



# An Evaluation of Facility-based Primary Distribution of HIV Self-Testing in Uganda

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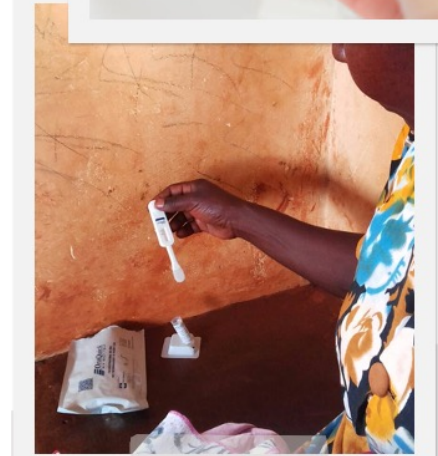
# Outline

- **Background and context of HIV testing services in Uganda**
- **Evolution of HIV self testing in Uganda**
- **Evaluating facility based HIVST in Uganda**
  - **Scope**
  - **Methods**
  - **Results**
- **Lessons learned**



# Background and Context

- As Uganda approaches the 95:95:95 targets for the overall population, HTS strategies are evolving to meet current needs
- In order to find the estimated **202,000 undiagnosed people** living with HIV, MOH and its partners are rolling out HTS to specific geographic areas and populations, guided by surveillance and modeling (UPHIA, Spectrum)
- The country is also diversifying testing strategies, including **HIV self testing (HIVST)**, which was adopted as an additional approach to HTS in 2018
  - Oraquick was the only kit until 2021 when two blood-based HIVST kits were introduced (SureCheck and INSTI)
  - Broadened scope of recipients of HIVST from KPs and men in ANC only to include adolescents, AGYW, and high-risk men
  - As an adaptation during COVID-19 pandemic, community distribution of HIVST was scaled up using peer network platforms
- **Next FY, Uganda aims to diagnose 170,000 individuals**



# Evolution of HIVST in Uganda: Opportunities for expanding coverage

## Opportunities for expanded implementation:

- In the 2021-2023 Global Fund cycle, Uganda received \$5.8M to sustainably scale HIVST.
- With this catalytic funding, there is an opportunity to:
  - Conduct targeted assessments/evaluations of distribution models for HIVST
  - Gain experience and document lessons on implementation with blood-based HIVST kits
    - Over 2 million HIVST kits from Global Fund, 30% of these are blood-based kits (INSTI and SureCheck)
- CHAI and MedAccess have negotiated a \$1 HIVST product that will catalyze the market.

- HIVST kits have been prioritized for secondary distribution at ANC and primary distribution in community settings
- With catalytic funding from GFATM, Uganda is poised to significantly expand HIVST distribution


# Evolution of HIVST in Uganda-2: Opportunities for expanding coverage

## Existing

Current HIVST distribution channels:

 Facility:

- Secondary distribution for partners of women at ANC (PEPFAR/USAID & CDC IPs)

 Community:


- General distribution (PEPFAR/USAID & CDC IPs)

## Piloting

Distribution channels being piloted by partners:

 Facility:

- Caregiver-assisted (CRS)
- Secondary distribution for adolescent peers (CHAI)

 Community:

- Peer distribution – adolescents (CHAI)
- Peer distribution – men (PATH)
- Boda stages, sports arenas, etc. (PATH)

 Other:

- Workplace (PATH)
- Private sector (PATH)

## Planned

Distribution channels being piloted by MOH:

 Facility:

- Primary distribution at OPD
- Primary distribution during the postnatal period

# Evidence and modeling demonstrate that distributing HIVST for primary use in public facilities would increase testing uptake among priority populations, while drastically reducing HCW time required


## Reaching Priority Populations

*In collaboration with Partners in Hope, CHAI examined under-reached populations' use of facility-based health services.*

**Preliminary results found that, contrary to popular belief, under-reached populations visit facilities, but are not regularly offered HTS**



42% of youths and men surveyed had either never been tested or had not tested in the last two years

