HIV Self-Testing- Key Considerations for Monitoring and Evaluation

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HIV Self-Testing - M&E Considerations

HIVST is AO, confirmative testing required to “complete test” for self-testers with reactive self-test result

Measuring impact of HIVST distribution on uptake of HIV testing among populations unreached by conventional testing

- Coverage for priority population to be reached
- Primary and Secondary distribution
- Effectiveness of HIVST distribution model
- Optimization of HIV testing services through HIVST

HIVST Outcome measures: HIVST test use, confirmative testing, treatment/Prevention services uptake

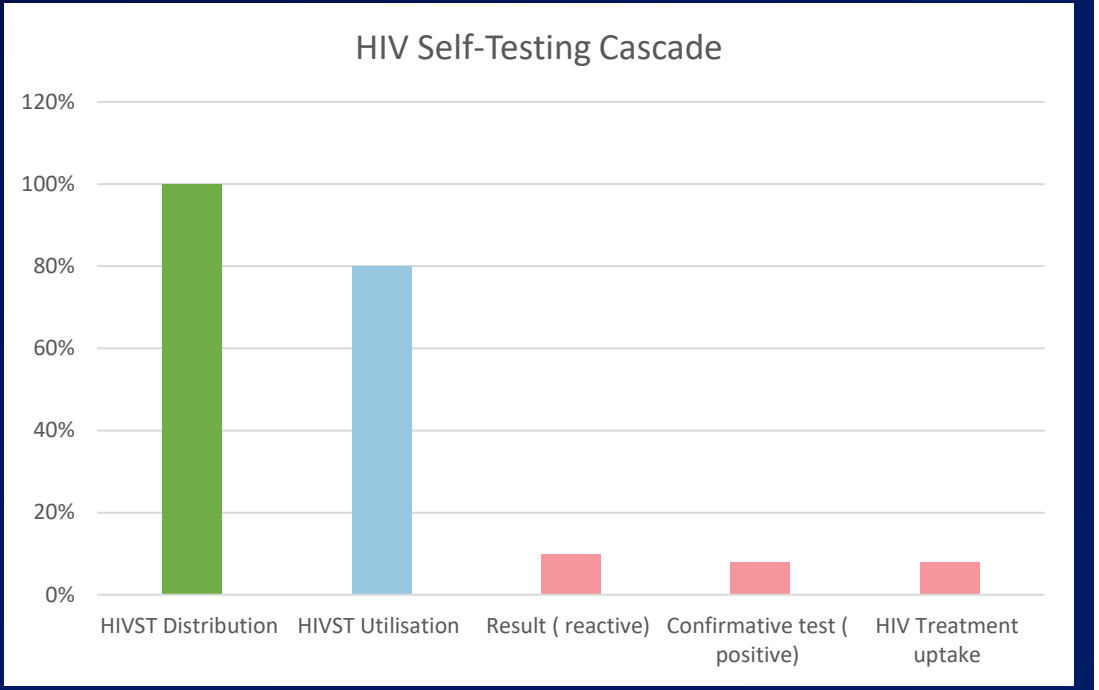
- HIVST attribution to HIV testing coverage, case finding, ART coverage

Integration of HIVST indicators in mainstream M&E and HMIS for HIV testing services

M&E Indicators Related to HIVST

Distribution	Use and results	Linkage
• **Number of individual HIVST kits distributed (programme data) (required)** • Number of sites distributing HIVST kits (programme data) • Percentage of first-time testers among people who received HIVST (programme data) • Percentage of the population aware of HIVST (survey) • Percentage of the population willing to self-test if available (survey)	• Number of HIVST tests used and the percentage of HIVST-positive results observed and self-reported (programme data) • % of the population who has ever self-tested (survey) • % of the population who has ever self-tested and reported positive result of self-test (survey) • % of those tested in the last 12 months reporting self-test as their last test (survey)	• Number and percentage of people diagnosed with HIV following HIVST (programme data) • Percentage of new ART initiations among people diagnosed with HIV who report prior self-testing in the past 12 months (programme data) • Proportion of people who test positive for HIV using an HIVST, enrolled in ART services (survey) • Percentage of PrEP initiations among people who report prior self-testing in the past 12 months (survey)

HIV Self-Testing Cascade M&E Challenges



- ✓ Privacy of the test & autonomy of users
- ✓ Relying on self-report to measure outcome of self-test and uptake of linkage to treatment/prevention services
- ✓ Cost and feasibility of self-test user follow up
- ✓ Tracking secondary distribution

HIVST M&E General Principles

Using multiple data sources and information (including triangulation)

Data collection should not be intrusive or burdensome, protection of confidentiality and privacy

