




DIFFERENTIATED SERVICE DELIVERY FOR HIV:

A DECISION FRAMEWORK FOR HIV TESTING SERVICES

Mobilizing, testing, linking

It's time to *test* differently.



Over the past two decades, major progress has been made in identifying people living with HIV (PLHIV) and linking them to HIV care. Many countries are already reaching the first 90 target with gains made by adapting HIV testing services, providing services both at facility and community locations and embracing task sharing. However, for some countries and some specific populations, access to testing remains a major challenge. How can we reach the remaining people living with HIV who do not yet know their status? Can the principles of differentiated service delivery help identify our gaps and adapt our services? Read on to see how we can start to *test* differently.



It is time to test differently. Coordinated support from donors, implementing agencies, communities and networks of PLHIV is needed to take on this challenge to reach the testing goal of 90% of all PLHIV knowing their status by 2020. *Differentiated service delivery for HIV: A Decision Framework for HIV testing services* highlights how the principles of differentiated service delivery may support a systematic approach to reaching the remaining people living with HIV who do not know their status. These principles should be applicable to a global audience.

This is the fourth of the Decision Framework series. Previous frameworks have focused on ART service delivery models for stable clients and specific populations, such as pregnant and breastfeeding women, children and for key populations. This is the first framework to address another part of the HIV cascade. We hope that this structured approach to performing the situation analysis and building HIV testing service delivery models helps you reach the first 90.

EXECUTIVE SUMMARY



How am I going to reach the remaining people with HIV who don't know their status with the resources we have? We have to reach our 90-90-90 targets.

Learn more about **Andrew**, a district HIV manager, on page 8



How am I meant to have an HIV test every six months? The queues in the clinic are too long. I'm also not sure where I can get a regular supply of condoms and I heard some of my friends have started to take PrEP. Where should I go?

Learn more about **Namrata**, a female sex worker, on page 8

Global targets have been set for 90% of people living with HIV (PLHIV) to know their status, 90% of people who know their status to be on ART and 90% of those on ART to achieve virological suppression by 2020. By 2030, these targets increase to 95% across the cascade. Progress in the first 90 lags behind other areas of the cascade with the largest gaps often among men, young people and key populations. While more than two out of three people living with HIV know their status worldwide, programme managers are being challenged to determine efficient and effective ways to reach those that are not yet diagnosed and link them to care.

Targets have also been set for prevention with a global goal of achieving less than 500,000 new infections by 2020¹. To achieve this target, linking clients to the five prevention pillars should be an essential component of any HIV testing service delivery model. These pillars are: combination prevention for adolescent girls and young women; combination prevention for key populations; comprehensive condom programmes; voluntary medical male circumcision and sexual and reproductive health services for men and boys; and rapid introduction of pre-exposure prophylaxis (PrEP).

The concerns of Andrew, a district HIV manager, and Namrata, a member of a key population, shown above highlight some of the challenges being faced in many settings as we continue to scale up access to HIV testing services (HTS).

Differentiated service delivery (DSD), or differentiated care, is a client-centred approach. It simplifies and adapts HIV services across the cascade of HIV care to reflect the preferences and expectations of various groups of PLHIV while reducing unnecessary burdens on the health system². DSD supports shifting resources to clients who are most in need and hence, in the context of HIV testing, is aimed at developing HIV testing strategies targeted at identifying those PLHIV who do not yet know their status with the aim of linking them to HIV care. The DSD approach will support programme managers to think through how to mobilize, test and link to care and prevention differently.

This framework is aimed at using the principles of DSD (elements, Part 4, and building blocks, Part 6), presented in the previous frameworks^{3,4}, to guide HIV programme managers at national and district level, implementing partners, technical assistance providers and other key stakeholders in analysing and adapting their HIV testing service delivery models. The aim is to provide a systematic approach to building a **strategic mix of testing strategies**, including deciding which testing models they may need to adapt, build or drop. The approach will consider the **core components for the first 90: mobilizing, testing and linking to prevention and/or treatment, Part 2**.

The *Decision Framework for HIV testing services* is a practical tool supported by an online compendium of tools and best practices available at www.differentiatedservicedelivery.org to guide HIV programme managers on how to consider HIV testing and linkage services differently. The aim is for testing services to be adapted to the needs of the community by considering the core components of testing through a client-centred lens.