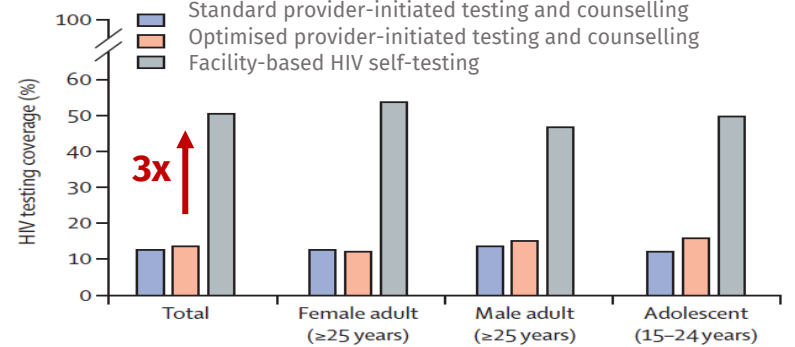


Even though 80% of those youth and men reported attending a health facility in the last two years

## Testing Uptake

*A study conducted in Malawi found that HIVST offered in facilities is acceptable, increases testing uptake, results in similar positivity rates to standard HTS, and increases new identifications.*

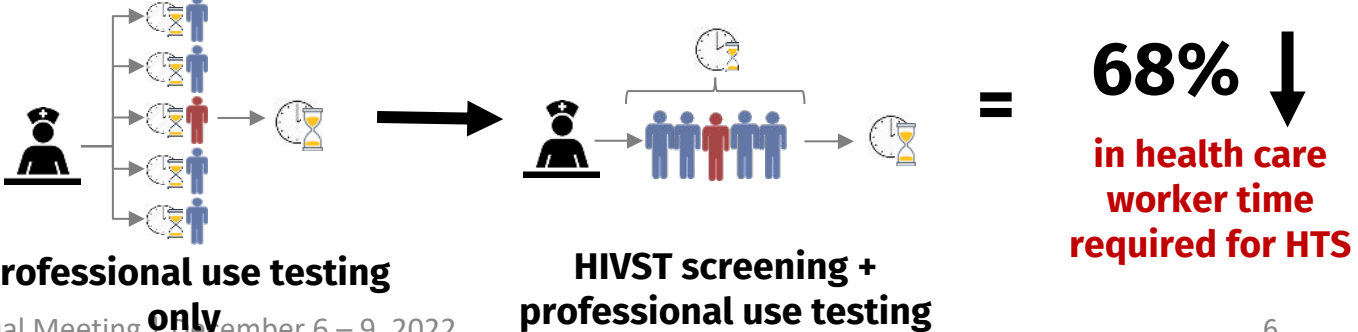
**HIV testing coverage by sex and age across trial groups (n=5,885)**



**HIVST lead to a 3x increase in overall testing uptake among priority populations, including men & young people**

## Program Efficiency

*CHAI developed a multi-country model to assess the potential impact of HIVST use on program outcomes and efficiency.*



**68% ↓ in health care worker time required for HTS**

**In the national HIVST scale up workplan, the Ministry of Health identified a few key evidence gaps and opportunities where HIVST could be leveraged to strengthen case finding efforts**

	<b>Question</b>	<b>Proposed Intervention</b>	<b>Target Population</b>
<b>1</b>	<b>How can HIVST be sustainably integrated into existing facility-based testing approaches to increase coverage and program efficiencies?</b>	Primary distribution of HIVST in OPD for use onsite	Clients ages 18+ who opt in for testing
<b>2</b>	<b>Can HIVST be leveraged to increase testing rates among postnatal women?</b>	Primary distribution of HIVST during postnatal visits	Breastfeeding women ages 18+ who opt in for testing
<b>3</b>	<b>How do HIVST implementation approaches need to be adapted if using a blood-based kit?</b>	Distribution of HIVST in facilities using blood-based HIVST kits (e.g., INSTI/SureCheck)	Clients age 18+ who opt in for testing

# Evaluation of Facility-based Primary Distribution of HIV Self-Testing



# MOH with support from CHAI carried out a study to demonstrate the effectiveness and operational feasibility of primary distribution of HIVST at OPD and postnatal care in public health facilities