Human and financial cost of active monitoring to be considered

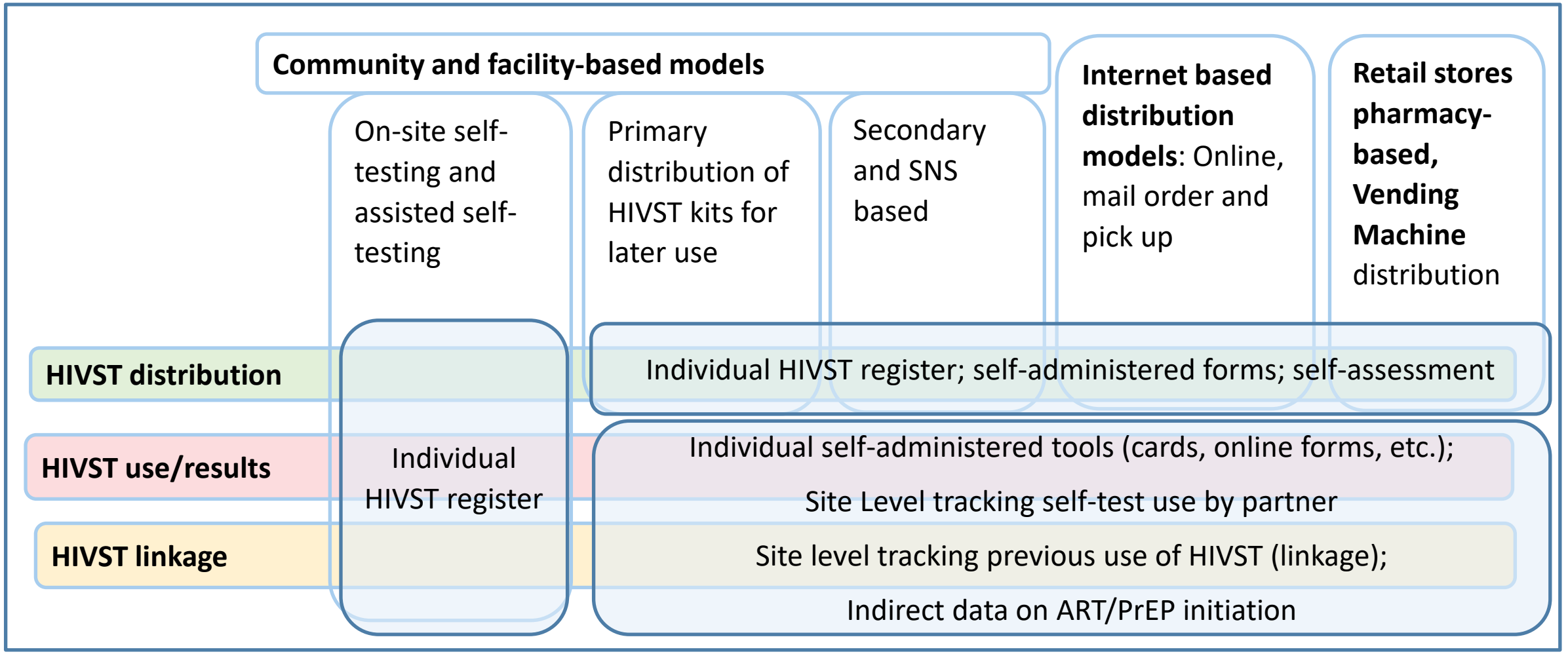
Prioritization on the use of
Routine data (=integration & sustainability)
Triangulation (= impact at the population level)

Key Data Sources for HIVST M&E

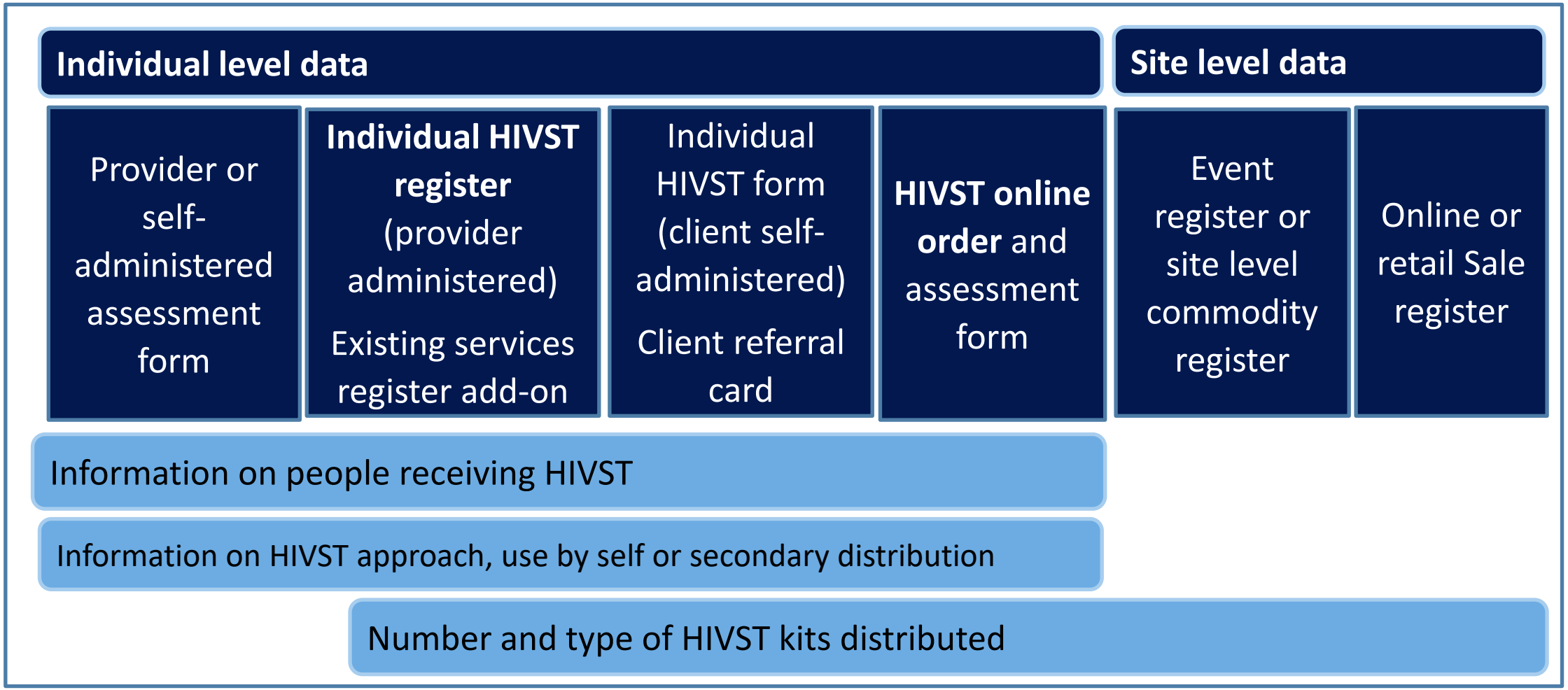
Routine programme monitoring

Routine HIVST monitoring	Self-reported data on HIVST	Data on use of HIVST from other service data	Special surveys, population size data, client/patient-based surveys
HIVST service register, HIVST order form, sale registers	Self-administered forms, client feedback, hotline follow up calls	ART/PrEP service register, HTS register, health statistics	Target groups for HIVST. Group size. Coverage of HIVST.
HIVST kits distributed. People receiving HIVST. Coverage of HIVST programme.	People reported on using HIVST results. Reported results positivity.	People reported on using HIVST services prior to confirmatory HIV test, ART, PrEP, etc.	Group using HIVST. Positivity rate of HIVST.
	People reported on using services after HIVST. Accessing confirmatory test, ART, PrEP, etc.		Percentage accessing confirmatory test, ART, PrEP, etc.

