



Implementing and evaluating HIV self-testing in West Africa

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Implementing and evaluating HIV self-testing in West Africa

Sophie Calmettes (Solthis)
Joseph Larmarange (IRD)

EPH preconference | Marseille | 20 November 2019



Context

HIV self-tests (HIVST)

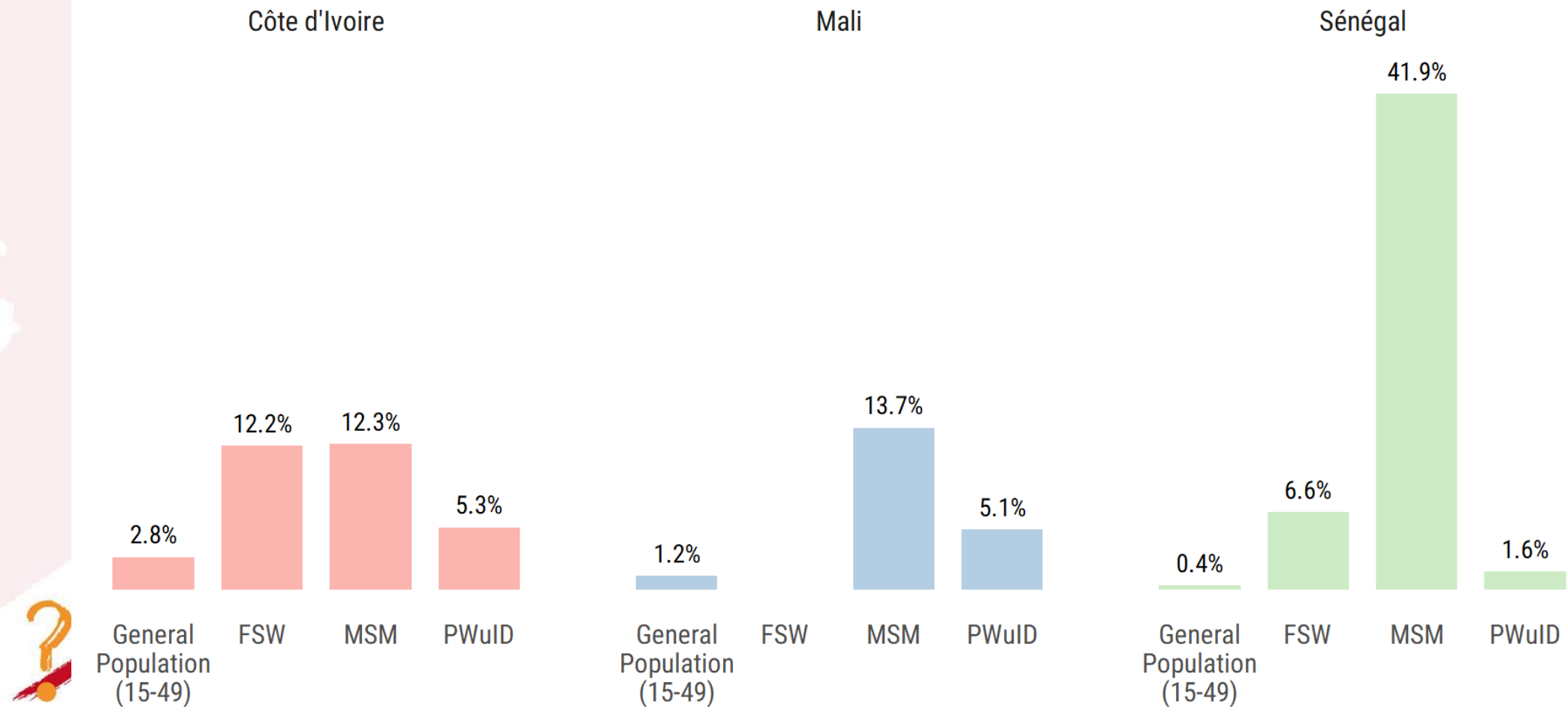
- › New diagnosis tool
- › Recommended by WHO since 2016 as an additional testing strategy
- › STAR
 - » Funded by Unitaid
 - » Phase 1 (2015-2017) in Malawi, Zimbabwe, Zambia
 - » Diagnostic accuracy, user preferences, social harms, linkage to care
 - » Market creation & Price reduction
 - » Mainly primary distribution
 - » Call for proposals launched by Unitaid for a project in Western Africa: an operational project with embedded evaluation/research component



West Africa: mixed HIV epidemics

HIV prevalence by country and sub-population

Source: Unaids data 2018



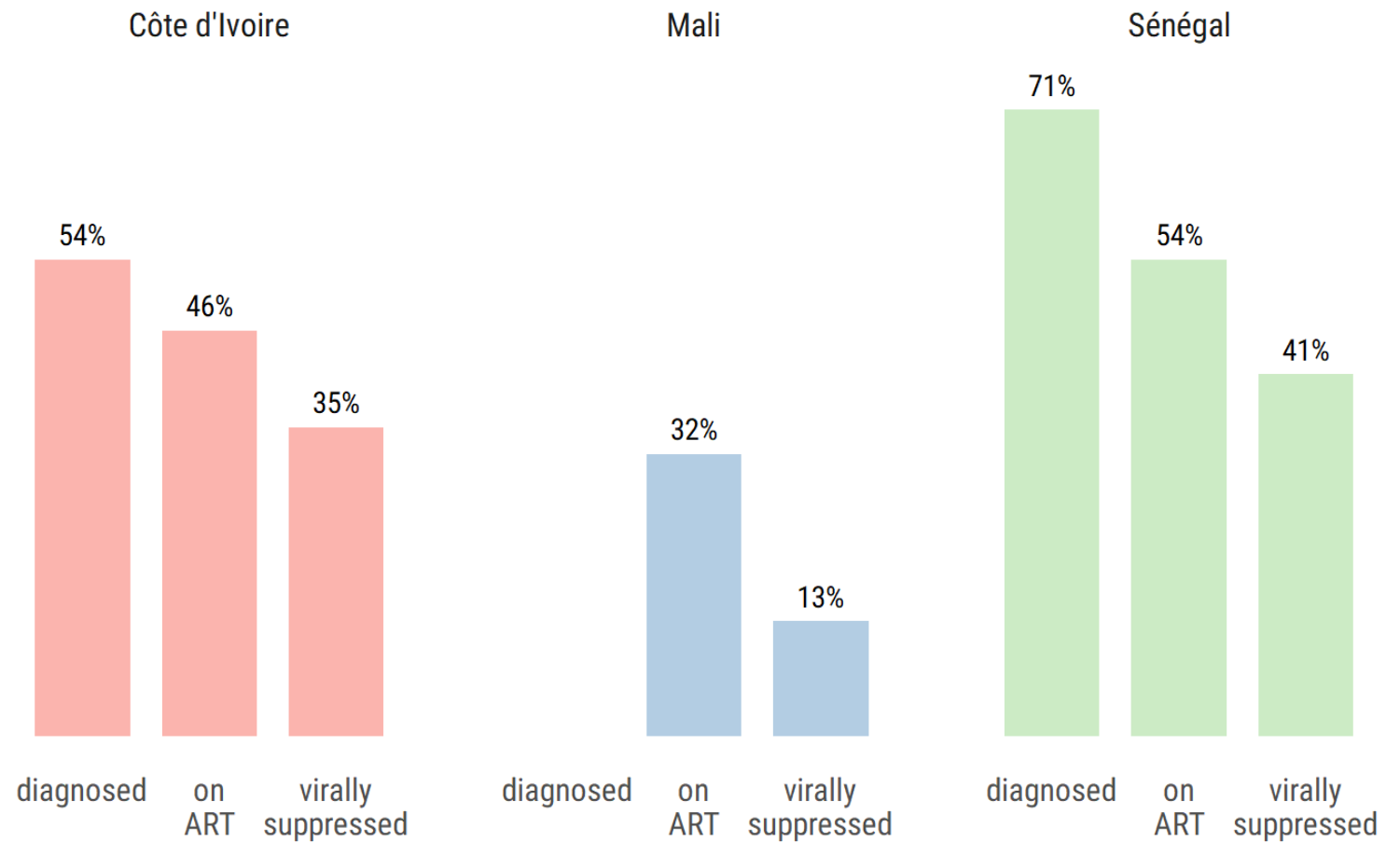
HIV Care cascade

Testing constitutes the **main gap** in the cascade

- › Testing is relatively high among those reached by NGOs (e.g. 70% of FSWs recently tested in PrEP-CI Study in Côte d'Ivoire)