	OPD Distribution	Postnatal Care Distribution
<b>Number of facilities</b>	8	8
<b>HIVST</b>	SURECHECK – 4 facilities OraQuick – 4 facilities	SURECHECK – 4 facilities OraQuick – 4 facilities
<b>Objectives</b>	<ul style="list-style-type: none"> <li>To measure the incremental effect of primary facility-based distribution on testing coverage and ART initiations</li> <li>To document user and provider experiences of primary facility-based distribution of HIVST</li> <li>To develop an operational model for primary facility-based distribution of HIVST that could be scaled nationally</li> </ul>	
<b>Implementation</b>	<ul style="list-style-type: none"> <li>Reviewed and developed HIVST materials to support primary facility-based distribution</li> <li><b>Engaged HCWs, partners and MOH</b> prior to implementation to <b>develop an operational model</b></li> <li>Reviewed and developed HIVST M&amp;E tools</li> <li>Trained HCW to distribute and facilitate HIVST</li> <li>Supported implementation through monitoring and supervision visits</li> </ul>	

**SCOPE:** 16 facilities in the Northern, Eastern, Southwestern, and Western regions participated in this pilot using either blood based or oral based kits

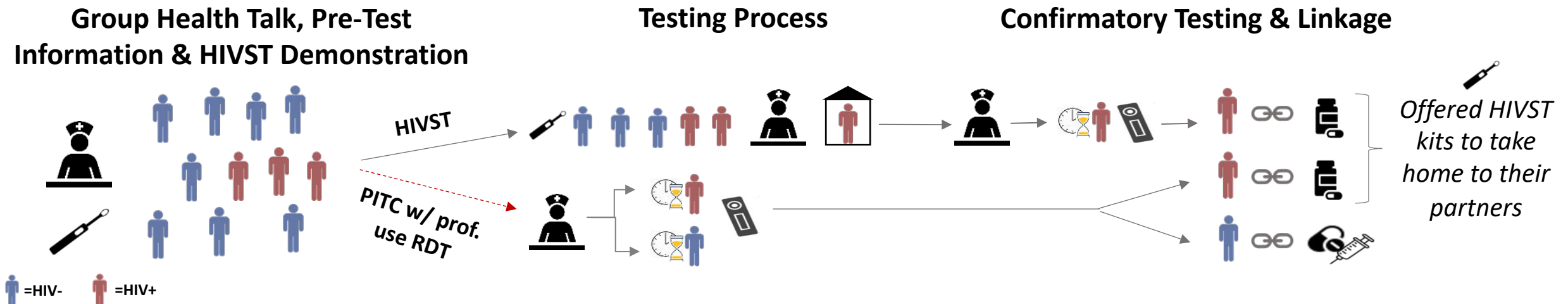
		<i>SURECHECK</i>	<i>HIVST Kit</i>	<i>ORAQUIK</i>
<i>Distribution Location</i>	<i>OPD</i>	<ul style="list-style-type: none"> <li>Mbale RRH</li> <li>Apac Hospital</li> <li>Rukungiri HC IV</li> <li>Mugarama HC III</li> </ul>		<ul style="list-style-type: none"> <li>Pallisa GH</li> <li>Dokolo HC IV</li> <li>Rushoroza HC III</li> <li>Hoima RRH</li> </ul>
	<i>PNC</i>	<ul style="list-style-type: none"> <li>Busiu HC IV</li> <li>Inomo HC III</li> <li>Kabale RRH</li> <li>Masindi GH</li> </ul>		<ul style="list-style-type: none"> <li>Molo HC III</li> <li>Lira RRH</li> <li>Itojo GH</li> <li>Kakumiro HC IV</li> </ul>

# Methods:

## Core components of facility-based distribution of HIVST process



### Patient flow for facility-based distribution of HIVST



# Testing Process and Results

## Testing Process & Results



- Clients tested themselves, waited for their test to process, and then interpreted their results in a private space
  - There was no additional space procured or created for the pilot
  - For clients using OraQuick, the facility had to decide where clients should wait for their test to process.
  - At some facilities, clients waited in the service delivery queue.
- A provider was in the area where clients were testing and available to support clients during the testing process if requested.
  - No additional providers were recruited for the pilot
- Clients had the the **option** to report their results to the healthcare provider.
- For **PNC clients**, clients were told that they may be asked to report their test status, including the results of their self-test, when they see the PNC provider.