Routine Data Collection Strategies on Different Stages Depending on HIVST Models



Routine HIVST Monitoring Tools Measuring Distribution



Routine HIVST Monitoring Tools Measuring
Test Use and Results

Notification/reminders		Client self-administered reporting		Individual-level follow up
Automated SMS and messengers reminders	Interactive voice response systems	Paper based on-site results reporting cards	Mobile apps, messengers, chat bots, website results reporting and feedback collection forms	Provider administered individual follow up and feedback forms, referral cards

Number of HIVST tests used

Number of HIVST results reported, number of positive results reported

Information on people using HIVST and reporting it

Routine HIVST Monitoring Tools measuring Linkage

Notifications and referrals	Self-administered reporting	Individual-level follow up	Clinic registers
Referral cards to link to services. Automated SMS and messages. Interactive voice response systems	Mobile apps, messengers, chat bots, web apps and online feedback collection forms	Provider administered individual follow up forms, peer referral and navigation	HTS registers, **ART registers**, PrEP registers, etc.

Number of people self-reported positive tests results confirmed after HIVST

Number of people self-reported link to prevention and treatment services after HIVST

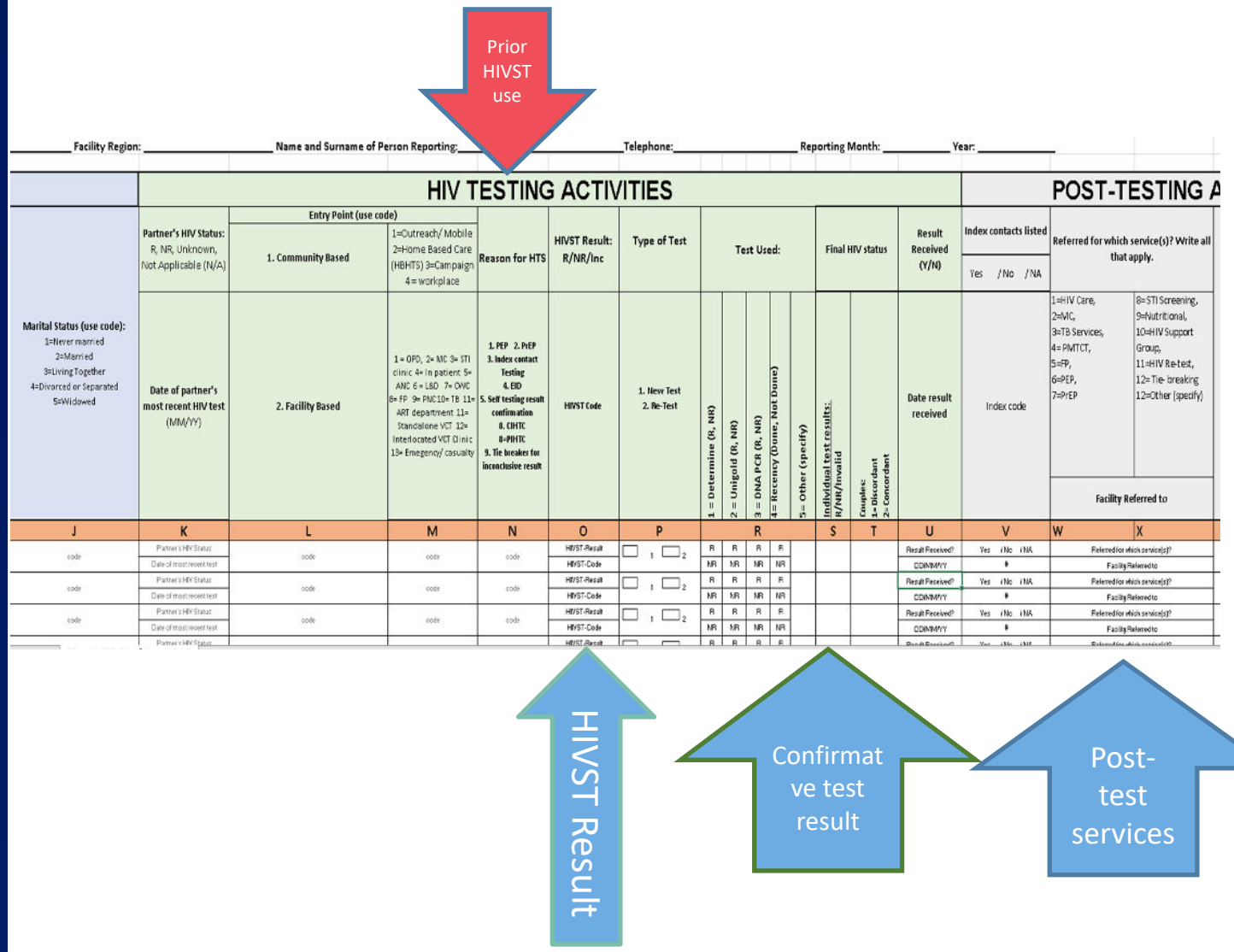
Proportion of people using prevention, testing and care services prompted by HIVST