Outline of the framework

In Part 1, an overview of DSD is given, including how differentiated HIV testing services are a part of DSD. Part 2 outlines the three core components of any HIV testing service delivery model: mobilizing; testing; and linking to ART or prevention services. Part 3 outlines a six-step plan aimed at enabling programme managers to prioritize who requires differentiated HIV testing approaches and how to build these using the building blocks.

In Part 4, the three key elements of a client are described. This includes the client's: clinical characteristics; specific population(s); and the context in which they live. Part 5 addresses how to develop an optimized and effective programme through either adapting existing models of HIV testing or building new models. Part 6 outlines the service delivery building blocks used to build a model.

Throughout the framework, case studies and real-world examples illustrate how the elements and building blocks have been used to design differentiated HIV testing services.

COMMON CHALLENGES: WHY IT'S TIME TO TEST DIFFERENTLY

CLIENT PERSPECTIVE



HEALTHCARE WORKER (HCW) PERSPECTIVE

I'd like to have an HIV test, but I don't want to lose my place in the queue to see the doctor. I don't think I'll bother today.

How can I test all these clients in my outpatient department (OPD) for HIV? The queue is so long and I don't have time to provide quality testing. At best, I can test eight people today.

My husband is never going to come for a test at the clinic. He is working all day and it takes us two hours to get to our clinic. What about my previous partner, shouldn't he also have a test?

How can I test the children and husband of this woman living with HIV? They still have not come to the clinic and they live far away. Should I contact her previous partner?



I had an HIV test a few weeks ago and it was positive, but I really don't want to test my child.

I am quite worried as this child has some signs of HIV, but I don't think her mum wants me to test her. What should I do?



We don't like going to the clinic and asking for HIV testing. The healthcare workers are not approachable. Why can't we test ourselves?

I work in a context where the HIV prevalence is much higher in our key populations. How can I reach them for testing when they don't like coming to the clinic?



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ABBREVIATIONS

ANC	Antenatal care	MoH	Ministry of health
ART	Antiretroviral therapy	MSM	Men who have sex with men
CHW	Community health worker	OPD	Outpatient department
COs	Clinical officers	PITC	Provider-initiated testing and counselling
DHS	Demographic and health survey	PLHIV	People living with HIV
DSD	Differentiated service delivery	POC	Point of care
EFMC	Excellence and Friends Management Care Centre	PrEP	Pre-exposure prophylaxis
EPI	Expanded programme on immunization	PWID	People who inject drugs
FSW	Female sex worker	RDT	Rapid diagnostic test
HCV	Hepatitis C virus	ROOT	Routine opt-out testing
HCW	Healthcare worker	SOP	Standard operating procedure
HTS	HIV testing services	STIs	Sexually transmitted infections
IPD	Inpatient department	SW	Sex worker
KPs	Key populations	TB	Tuberculosis
NCD	Non-communicable disease	VMMC	Voluntary medical male circumcision
NGO	Non-governmental organization	WHO	World Health Organization

“We have been doing so many outreach testing campaigns, but we are hardly identifying any new HIV-positive clients and so many of the people coming to test have already had an HIV test, even in the past few months. How can I reach the HIV-positive people who have not yet tested and make sure they start ART, but with the limited funds I have?”



PREFACE

Background to the Decision Framework series

The first *Decision Framework for ART delivery*³ was released in July 2016 and set the background and principles of differentiated service delivery using the elements and building blocks to design and build differentiated ART delivery models for clinically stable clients.

Moving beyond clinically stable clients, a *Decision Framework for differentiated ART delivery for children, adolescents and pregnant and breastfeeding women*⁴ was developed and launched in 2017. A third Decision Framework focusing on key populations will be released in 2018.

This framework, the fourth in the series, uses the same stepwise process for adapting or building DSD models for all specific populations – but now for mobilizing, testing and linking. The same principles, using the elements and building blocks as a systematic frame to build an HIV testing service delivery model are used. It is not a guideline, but it complements guidelines that are available, providing a systematic and programmatic approach to developing appropriate service delivery models for HIV testing in a given context.