# RESULTS: Observed differences in service uptake between HIVST and Conventional / Professional HIV Testing Services

## Pilot Results

	HTS (n(%))	HIVST (n(%))	Total
<b>Total Tests</b>	2264 (48%)	2411 (52%)	4,675
<b>Gender (Male)</b>	918 (41%)	1025 (43%)	1943 (42%)
<b>Age (years) (median (IQR))</b>	30 (24-44)	28 (23-37)	29 (23-40)
<b>Onsite Testing (HIVST only)</b>	Yes		
<b>Result disclosed (HIVST only)</b>	Yes		
<b>Test Results</b>			
<b>Negative</b>	2148 (95%)	2332 (97%)	4480 (96%)
<b>Positive</b>	110 (5%)	73 (3%)	183 (4%)
<b>Invalid</b>	1 (0%)	3 (0%)	4 (0%)
<b>Not Captured</b>	5 (0%)	3 (0%)	8 (0%)
<b>ART initiation</b>			
<b>Yes</b>	93 (85%)	66 (90%)	159 (87%)

## Key findings:

- ✓ HIVST uptake was slightly higher than conventional HTS uptake (52% vs. 48%)
- ✓ Uptake in men was also higher for HIVST vs. conventional HTS (43% vs. 41%)
- ✓ Positivity rate for HIVST was slightly lower than conventional HTS (3% vs. 5%)
- ✓ ART initiation rates were higher for HIVST vs. conventional HTS (90% vs. 85%)

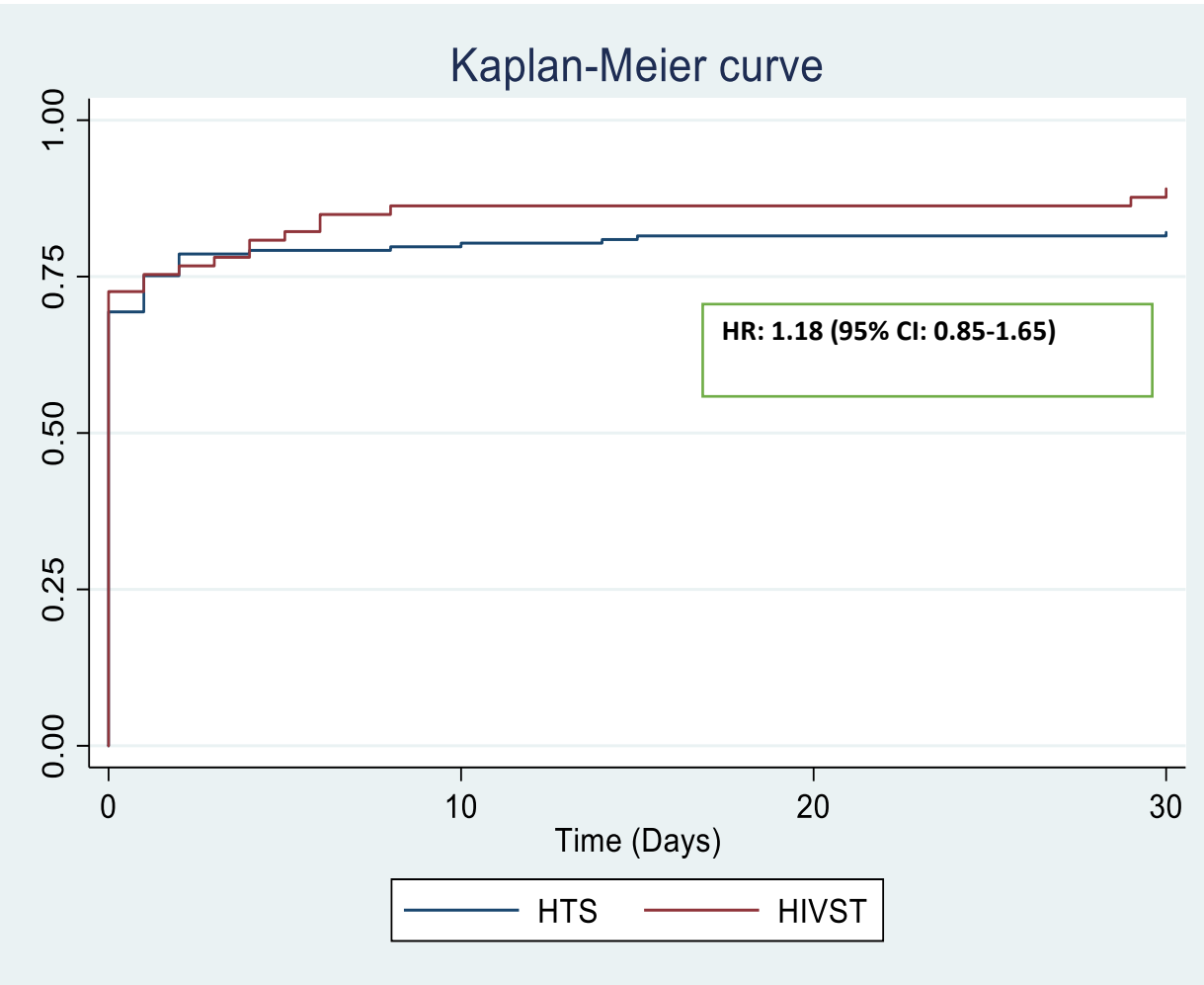
# RESULTS: Comparison of Oral-based and Blood-based HIVST