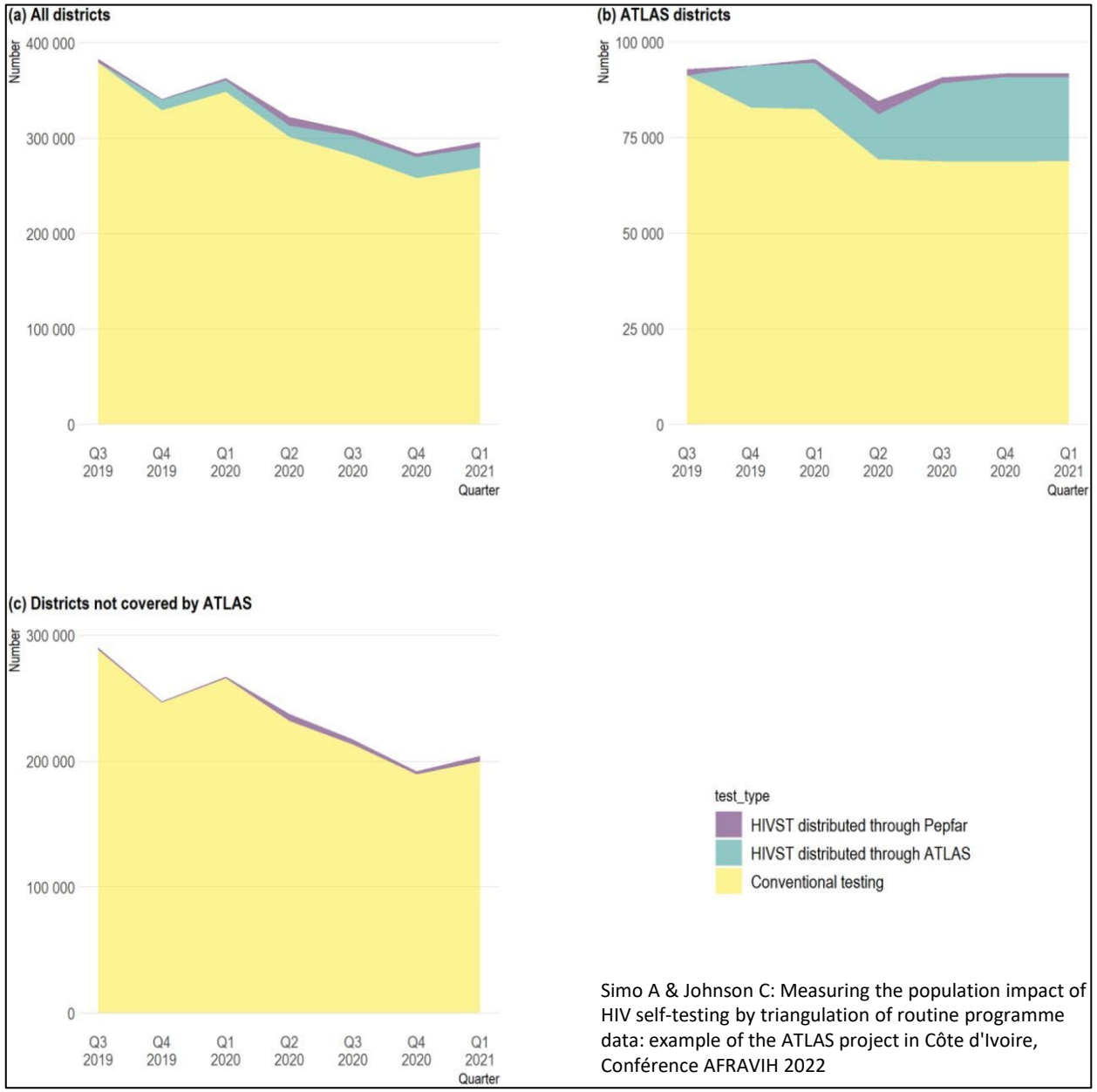
HIVST Outcomes Measures

Measuring HIVST Linkage in Care and Prevention

- Include questions into existing clinic registers on prior use of self-testing
- All referral health service points (ART services, PrEP and VMMC services) can adopt data collection to capture prior HIVST use (e.g. HIVST referral cards; clinic register etc.)
- Data may be subject to recall bias and some people may not disclose prior HIVST use and/or results
- Data do not provide a denominator to measure linkage following HIVST
- Data can provide useful information on the proportion of all ART/PrEP initiations prompted by HIVST

Clinic registers



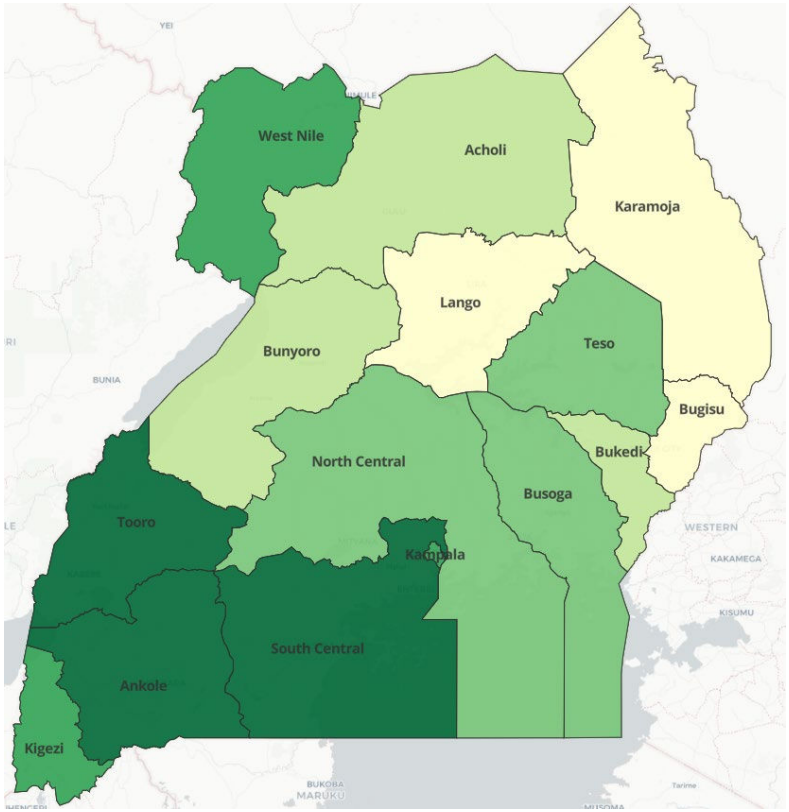


Simo A & Johnson C: Measuring the population impact of HIV self-testing by triangulation of routine programme data: example of the ATLAS project in Côte d'Ivoire, Conférence AFRAVIH 2022