**How to reach those
unreached by current
strategies?**

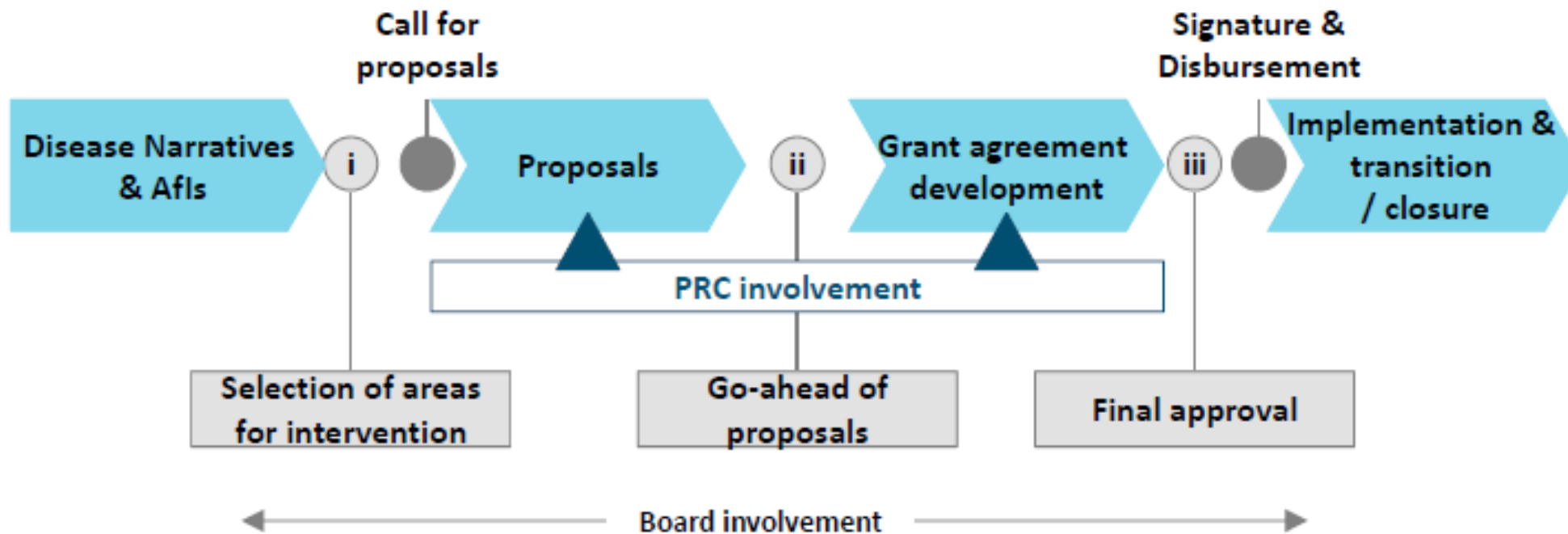
Source: Unaid data 2018



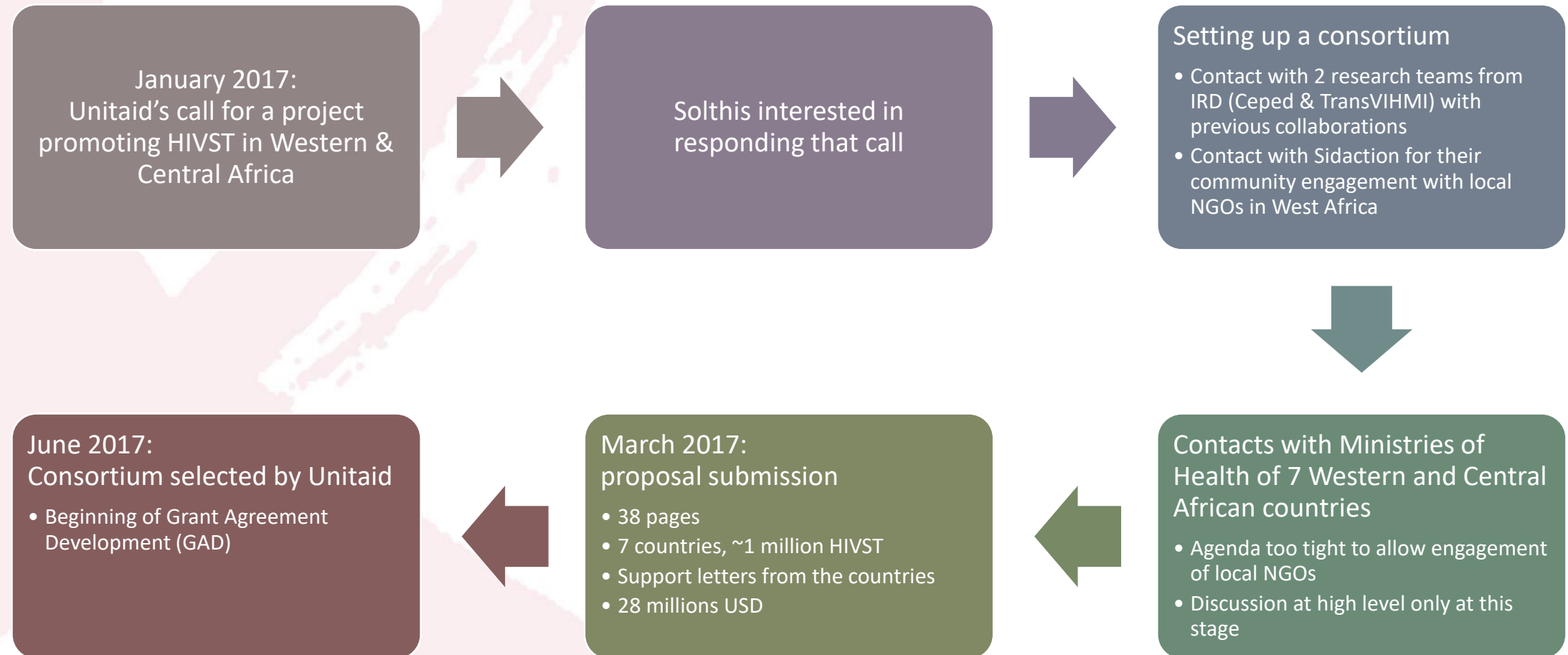
Building a consortium

(January – June 2017)

UNITAID's process for proposal selection and grant making



Writing a proposal



Developing the project

(June 2017 – May 2018)

Grant Agreement Developement

- › Unitaïd's initial requests:
 - » Reducing the number of countries
 - » Reduction of budget and human resources accordingly
 - » Activities to be implemented through local NGOs already receiving funding from Pefar or Global Fund

- › From June 2017 to May 2018
 - » Continuous negotiation with Unitaïd
 - » 5 versions of all documents submitted and reviewed by Unitaïd

Countries selection

- › From 7 to 4, then to 3 countries
 - » Discussion regarding Cameroun (issues in terms of feasibility)
 - » Political will expressed by countries taken into account
 - » Diversity of epidemiological contexts
 - » Discussions mainly between Unitaïd and the consortium
 - low involvement of countries in the final choice

- › August 2017
 - » Final selection: Côte d'Ivoire, Mali & Sénégal

Budget for Grant Development

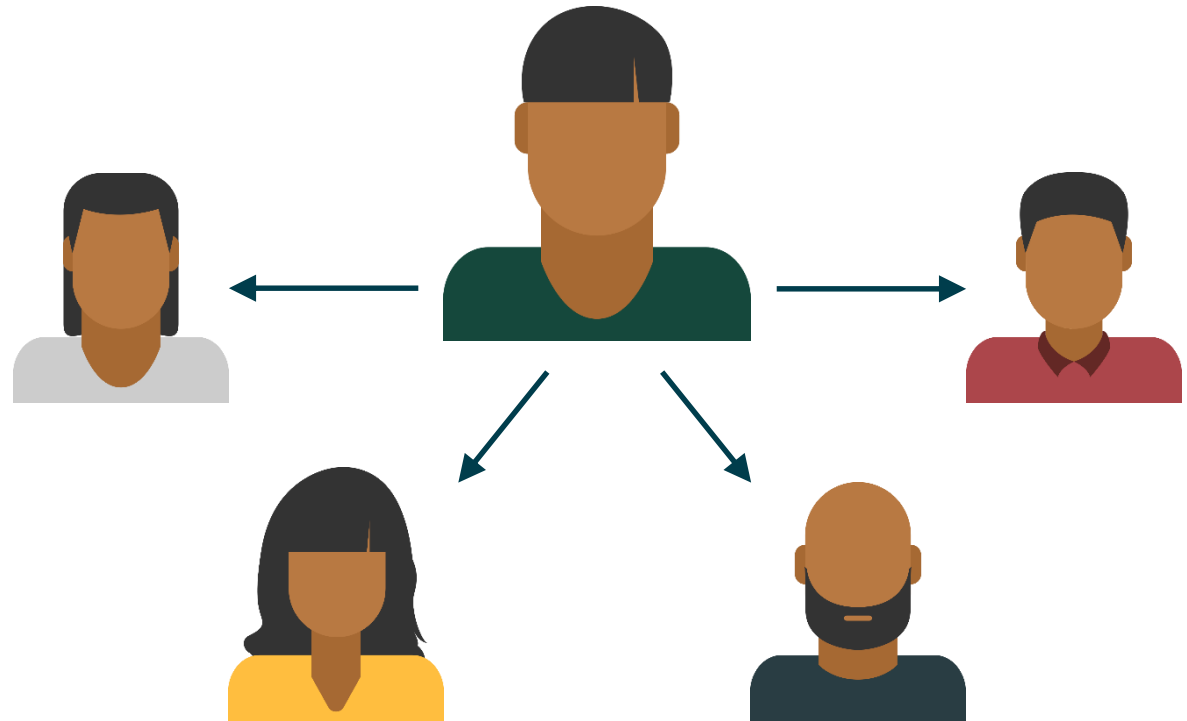
- › Unitaid provides a small budget for GAD phase
- › Country visits
 - » We asked for two per country to meet national authorities and local actors
 - » Only one visit per country was granted
 - » Country visits used to discuss and define population targets and HIVST distribution strategies
 - » Strategies have been renegotiated with Unitaid after country visits
- › Very short timeline
 - » Initially, project plan was supposed to be finalised for February 2018