	SURECHECK (Blood-based HIVST)			OraQuick (Oral-based HIVST)		
	HTS (n(%))	HIVST (n(%))	Total	HTS (n(%))	HIVST (n(%))	Total
<b>Total Tests</b>	981(49%)	1026(51%)	2007	1283 (48%)	1385(52%)	2668
<b>Gender (Male)</b>	376 (38%)	419 (41%)	795 (40%)	541 (42%)	606 (44%)	1148 (43%)
<b>Age (years) (median (IQR))</b>	28(23-38)	29 (23-37)	28(23-38)	34(25-49)	28 (23-38)	30(24-42)
<b>Result</b>						
<b>Negative</b>	907 (93%)	990 (97%)	1897 (95%)	1241 (97%)	1342 (97%)	2583 (97%)
<b>Positive</b>	69 (7%)	32 (3%)	101 (5%)	41 (3%)	41 (3%)	82 (3%)
<b>Invalid</b>	0(0%)	3(0%)	3(0%)	1 (0%)	0 (0%)	1 (0%)
<b>Not Captured</b>	5(1%)	1(0%)	6(0%)	0 (0%)	2 (0%)	2 (0%)
<b>ART initiation</b>						
<b>Yes</b>	58 (84%)	29 (90%)	87 (86%)	35 (85%)	37 (90%)	72(88%)

## Key findings

- ✓ Similar uptake of oral- and blood-based HIVST across gender and age
- ✓ Similarly high (90%) ART initiation rates for both HIVST types

# RESULTS: Comparison of Oral-based and Blood-based HIVST (Cont'd)



## Key finding:

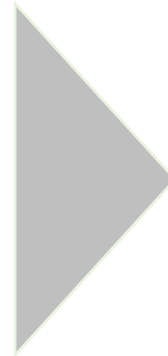
No significant difference in rate of ART initiation between HIVST and professional use rapid diagnostic testing for HIV

# Key lessons learned and takeaways

- HIVST implementation at OPD and PNC was feasible
- Both oral-based and blood-based self-test kits use were feasible at both entry points
- HIVST distribution led to a 5% increase in ART initiation – a high program priority
- Additional analysis indicates efficiencies on the HRH by freeing up HCW time to other priority activities

## Main challenges

- A dedicated well-equipped space (table and chair)
- Inadequate number of trained staff
- Some clients do not trust HIVST
- Difficult to confirm all reactive HIVSTs / some clients do not want to share results
- Data capture in the registers