Using multiple data sources and information

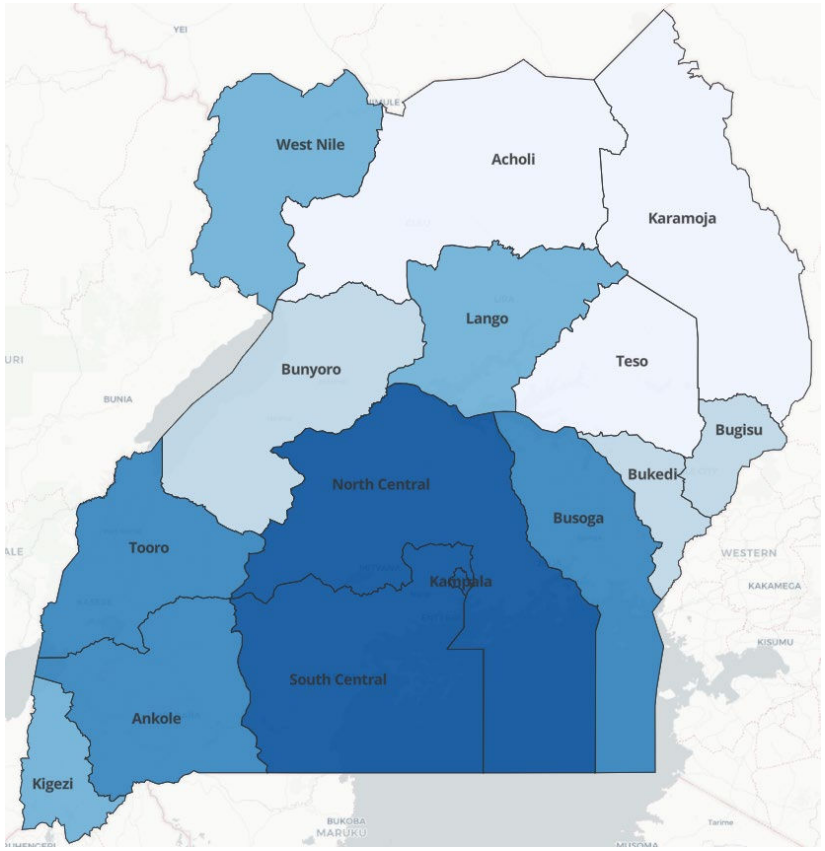
- Linkage to ART and prevention (PrEP) services can be estimated using routine program data from a variety of sources, such as client-administered tools, provider follow up data collection, clinic registers, and ART/PrEP initiations
- Triangulation in conjunction various data sources can provide estimates on HIVST impact on HIV testing coverage, diagnosis and HIV treatment coverage

Uganda: Regional comparison of HIVST distribution and HIV Positives cases identified



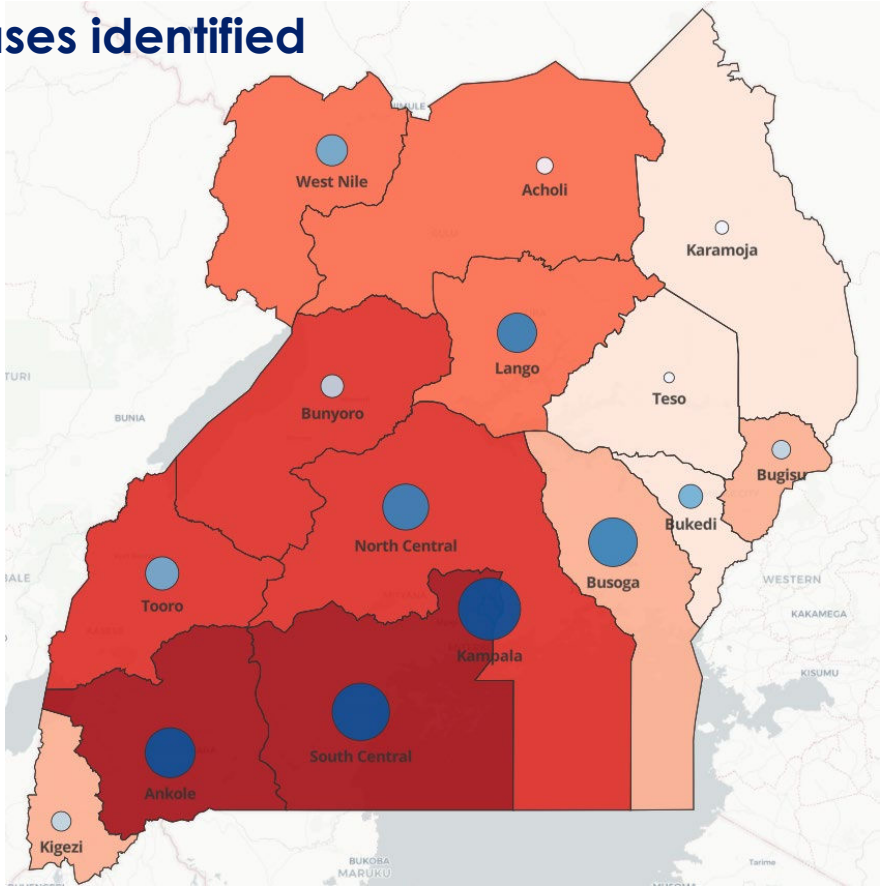
HIVST self test kits distributed – Unassisted (Jan-Mar 2024)

790 - 1671 (3)
1671 - 2235 (3)
2235 - 3110 (3)
3110 - 6487 (3)
6487 - 12385 (3)



HIVST self test kits distributed – Assisted (Jan-Mar 2024)

993 - 2437 (3)
2437 - 4520 (3)
4520 - 8303 (3)
8303 - 11364 (3)
11364 - 19080 (3)