Differentiated HIV testing services

To date, the concept of DSD has focused primarily on developing models of care to simplify ART delivery for stable clients and for specific populations, such as children and adolescents and pregnant and breastfeeding women³. HIV testing services in many settings have already demonstrated elements of a DSD approach. HIV testing may be provided at both the facility and in the community, the “where”, and in many contexts, has been task shared to lay cadres, the “who”. However, systematic use of the elements (Part 4) and building blocks (Part 6) for the three components of any testing model, (**mobilizing, testing and linking**) (Part 2) may not have been implemented in all programme settings.

Objectives of the Decision Framework for differentiated HIV testing services

Differentiated service delivery for HIV: A Decision Framework for HIV testing services is the fourth in a series of frameworks for implementation of DSD, but it may be read as a standalone document. The objectives of the framework are to provide:

- A **background** to the principles of DSD
- **Examples** of differentiated HIV testing service delivery models that demonstrate how to use the core components (Part 2), elements (Part 4) and building blocks (Part 6)
- **Guidance** on the steps to decide what differentiated HIV testing service delivery models are needed and whether to adapt or build new models.

The *Decision Framework for HIV testing services* is aimed at both national and district HIV programme managers and, where appropriate, at implementing partners, donors and other organizations supporting national HIV programmes. The online repository, www.differentiatedservicedelivery.org, has been updated to include best practices and relevant publications on differentiated testing and linkage, including all the relevant material previously available at www.HIVST.org.

“The peer leaders are helping people within their communities to find out their HIV status and get started on treatment when necessary. This innovative approach is breaking down barriers to care for people who need it most.”

– WHO, Viet Nam



PART 1

INTRODUCTION

WHAT IS DIFFERENTIATED SERVICE DELIVERY FOR HIV?

Differentiated service delivery (DSD), or differentiated care, is a client-centred approach that simplifies and adapts HIV services across the cascade of HIV care to reflect the preferences and expectations of various groups of PLHIV while reducing unnecessary burdens on the health system². By providing DSD, barriers to accessing services for clients and the burden of providing services for healthcare workers should be reduced, allowing the health and community systems to refocus resources to those most in need. To meet the diverse needs of people requiring HIV testing and ART services, the World Health Organization (WHO) recommends a differentiated approach to service delivery^{5,6}.

DSD is aimed at enhancing the quality of the client experience, putting the client at the centre of service delivery while ensuring that the health system is functioning

in both a medically accountable and efficient manner. The central driver for adapting service provision are the client's needs. From this starting point, the differing clinical needs, the specific population (pregnant and breastfeeding women, children and adolescents or key population) and the context in which the client lives should be considered. These three elements are further described in Part 4.

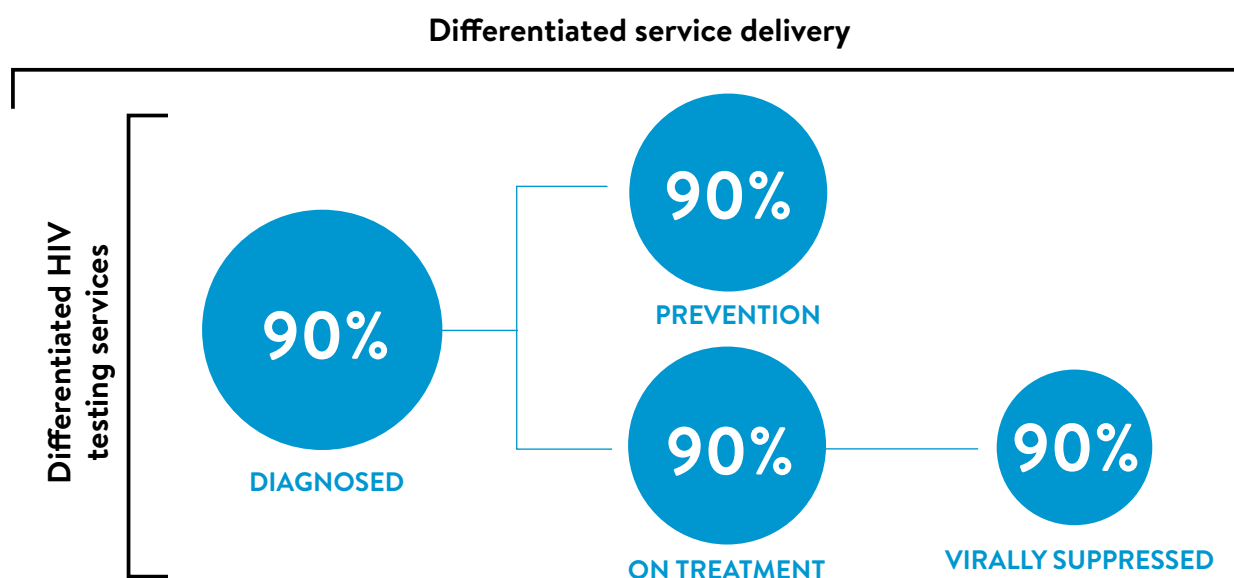
DSD supports shifting resources to clients who are most in need and hence, in the context of HIV testing, is aimed at developing HIV testing strategies to identify those PLHIV who do not yet know their status with the aim of linking them to HIV care or prevention services. In the current context, finding the correct strategic mix of testing models to do this task is the major challenge.