HIV self-tests

Primary distribution
for personal use



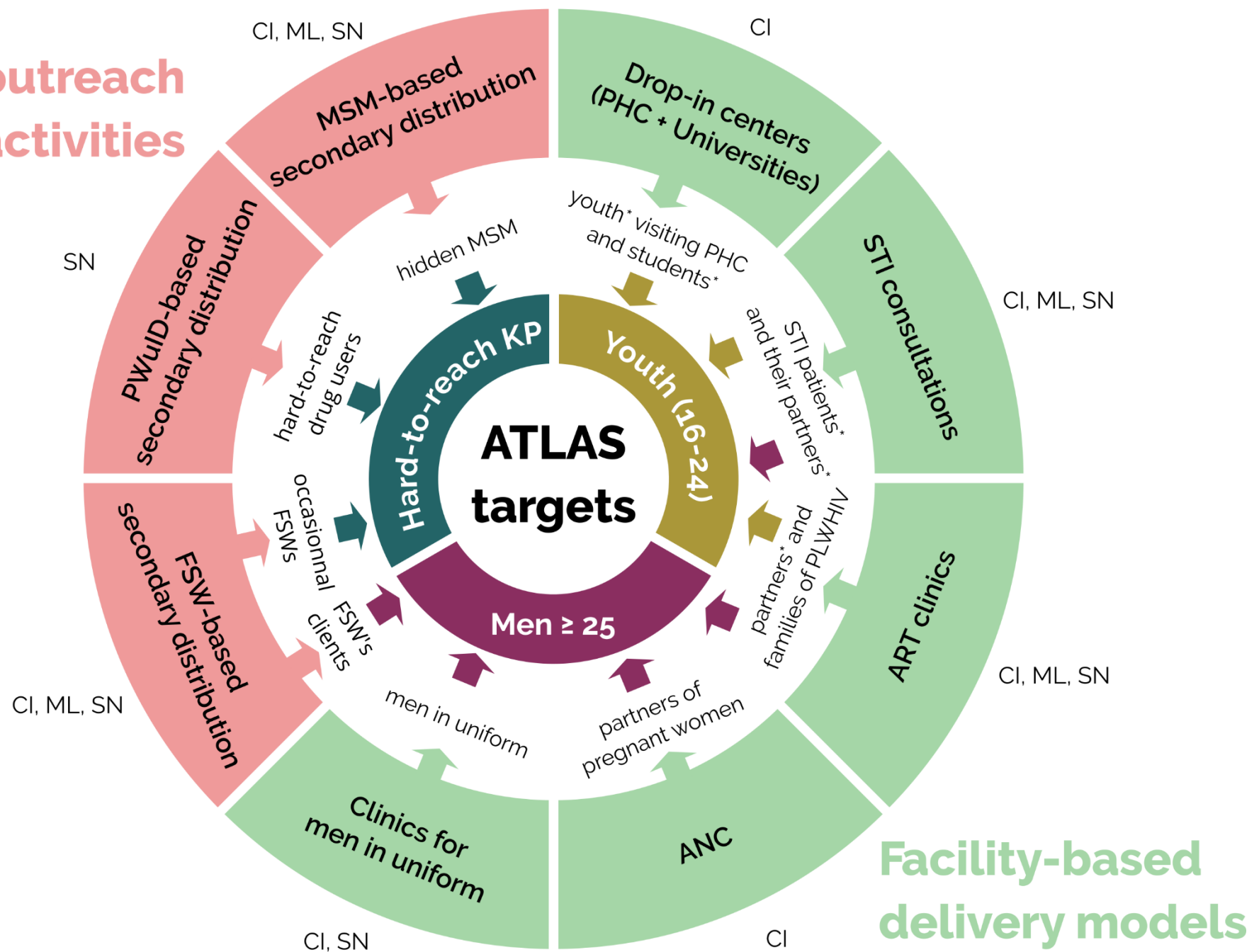
Secondary distribution
to be redistributed to
partners and relatives



ATLAS Strategy (January 2018)



KP outreach activities

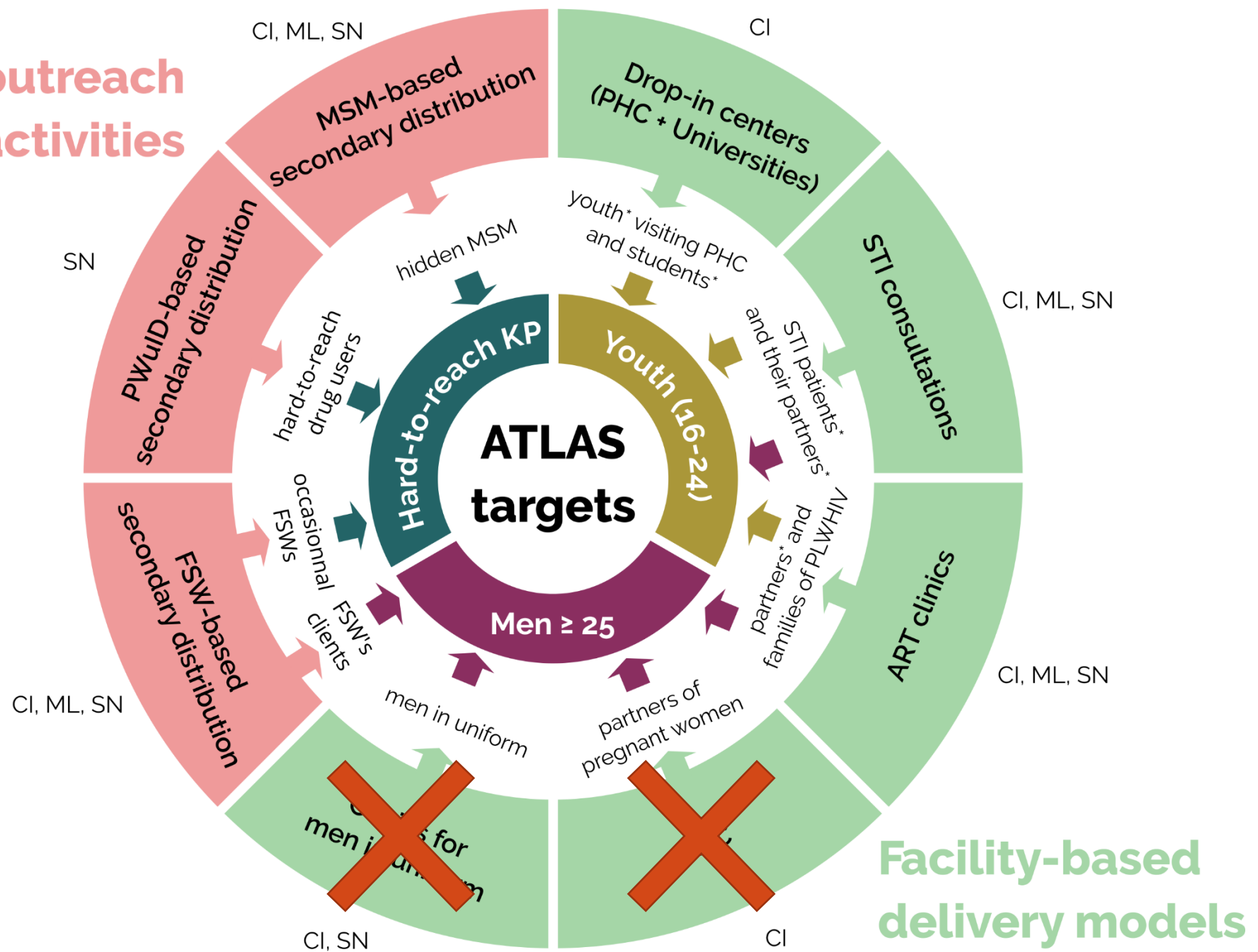


* some of them could also be part of key populations

ATLAS Strategy (March 2018)



KP outreach activities



* some of them could also be part of key populations

Integration of HIVST in preexisting activities

- › Identification of local implementers with Ministries of Health
 - » Based on current programmes funded by Pepfar or Global fund
- › Sidaction decided to leave the consortium
 - » Their historical partners were not necessarily sub-recipients of Pepfar/GF grants
 - » Not having local teams, low added value of their participation in the consortium