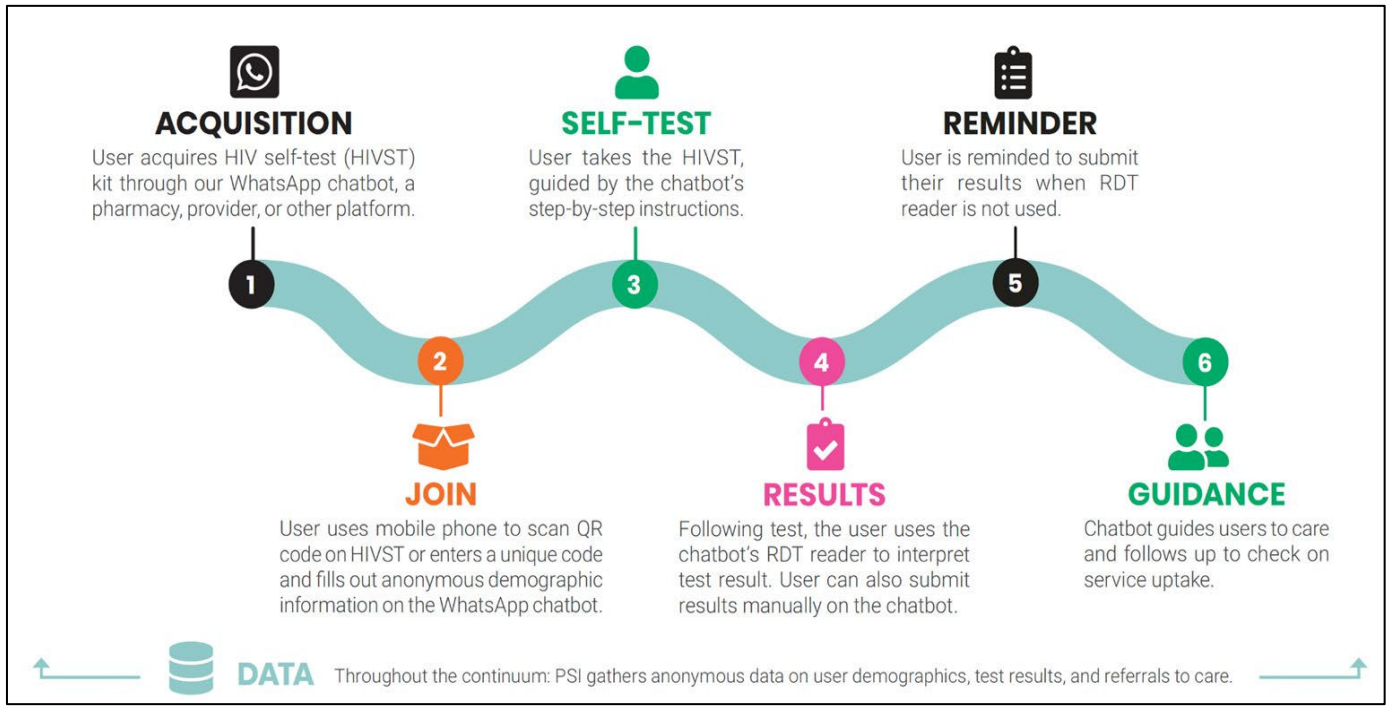


Newly diagnosed HIV +ves with a test for recent infection (Jan-Mar 2024)

219 - 283 (3)
283 - 389 (3)
389 - 736 (3)
736 - 1030 (3)
1030 - 1327 (3)

HIVST +ves Confirmed using the national test algorithm

194
75
4



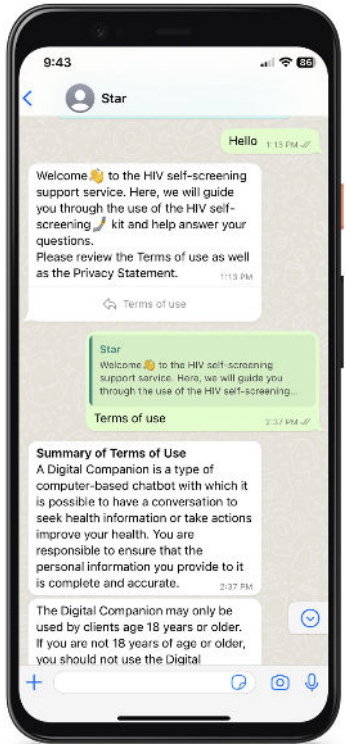
Use of digital health and mobile health technologies

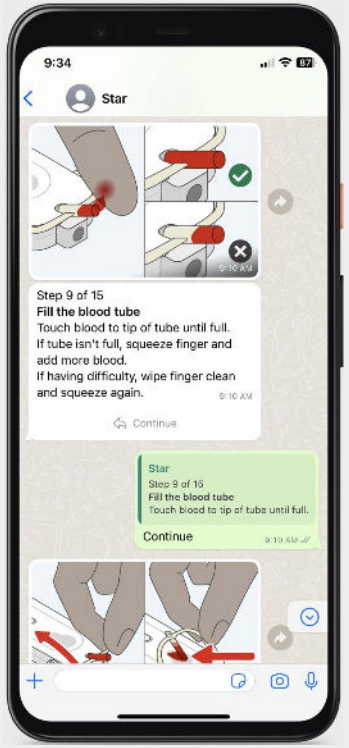
Widespread use of mobile devices creates opportunities for delivering HIVST services by generating demand, improve delivery of HIVST kits and collecting information from clients

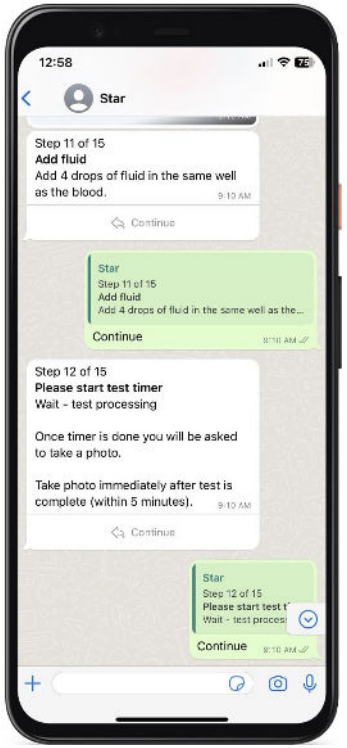
<u>Some digital health components related to HIVST:</u>

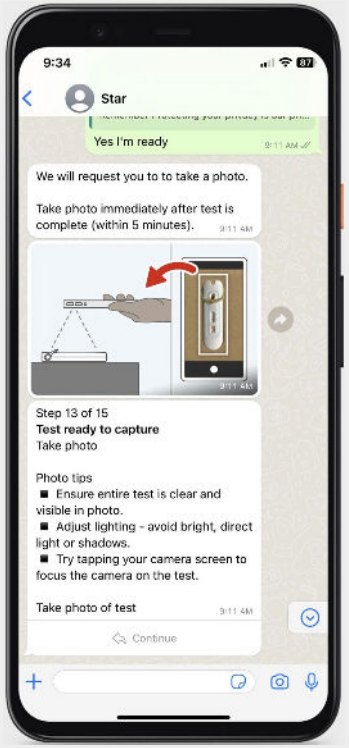
- **Client-to-provider communication: self-assessments, reporting of results**
- **Data collection and management: service records, registers, case management registers/logs, data collection of results, adverse events, IPV;**
- **Targeted client communication: notifications, alerts and reminders focused on improving linkages. Delivery channels include SMS, voice calls, interactive voice responses, mobile apps, messengers, and messenger bots**