DIFFERENTIATED SERVICE DELIVERY INCLUDES HIV TESTING

DSD applies across the HIV continuum from prevention to viral suppression (Figure 1) and therefore across all three of the 90-90-90 targets; the first 90 is that 90% of PLHIV should know their HIV status⁷. The global HIV testing and treatment cascades from 2015 and 2016 suggest an increase in the knowledge of HIV status amongst PLHIV from 66% in 2015 to 70% in 2016. However, progress in the

first 90 lags behind other areas of the cascade⁷. Depending on the context, specific populations may contribute a greater proportion of new infections and/or face barriers to accessing HIV testing services. The first 90 target will not be reached without defining the remaining PLHIV who do not know their status in a specific context and building differentiated HIV testing models to reach them.

Figure 1: Differentiated service delivery is applicable across the HIV care continuum



DSD applies across the HIV care continuum including linkage to prevention. This Decision Framework focuses on mobilizing, testing, the first 90 and linking – the second 90.

Differentiated HIV testing services must include linkage

This framework considers three core components that must be considered in any HIV testing model: mobilizing; testing; and linking (Part 2). In existing examples of differentiated HIV testing models, including those outlined in this framework, systematic consideration of all three components is not always present. Ensuring that the linkage component of a testing model is addressed will be essential to achieve the 90-90-90 targets through linking those

testing positive to ART. Linkage to prevention must also be strengthened to reach the ambitious prevention target of having fewer than 500,000 new infections in 2020. Prevention strategies that should be offered are outlined in the UNAIDS five prevention pillars: combination prevention for adolescent girls and young women; combination prevention with key populations; comprehensive condom programmes; voluntary medical male circumcision and sexual and reproductive health services for men and boys; and rapid introduction of pre-exposure prophylaxis. These are shown on page 37.




HOW ARE HIV TESTING SERVICES ALREADY DIFFERENTIATED?

Over the course of the HIV epidemic, different testing strategies have already been implemented. Initial strategies focused on VCT and progressed to the systematic introduction of HIV testing in ANC. The mid 2000s saw a greater emphasis on testing for key populations through mobile moonlight testing strategies alongside nationwide "know your status" campaigns utilizing mass media mobilization and door-to-door testing. From 2007, provider-initiated testing and counselling (PITC) was introduced, expanding rates of diagnosis in facilities; in more recent years, we have witnessed a paradigm shift towards approaches that maximize the number of HIV positive diagnoses. Within these HIV testing services (HTS), some concepts of DSD have already been incorporated (Table 1), but re-evaluation is recommended if we are to reach the first 90. In addition, with the exception of ANC testing, many such differentiated testing strategies are only implemented in pilot programmes or where implementing

partners support services. In other settings, policy and legal barriers may prevent implementation of services, for example, for key populations, and challenges related to stigma may prevent other populations from successfully accessing existing testing services.

Previous systematic reviews have outlined the benefits and remaining challenges associated with implementing differentiated HIV testing services^{8,9}. On the positive side, community-based testing was the approach that yielded more first-time testers, men, children and clients with higher CD4 counts. However, gaps have been identified, highlighting missed opportunities for HIV testing and specific populations that are yet to be reached. One such example, demonstrated by a systematic review of PITC in sub-Saharan Africa, showed many missed opportunities for testing within clinic-based entry points¹⁰.