## Suggested Improvements

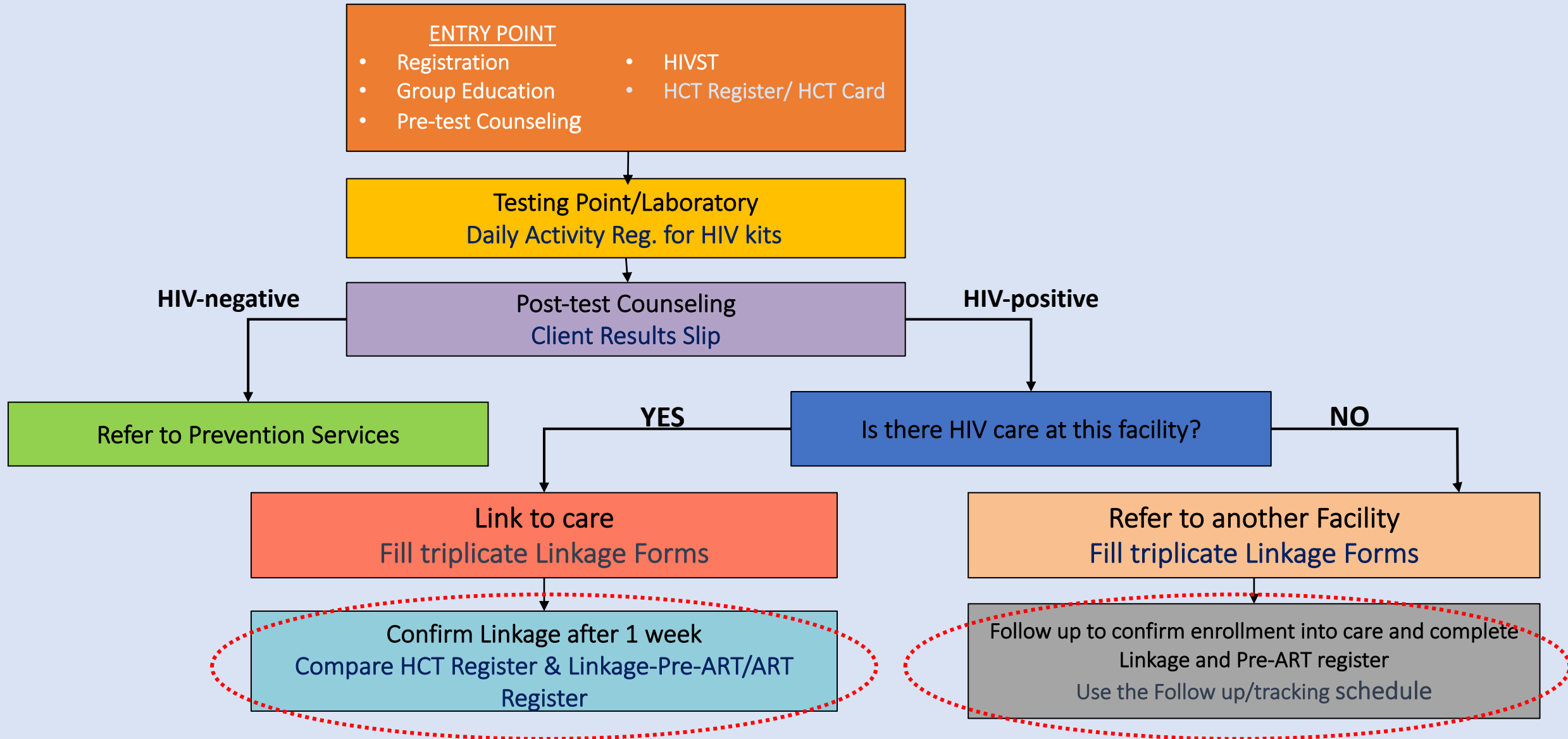
- Ensure that dedicated testing areas as well as patient pathways have been identified in consultation with facility staff
- Develop information, education and communication materials on HIVST
  - Engage community to provide information on new testing modality at the facility
  - Build educational material on self-testing that can be distributed through multiple channels (leaflets, education programs, social media)
  - HIVST demonstration at health facility via posters and TV at entry point
- Train additional HCW on HIVST support and distribution



Thank you!