Embedding research

- › HIVST distribution strategies has been designed regardless of the ease with which they can be evaluated
 - » In particular, secondary distribution without any tracking
- › Research plan was developed based on the operational strategy
 - » Research activities had to evolve during GAD to adapt to strategy changes
- › Strong request from Unitaid to collaborate with other Unitaid-funded projects
 - » STAR project in Eastern & Southern Africa
 - » MTV Shuga Babi project
- › Challenges for implicating local researchers in a tight agenda
 - » Use of preexisting partnerships (PAC-CI, CRCF)
 - » Most of recruited post-doc and PhD students are African
 - » Involvement of national co-investigators, representatives of MoH, during protocol development (i.e. after GAD)

6 Research Work Packages

Social contexts

KP qualitative survey

*led by
A Desclaux (IRD)
partnership with
CRCF Dakar*

Partners of PLWHIV anthropological survey

*led by
D Pourette (IRD)*

Evaluation of ATLAS impacts

Coupons survey

*led by
J Larmarange (IRD)
partnership with
PACCI Abidjan*

Costing

*led by
F Terris-Prestholt (LSHTM)*

Population-based survey (Bas-Sassandra, CI)

*led by
I Birdthistle (LSHTM)
in partnership with
MTV Shuga project*

Modelling

*led by
MC Boily
(Imperial College)*



Lessons learned

Research/Implementation articulation

- › A co-construction between implementers (Solthis) and researchers (IRD)
 - » Mobilization of the state of scientific knowledge to design the operational strategies
 - » Research questions defined to address the field actors' concerns in terms of scale-up
 - » Research must feed implementation / Implementation must guide research

- › A limited place for local actors during the development phase
 - » Continuous negotiation with Unitaïd (strong constraint)
 - » Solthis maintained ongoing discussion with national authorities (MoH, HIV programmes)
 - but the latest were poorly involved in decision making
 - no joint meeting between Unitaïd, Solthis/IRD and countries
 - » Limited involvement of local implementing NGOs and public sites (>30) at that stage

How to compensate during implementation phase ?

› At operational level

- » Establishment of national technical groups
- » At project start, 6 months dedicated with local actors on the operationalization
- » Meetings once or twice a year bringing together stakeholders from the three countries (consortium meeting)
- » Adaptation of budget envelopes to each field actor according to his reality

› At the research level

- » Identification of co-investigators from ministries of health
- » Focus groups conducted at regular intervals among the 700 dispensing agents
- » Results presented and discussed during consortium meetings & country workshops
- » Development of a knowledge transfer plan: summary reports...