Table 1: Select examples of how HIV testing has been differentiated

 WHERE ARE HTS OFFERED?	HIV testing has been delivered at the facility, in the community and in the workplace
 WHO ARE PROVIDING HTS?	HIV testing has been task shared to nurses and lay workers
 WHEN ARE HTS DELIVERED?	HIV testing is performed after working hours for key populations (e.g., moonlight testing for female sex workers)
SPECIFIC POPULATIONS	HIV testing is offered as opt-out service for pregnant women in ANC by nurse midwives

WHY DO WE NEED TO REASSESS HOW HIV TESTING SERVICES ARE DIFFERENTIATED?

We need to reassess how HIV testing services are differentiated because a number of gaps have been identified, highlighting missed opportunities for HIV testing, particularly among specific populations:

- Opportunities to test and uptake of HTS for men continues to be lower than for women¹¹.
- Fewer than one in five adolescent girls in Africa are aware of their HIV status¹².
- Key populations – men who have sex with men (MSM), people who inject drugs (PWID), sex workers (SW) and transgender people – are disproportionately affected by HIV, but uptake of HIV testing services is limited⁷.
- Sexual partners of PLHIV and children of PLHIV are not systematically tested⁵.

HIV testing service delivery: Mobilizing + testing + linking

A critical proposition of this framework is that there are three core components of any HIV testing service delivery model:

- **Mobilizing**
- **Testing**
- **Linking** to both treatment and/or prevention.

Strategic consideration of each component, both separately and as a complete package, is expected to increase uptake and efficiency of testing models (see Part 2). Differentiated approaches to increase efficiency of testing models may involve reducing some current practices.

HOW THIS FRAMEWORK WILL SUPPORT DEVELOPING A STRATEGIC MIX OF DIFFERENTIATED HIV TESTING SERVICES

This framework presents programme managers with a six-step approach (Part 3) to develop a strategic mix of HIV testing service delivery models to address missed opportunities and neglected populations. The strategic mix will be driven by the context, including the HIV prevalence and current coverage of the first 90 target, in combination with assessing how available resources can be utilized most efficiently. This may or may not be heterogeneous across a country. In some settings, there may be HIV testing models that should be implemented in all regions, such as testing people with symptoms of HIV, tuberculosis (TB) and sexually transmitted infections (STIs), as well as testing the children and sexual partners of PLHIV.

In settings where a high proportion of clients already know their status, differentiated HIV testing strategies may include prioritised testing based on an HIV risk assessment and the introduction of targeted strategies for those not accessing services, such as workplace testing programmes for men. In low HIV prevalence settings where the number of PLHIV who know their status is low, one can consider reducing routine testing in OPDs and increasing PITC in TB and STI clinics alongside strengthened assisted partner notification services. In almost all settings, community-based programmes to reach key populations with adapted HIV testing services should be considered¹³.

HOW THIS FRAMEWORK WILL SUPPORT THE SYSTEMATIC BUILDING OF DIFFERENTIATED HIV TESTING SERVICE DELIVERY MODELS

Once the strategic mix of HIV testing strategies has been decided, the client-centred elements (Part 4) and building blocks (when, where, who and what) will provide programme

managers and implementers with a systematic approach to **build each of the core components of an HIV testing service delivery model: mobilizing; testing; and linking (Part 2).**