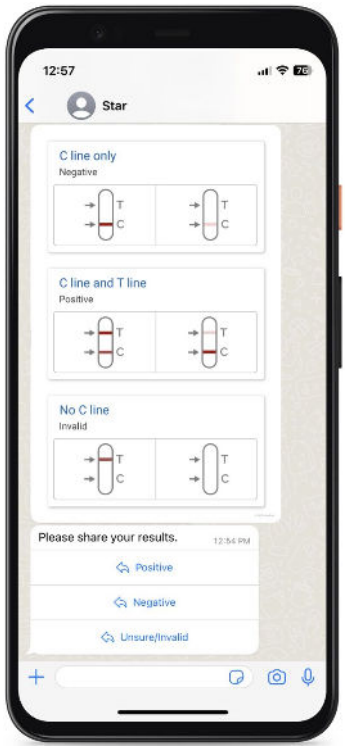
Chatbot self-tester flow with digital IFU & AI

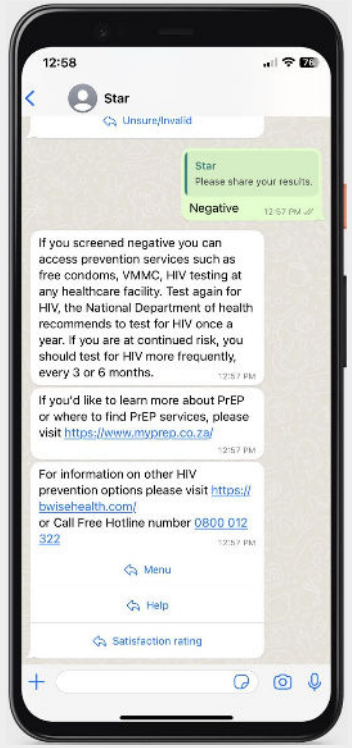


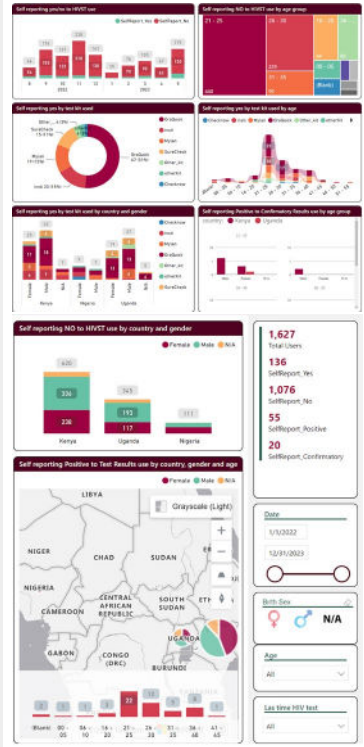












Go to relevant WhatsApp number, register and choose self-test path

Step-by-step administration instructions

Tools such as timers & notifications

Photo capture for image quality assurance, and AI interpretation

Guided self-tester interpretation

Next steps based on result and local guidance

Data including AI interpretation for decision support & surveillance

UCS features roadmap – Deployed – Completed with pending Deployment – Under development – In pipeline

UCS - HIV
CBHS
INDEX Contacts tracing
PMTCT Case Management
HEI Case Management
HIV Self Testing
KVP and PrEP Services
Condom Programing
LTFU
Voluntary Medical Male Circumcision (VMMC)
AGYW
Social and Behavior Communication (SBC) for HIV
HTS

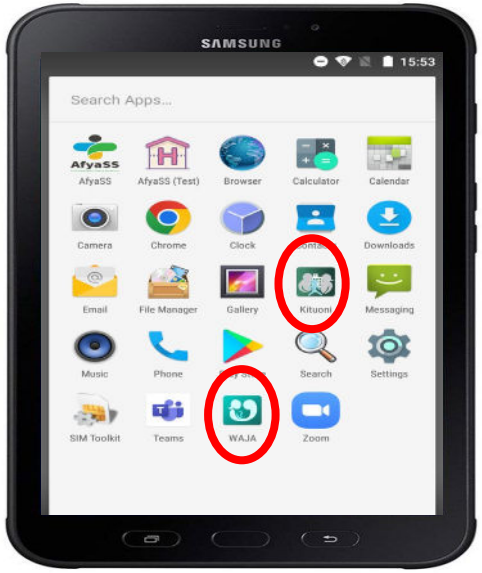
UCS - RCH
ANC
PNC
Labour and Delivery Case Management
Children under 5 home visits.
Family Planning
CECAP
cPAC
Adolescent Sexual Reproductive Health
Gender-Based Violence
Early Child Development (ECD)