Coordination



Bailleurs



LES PARTENAIRES

Partenaires de mise en œuvre

Côte d'Ivoire

Ministère de la Santé et de l'Hygiène Publique
PNLS



Ariel Glaser
Espace Confiance
Heartland et ses partenaires
Ruban Rouge

Mali

Ministère de la Santé et des Affaires sociales
HCNLS



AKS
Amprode Sahel
ARCAD Sida
Danayaso
PSI
Soutoura

Sénégal

Ministère de la Santé et de l'Action Sociale
CNLS



CTA
CEPIAD
Enda et ses partenaires

Partenaire technique



Partenaires de recherche



Projets partenaires

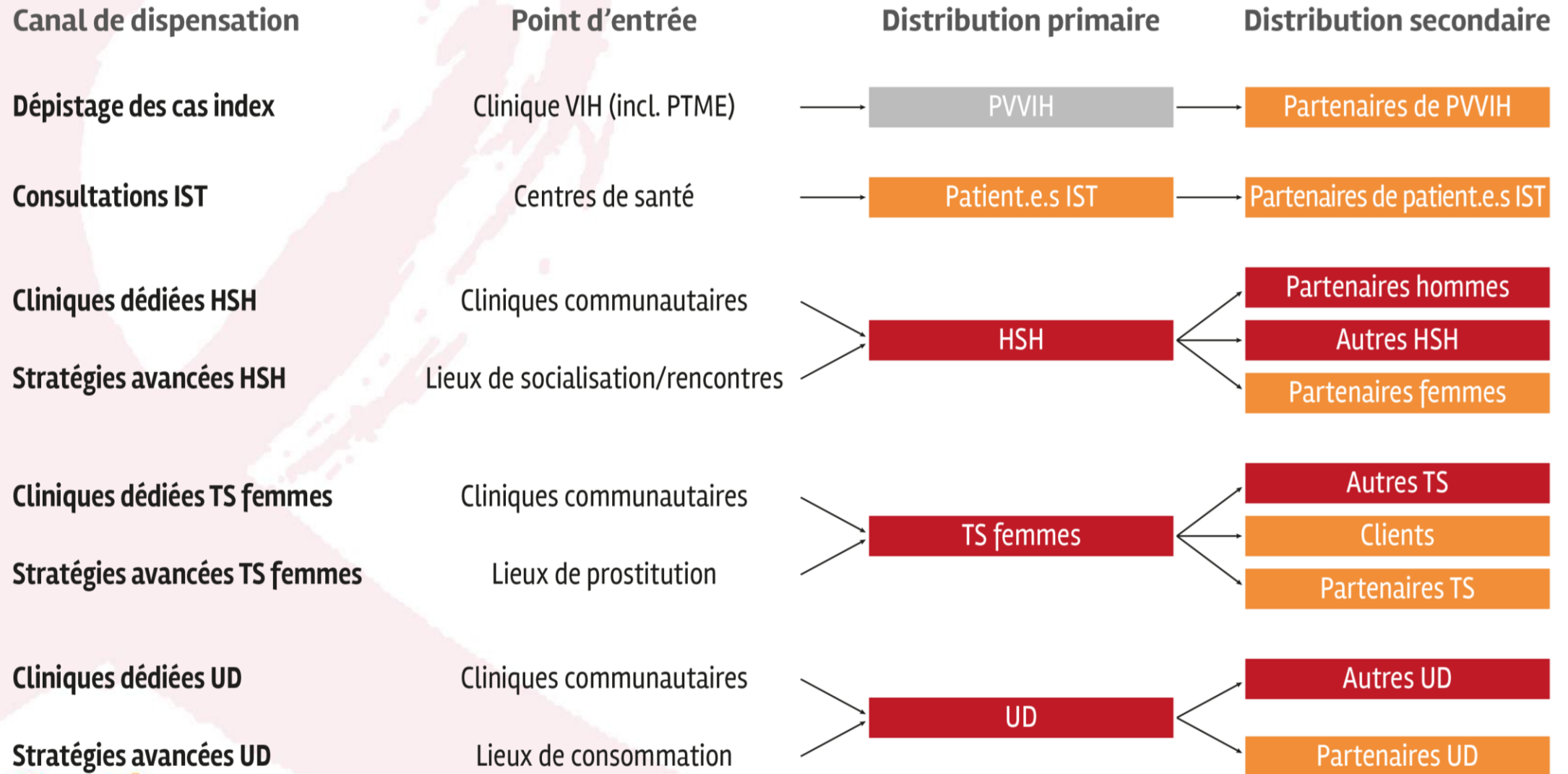


Extra slides



ATLAS IMPLEMENTATION

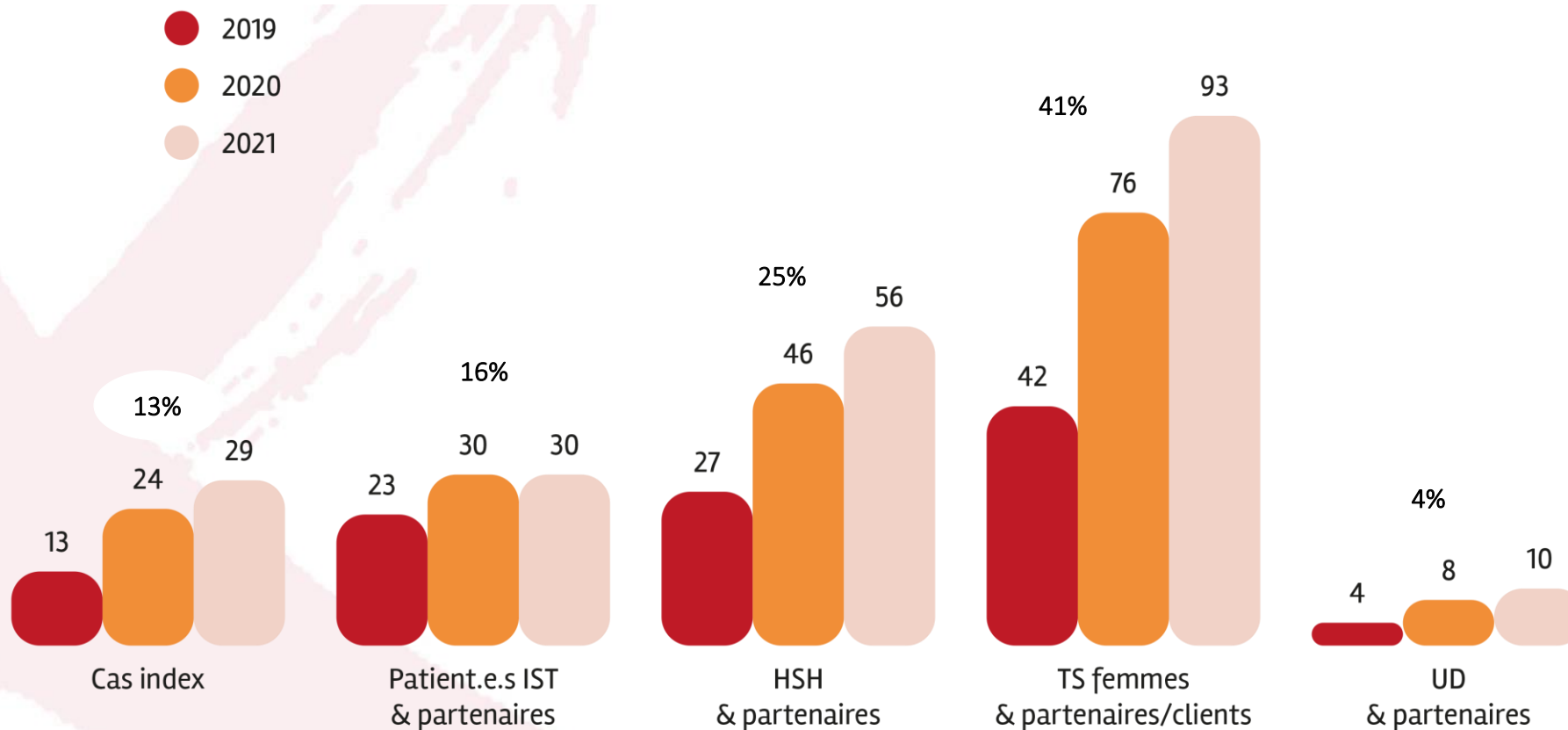
ATLAS delivery channels



Estimated HIVST distribution 2019-2021

HIVST estimated distribution per year and target population (ATLAS project)

In thousands, estimations, June 2019



Implementing
partners
and regions



MoH (PNLS)

Ariel Glaser

Heartland Alliance

Espace Confiance

Ruban Rouge



MoH (CSLS)

HCNLS

AKS

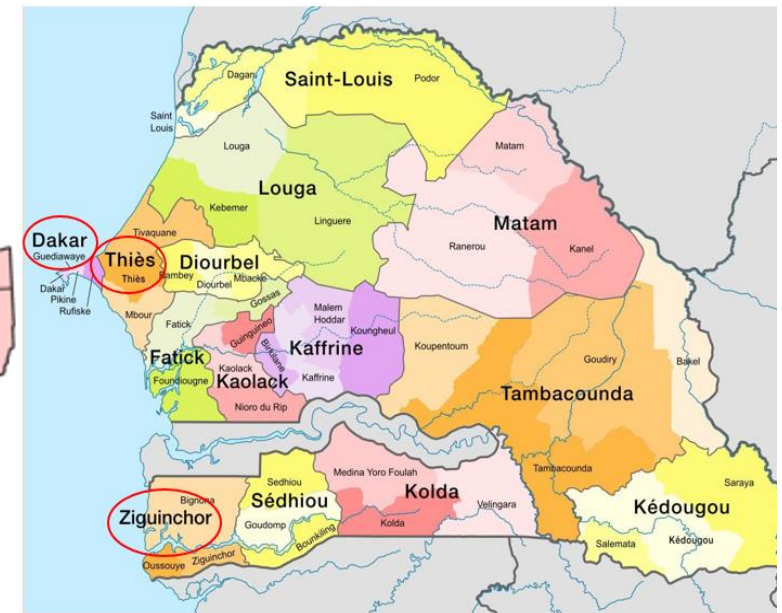
AMPRODE SAHEL

ARCAD-SIDA

DANAYA SO

SOUTOURA

PSI Mali



MoH (DLSI)