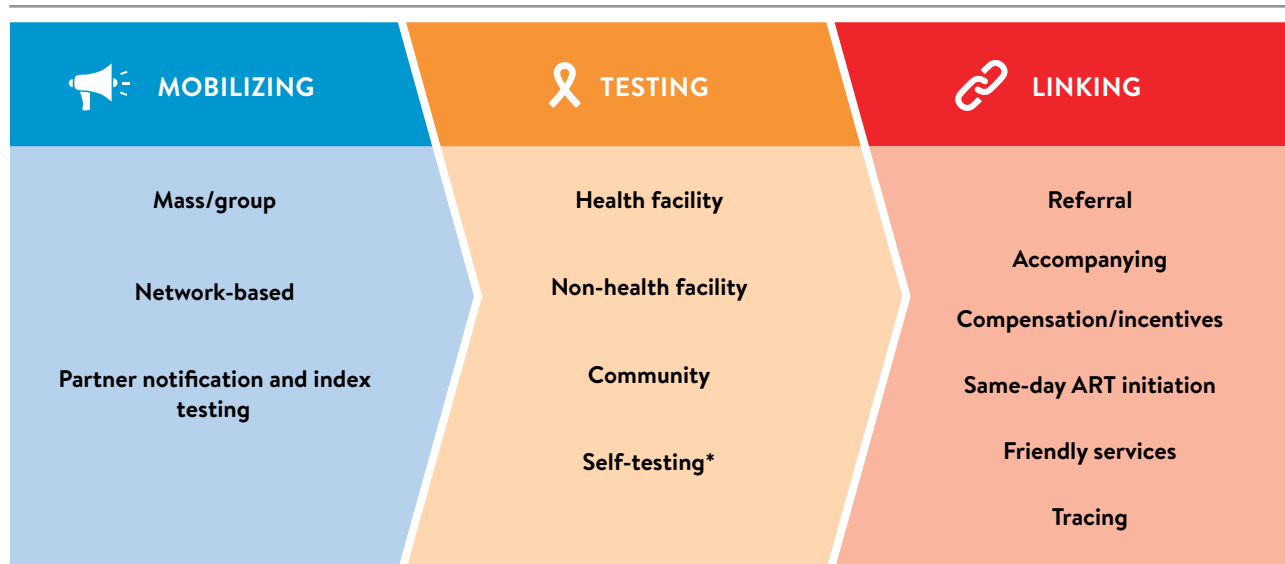
PART 2

THE CORE COMPONENTS OF DIFFERENTIATED HIV TESTING SERVICES

Any HIV testing service delivery model should include the following three core components: mobilizing; testing; and linking (Figure 2). Details on mobilizing, testing and linking are provided in Annex 1 alongside descriptions of the different approaches presented within Figure 2. When described as a service delivery model of HIV testing services, all three components are necessary and should be

included in the design of the model. In the examples given throughout this framework, these core components are outlined and the building blocks (Part 6) used to describe their implementation. Table 2 illustrates how these three components and the building blocks should be used to design an HIV testing service delivery model.

Figure 2: Three components of differentiated HIV testing services



* Self-testing is a testing modality that can be used within health facilities, non-health facilities or the community. Here it is listed as a standalone model of testing.

Table 2: Components and building blocks for building an HIV testing service delivery model

	MOBILIZING	TESTING	LINKING
WHEN	Time of day and frequency	Time of day and frequency	Time period for linking and frequency of tracing
WHERE	Location of mobilization activities	<ul style="list-style-type: none"> Health facility Non-health facility Community 	Location of linkage activities
WHO	Who does the mobilization?	Who does the HIV testing?	<ul style="list-style-type: none"> Who supports linkage to prevention? Who supports linkage to ART initiation?
WHAT	For HIV testing alone or with other services	For HIV testing alone or with other services	<ul style="list-style-type: none"> Prevention: SMS/phone Community-based tracing
			<ul style="list-style-type: none"> ART initiation: SMS/phone Community-based tracing

A photograph of a group of women in black hijabs standing in a hallway. In the center, a woman wearing a checkered hijab is holding a baby wrapped in a patterned blanket. The background shows a hallway with white metal railings and glass doors.