UCS – OVC
Orphans and vulnerable children

UCS – GE
Gender Equality

UCS - MALARIA
Integrated Community Case Management

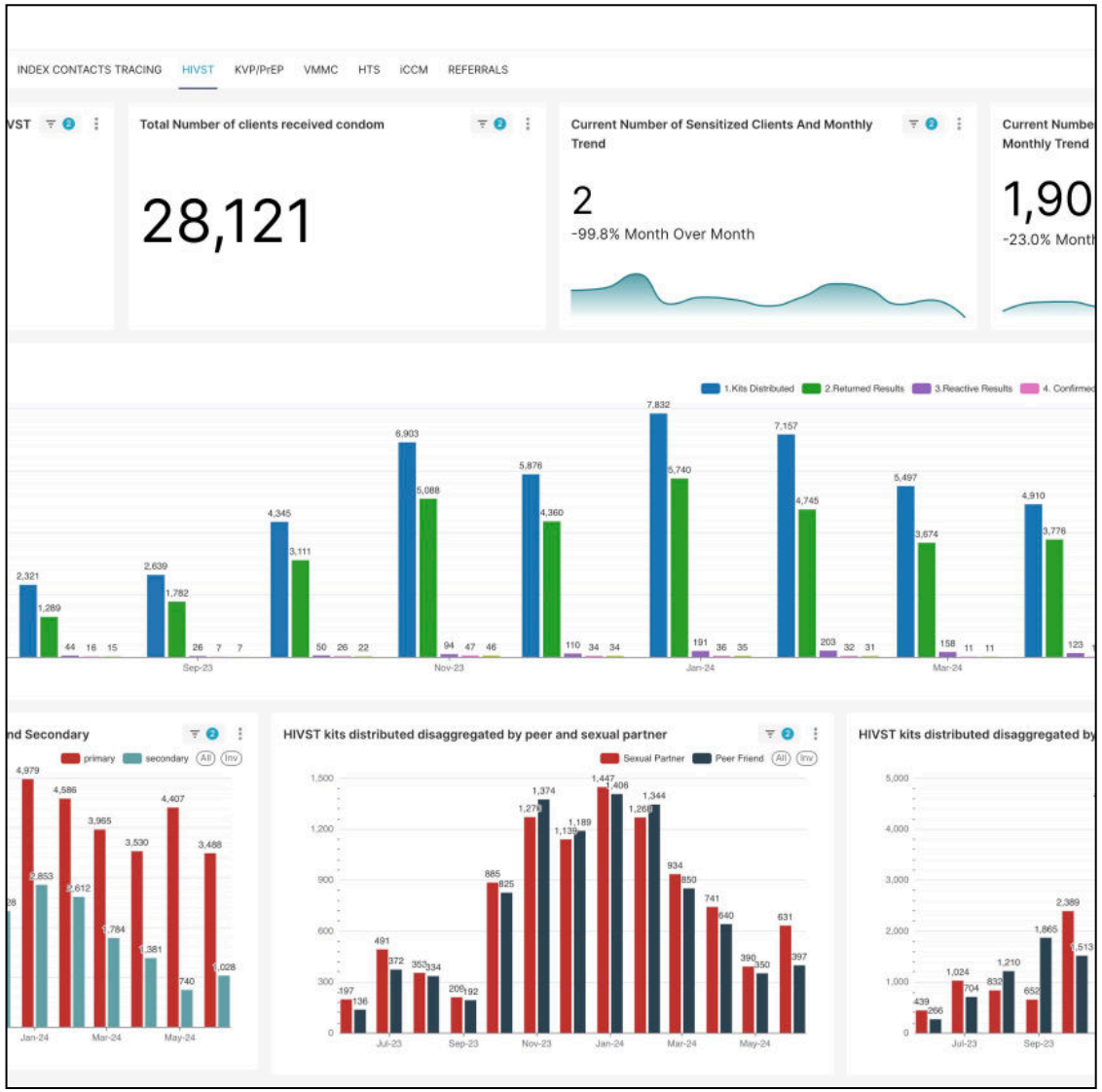
Cross – cutting module
National Blood Transfusion Service
Neglected tropical diseases

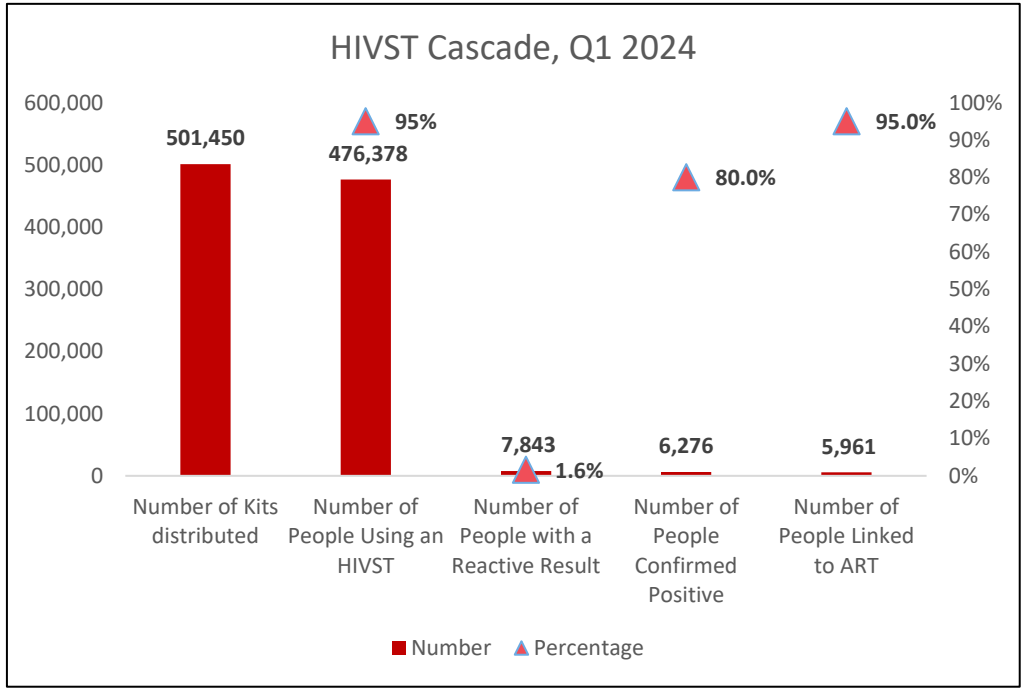


Tanzania Unified Community System (UCS)

- Comprehensive solution covering community health services offered by CHWs
- Community data linkages with health facilities
- WAJA app: used at the community level by CHWs; KITUONI app: used at health facilities without EMRs
- HIVST individual client data, unique identifier, client demographics, HIVST distribution modality, primary, secondary, self-test result, confirmatory test and treatment uptake, prevention services uptake
- Reporting dashboard: Used beyond facility and community setting to support M&E, planning, and decision making
- Open-Source Smart Registry

HIVST DASHBOARD of Tanzania Unified Community System





Take - Away Messages

- M&E for HIVST needs to be adapted from HTS to fit purpose
- Integration into existing systems is key
- Triangulation of routine data can provide insights
- HIVST distribution data is not enough to make programmatic decisions
- Collection of outcome data where feasible and linking community and facility data for dashboards to inform programming and monitor performance.
- Digital health, AI and mobile health technologies can be further optimised to collect HIVST data

icap Global Health

THE CQUIN NETWORK

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Thank You!