CNLS

CEPIAD

ENDA Santé

CTA



CONTEXT



**Epidemiological
categories**

**Individuals
reached by
surveys**

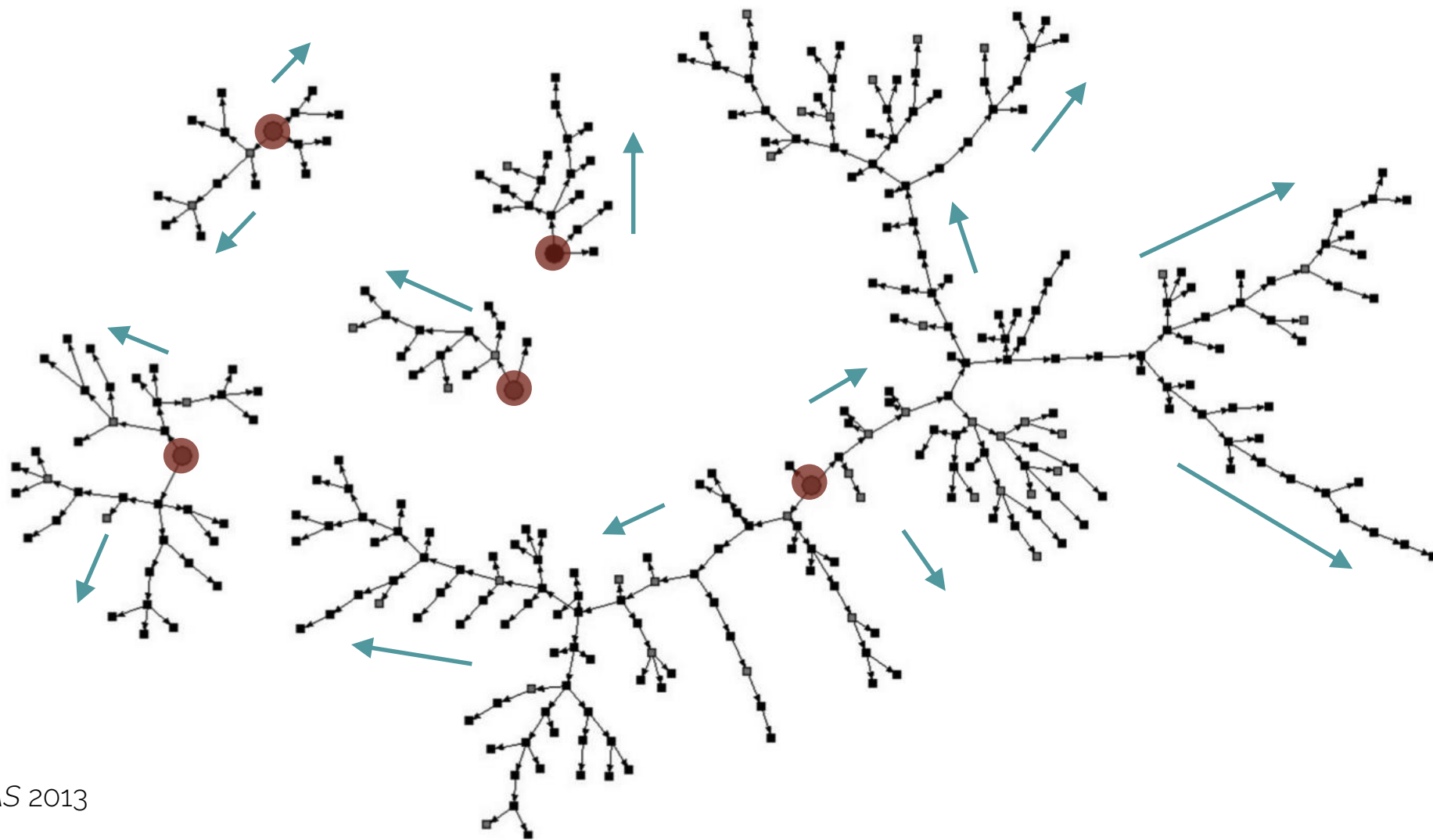
Sexual networks

**Individuals
reached by
programmes**

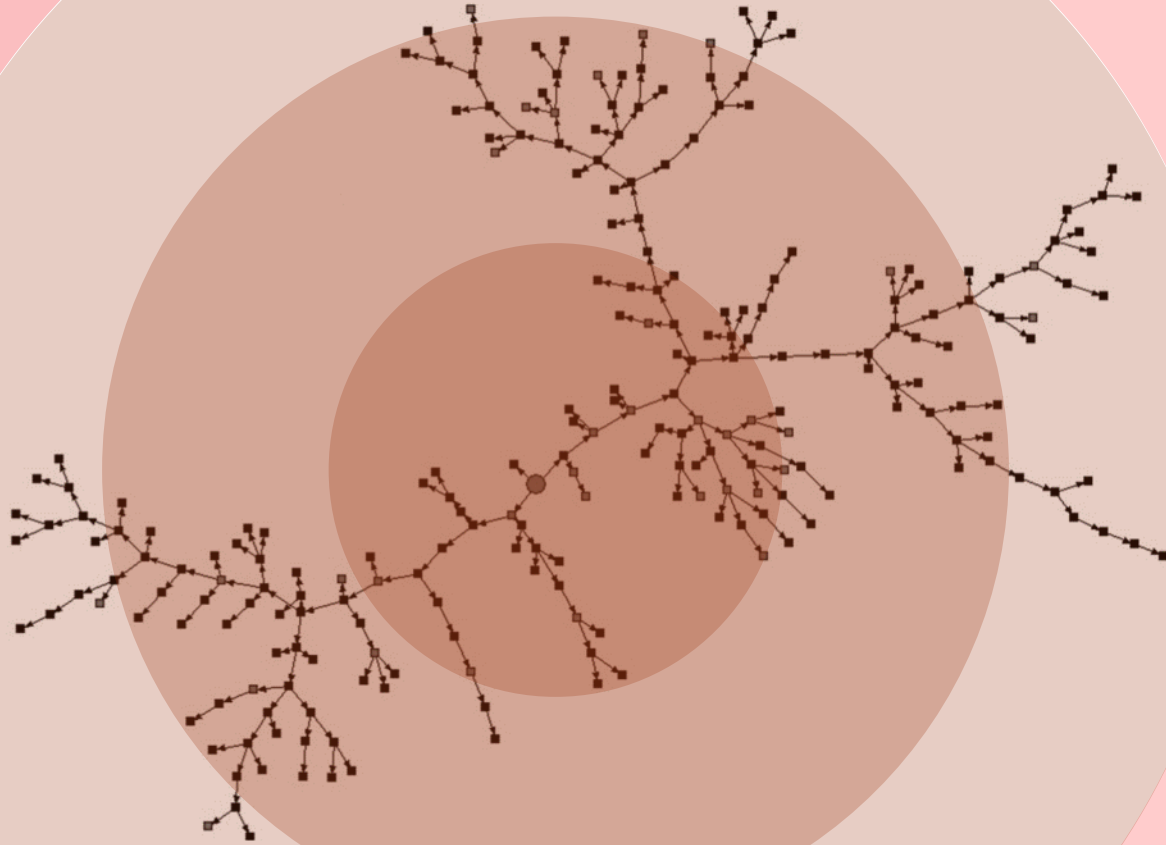
**Social
groups**

RDS

Respondent Driven Sampling



There is a relation between exposure to HIV, access to HIV testing and position within sexual networks



Self-reported orientation, HIV prevalence & status knowledge by RDS waves

Waves 0-3


49% self-reported to be Gay
48% infected by HIV
53% knew their HIV status

Waves 4-7

48% self-reported to be Gay
27% infected by HIV
37% knew their HIV status

Waves 8-13

27% self-reported to be Gay
15% infected by HIV
33% knew their HIV status

A large iceberg floats in a blue ocean under a clear sky. The visible tip of the iceberg is on the right side of the frame. The much larger, submerged part of the iceberg extends across the bottom half of the image, illustrating the concept that many MSM are not observed in surveys.

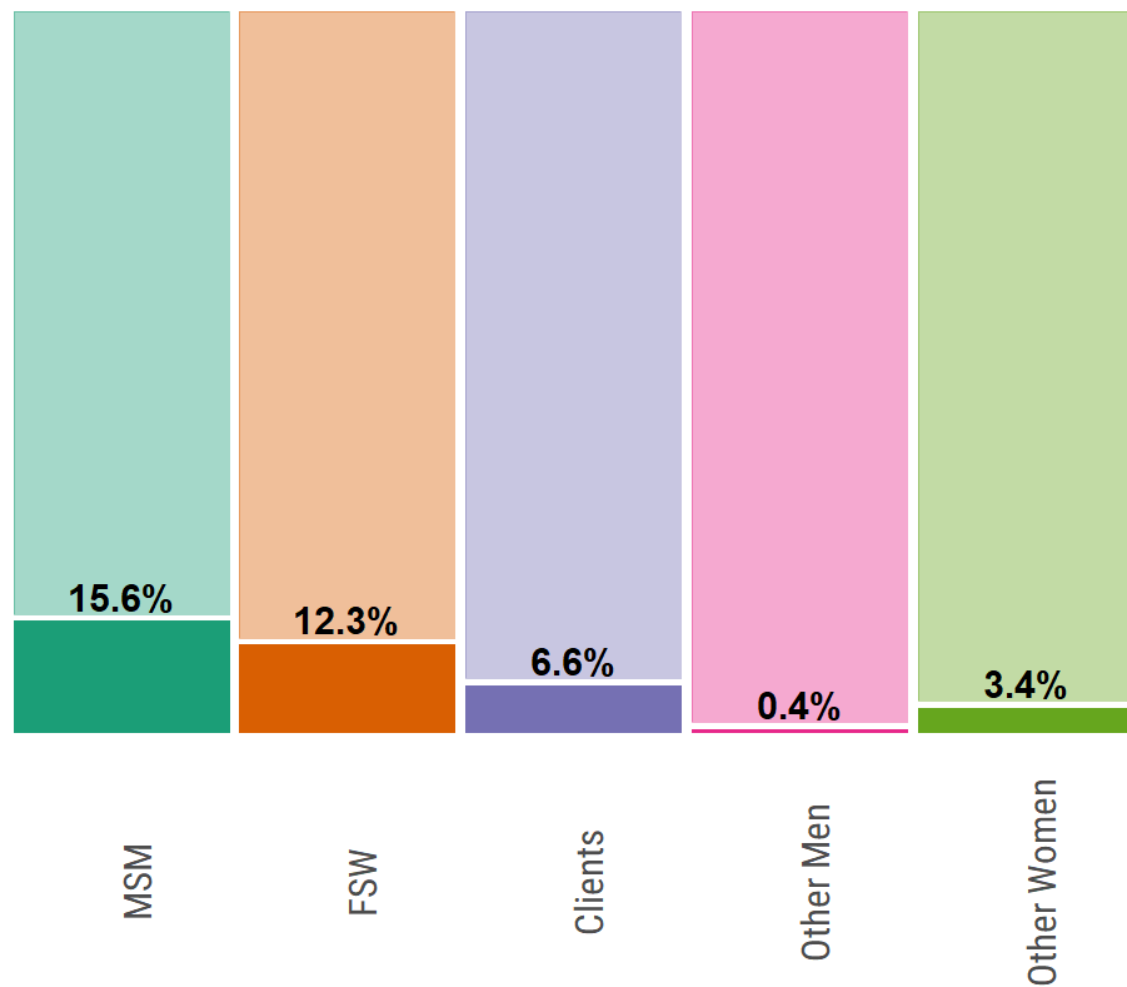
Some MSM are not observed in the different surveys

Most participants are young (<35) and
report having older sexual partners

Similar feedback from peer educators on the field
They have difficulties to reach older MSM,
in particular married men