# The following flow chart outlines the linkage procedure within a facility which was utilized during the pilot

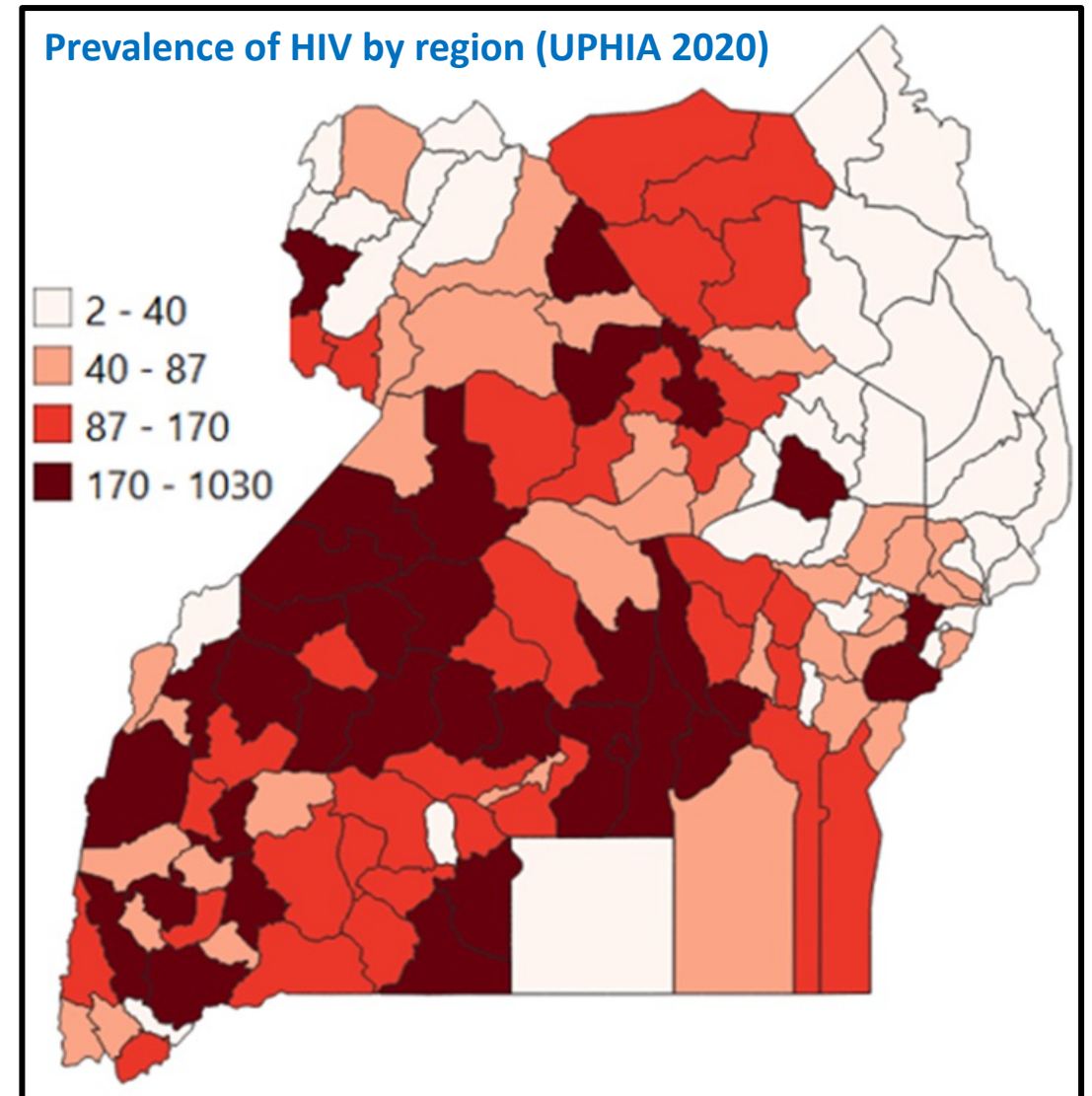


# Background and Context 1: HIV statistics

- Estimated PLHIV: **1,453,891**
- HIV prevalence: Overall **5.5%** and **6.0%** among 15-64 years (UPHIA, 2020)
  - Women: **7.1%**
  - Men: **3.8%**
- Knowledge of status: **81%**
- On ART: **96%**
- Virally suppressed: **92%**
- Estimated new cases: **54,000** per year
- Total undiagnosed, **202,000**
  - **80%** of undiagnosed in 6 regions

**Next FY, Uganda aims to diagnose 170,000 individuals**

*Source: UPHIA 2020  
Spectrum Estimates 2022*



# Background and Context 2: Who are the undiagnosed and where are they?