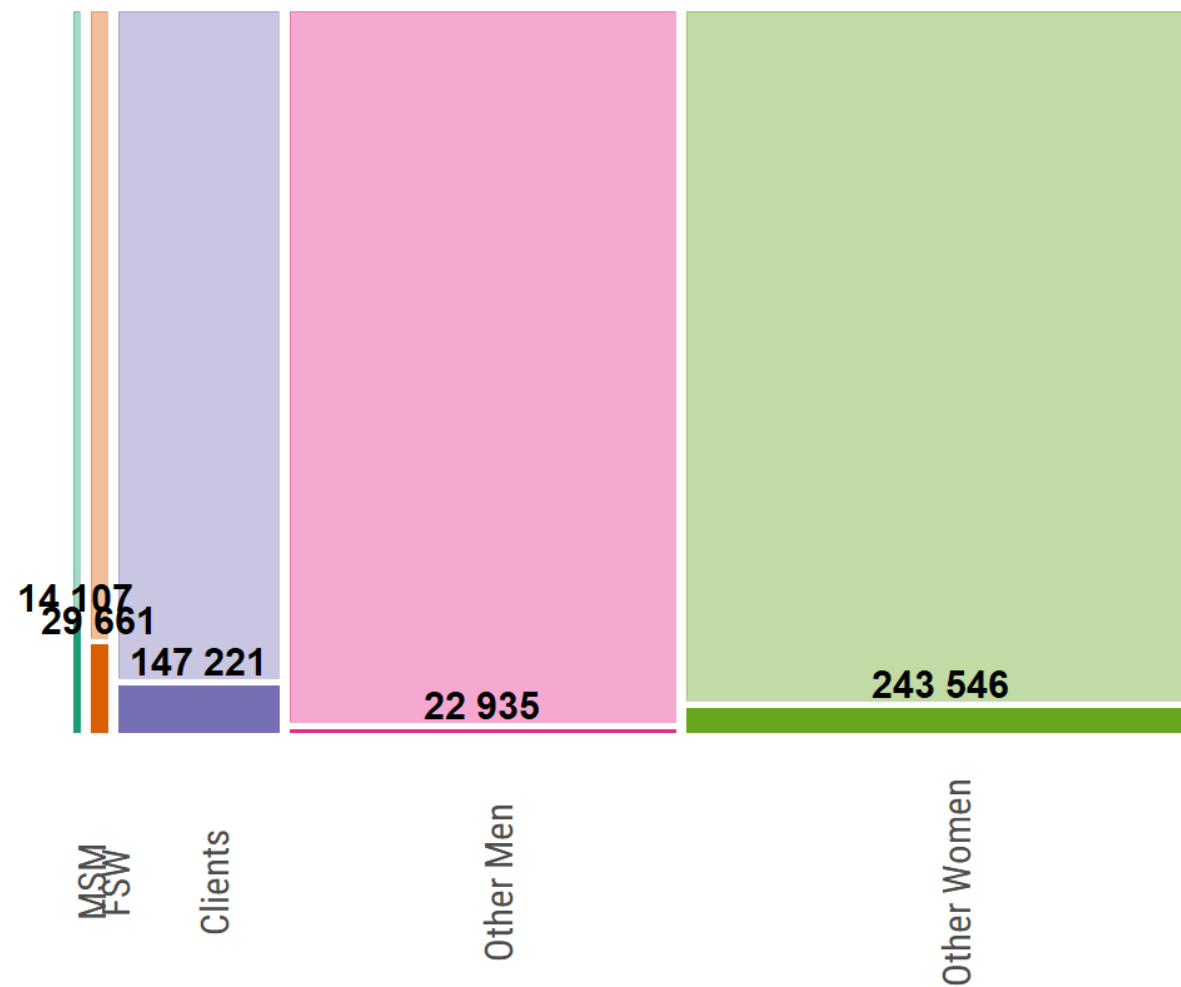
HIV prevalence by sub-population

Côte d'Ivoire 2018, unpublished data
derived from Maheu-Giroux et al. JAIDS 2017

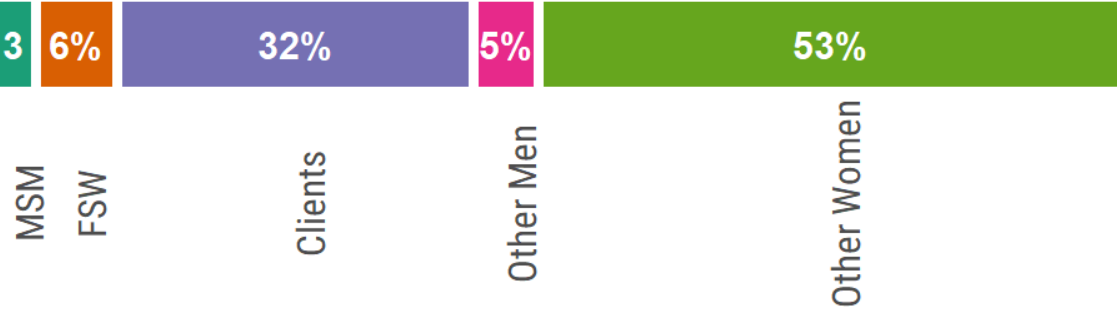


Number of PLHIV by sub-population

Côte d'Ivoire 2018, unpublished data
derived from Maheu-Giroux et al. JAIDS 2017

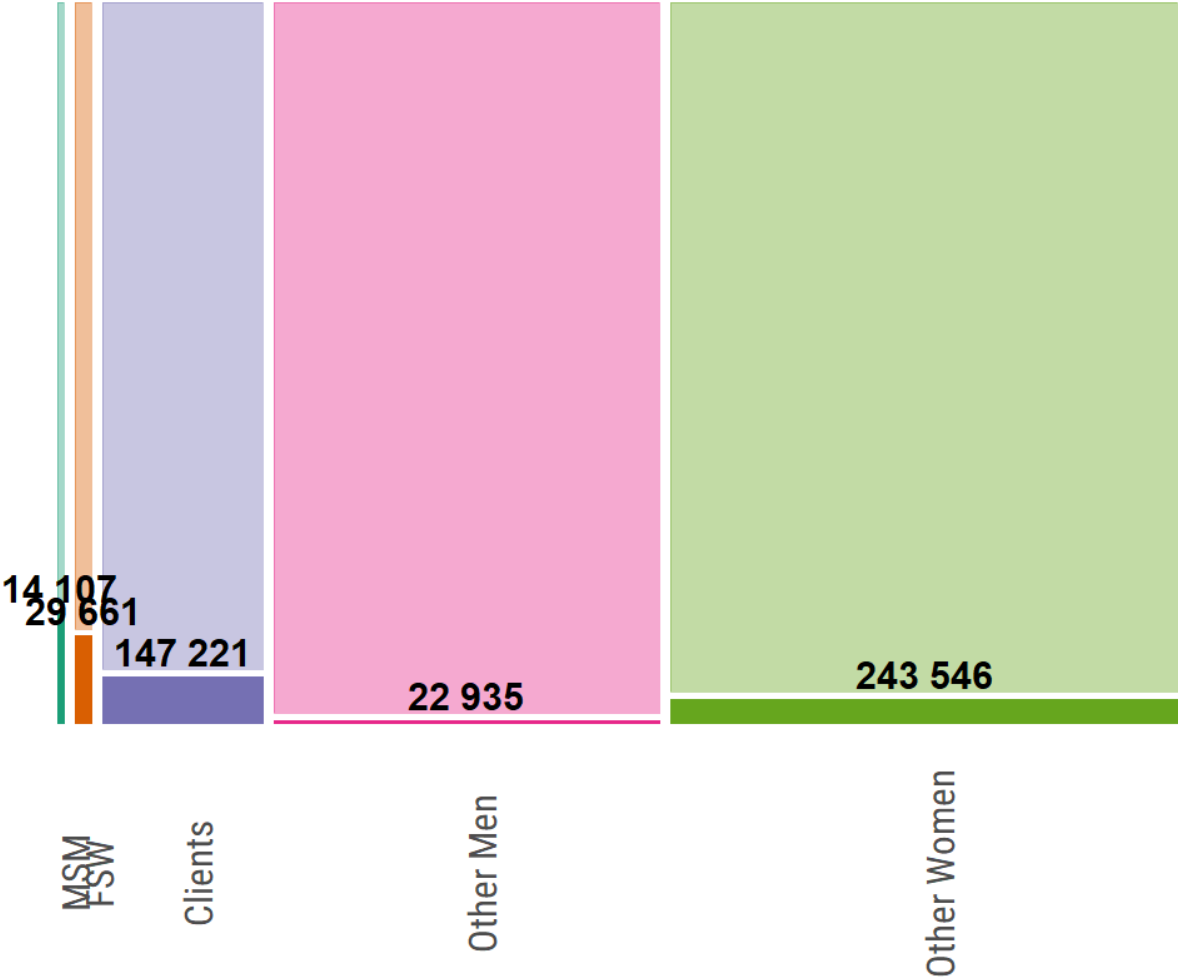


Distribution of PLHIV by sub-population

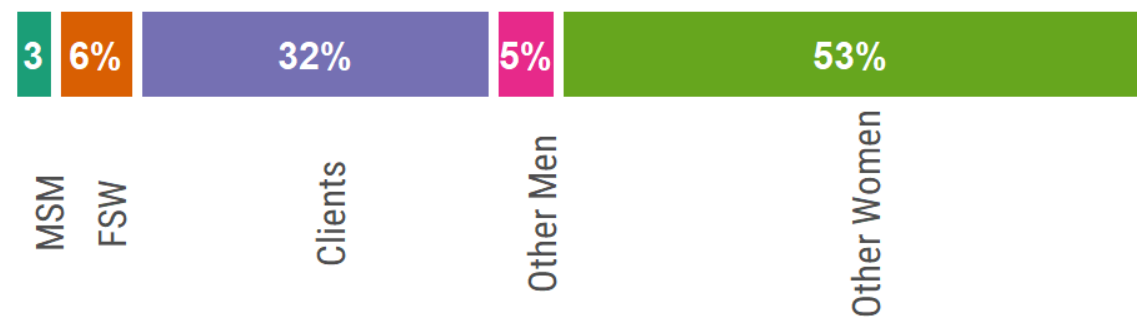


Number of PLHIV by sub-population

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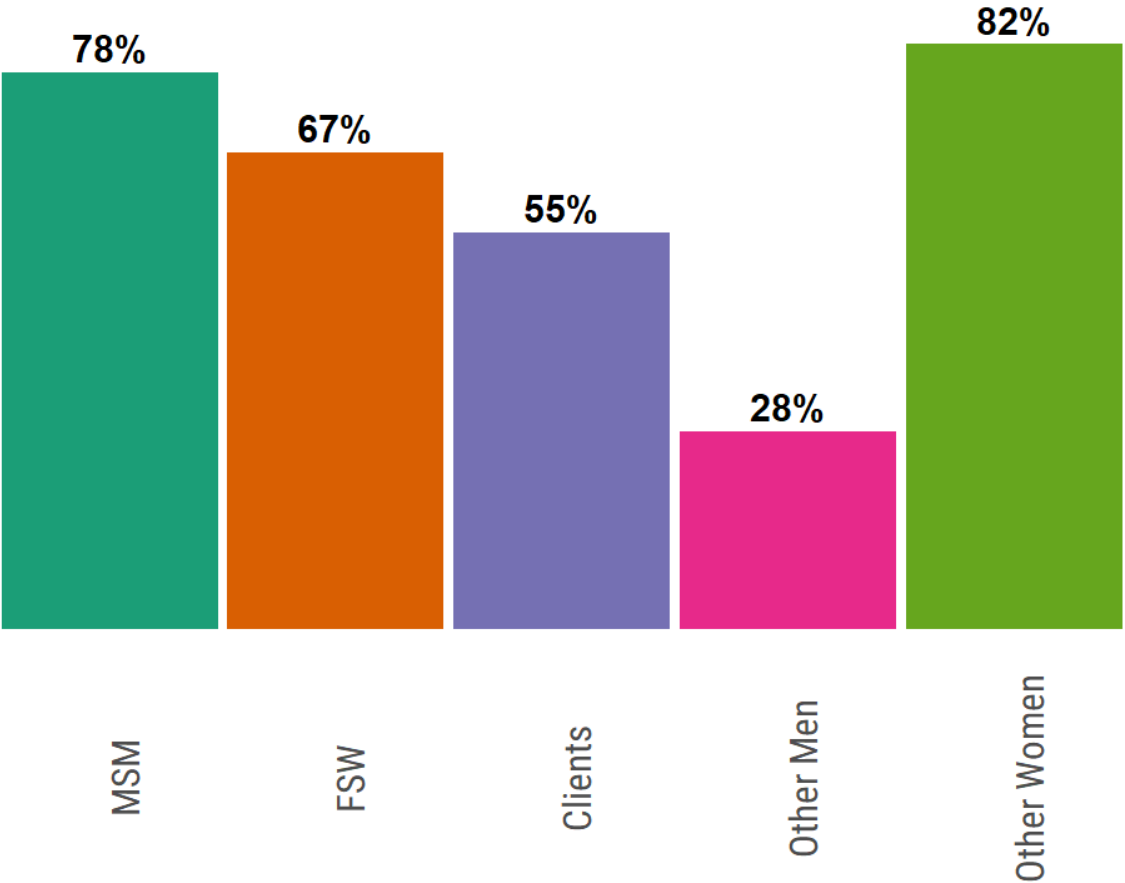


Distribution of PLHIV by sub-population

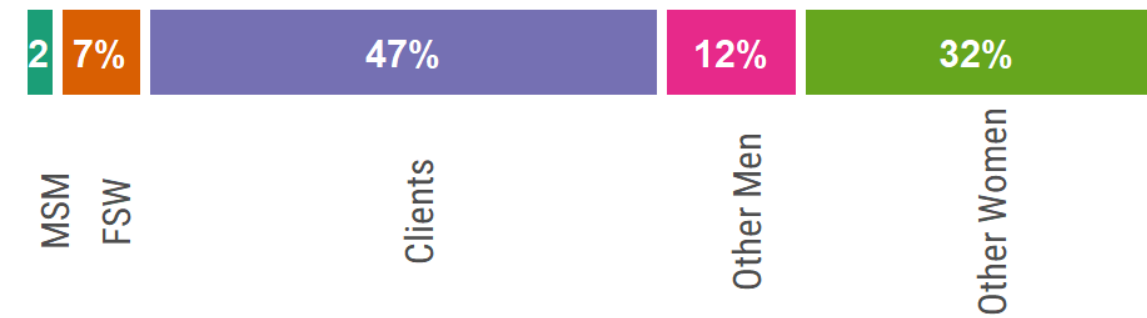


First 90 by sub-population

Côte d'Ivoire 2018, unpublished data, courtesy of Maheu-Giroux and colleagues



Distribution of undiagnosed PLHIV by sub-population





Who transmit and who acquire HIV?

According to the same model,
in Côte d'Ivoire, between 2005 and 2015

- › MSM:
4% of those acquiring HIV
4% of transmitters
- › FSW:
5% of those acquiring HIV
19% of transmitters
- › **44% of HIV infections occurred between a client of FSW and a no-FSW women**



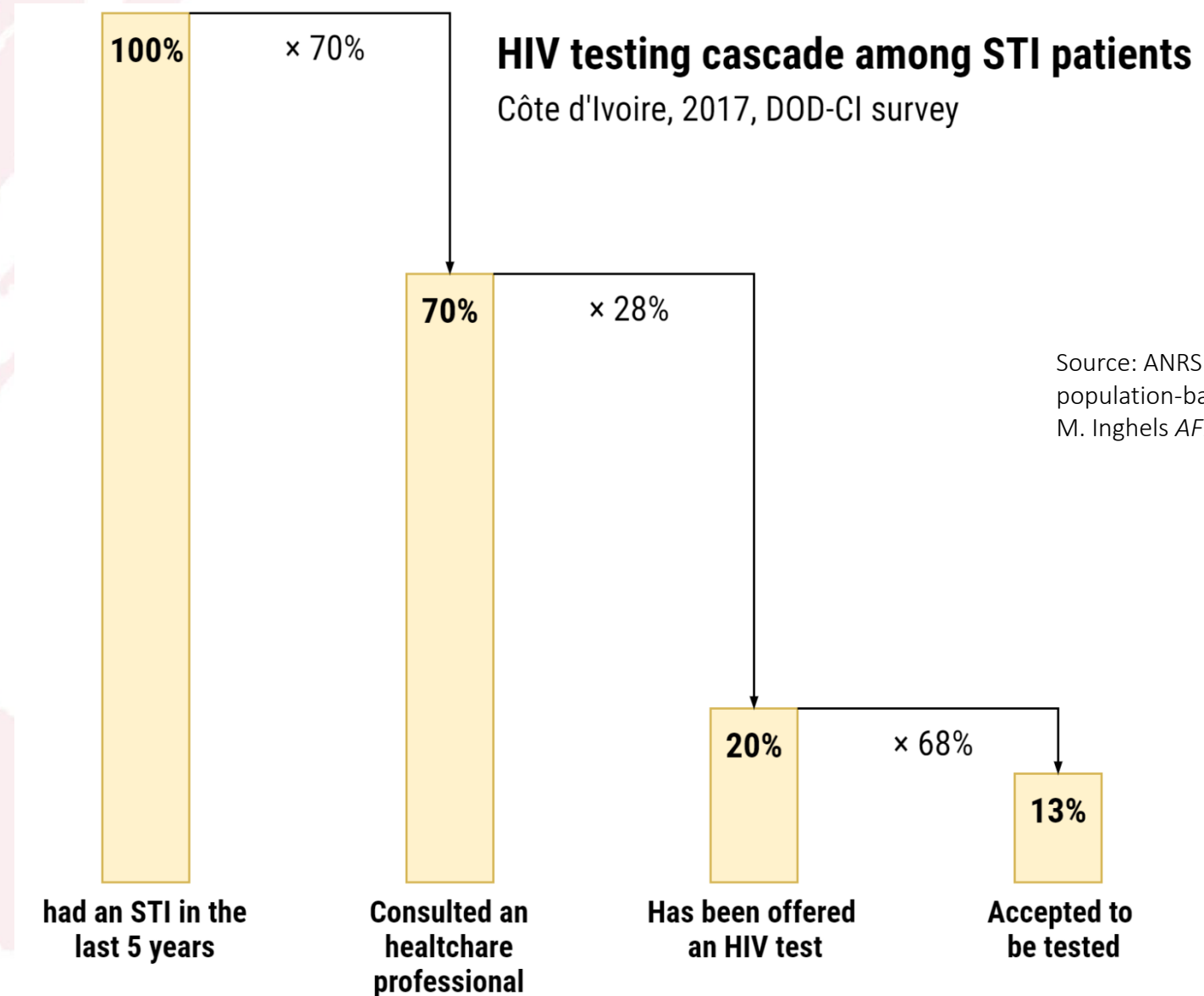
Differences by countries

According to a similar model
for Dakar only in Senegal:

- › *Sex between men* (MSM) account for around **half** of new HIV infections
- › *Commercial sex* account for around **one sixth** of new HIV infections

STI consultations and HIV testing

Only 28% of those who consulted a health professional for an STI in Côte d'Ivoire reported that they were offered to test for HIV.



Source: ANRS 12323 DOD-CI population-based survey 2017, M. Inghels *AFRAVIH* 2018



ATLAS RESEARCH





Research embedded in ATLAS

General objective

Describe, analyse and understand
the **social, health, epidemiological** and
economic effects

of the introduction of HIV self-testing
in Côte d'Ivoire, Mali and Senegal
to improve testing offer (accessibility,
effectiveness and ethics)



Secondary objectives (1/2)

- Identify the social, cultural and organisational factors facilitating and limiting the primary and secondary distribution of HIV self-tests and their use/appropriation by the different actors concerned (program or project manager and NGO representative, delivery agents, primary contacts, secondary contacts).
- Establish the socio-behavioural profile and HIV testing history of HIV self-tests users and their care history in the event of a reactive self-test.
- Analyze the positive and negative social and health consequences of the introduction of HIV self-testing for individuals, communities and the health system.



Secondary objectives (2/2)

- Estimate the incremental costs of dispensing HIV self-tests per delivery channel.
- Model the epidemiological impacts of the ATLAS program and different scaling scenarios on epidemic dynamics.
- Estimate the medium- and long-term cost-effectiveness and budgetary impact of different scaling up strategies.