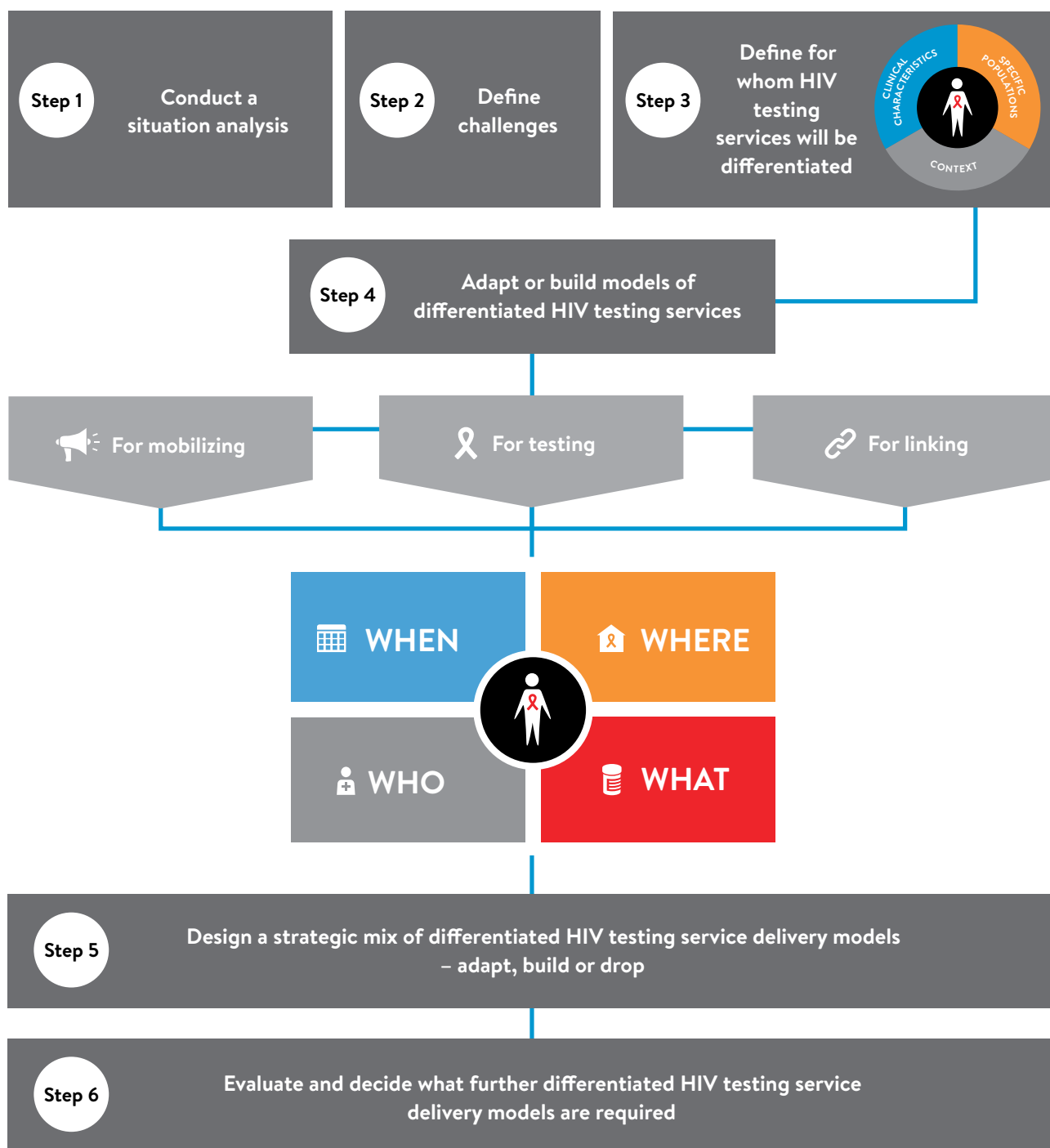
PART 3

THE SIX-STEP APPROACH TO DIFFERENTIATED HIV TESTING SERVICES

To develop differentiated HIV testing service delivery models, strategic decisions may have to be made at both the national and regional level. A mix of testing approaches may have to be endorsed at national level, but where each is applied will depend on the local situation analysis. Such local engagement in priority setting will also support ownership and buy-in for future implementation.

The six-step approach outlined in this section guides ministries of health and supporting partners in planning how to differentiate HIV testing services (Figure 3). To support this process, a number of annexes are available for download at <http://bit.ly/2sVehV5>. See Annex 2 for a full list of the annexes available online.

Figure 3: Six-step approach to differentiated HIV testing services





Learn more about Andrew

Andrew is a district HIV manager. He has just attended a sensitization meeting to outline what differentiated HIV testing service delivery models would be supported by the national programme. The HIV prevalence in his district is 7%. ART coverage is about 65% among all PLHIV and, from the latest data, he knows that 70% of women know their status versus 40% of men. Healthcare workers in the primary care clinics providing OPD services, including STI treatment, have complained that it is very difficult to test more people for HIV within the OPD due to the long queues and lack of additional human resources. Lay workers have been trained to test in the VCT centres linked to the district hospital, but there are no lay workers trained to test in the primary care clinics and no CHWs perform "test for triage" in the community.

Learn more about Namrata

Namrata is a sex worker in a large city. She has a good knowledge about HIV and has been tested for HIV a couple of times over the past few years. She knows that she should test more often, but queuing in the clinic during the day is tiring. Many of her sex worker colleagues have not tested for HIV for the same reasons. Namrata has heard of a project in another city where sex workers are being trained to raise awareness about HIV testing and HIV prevention services including PrEP and to distribute HIV self-tests and condoms to other sex workers. She is wondering if this is something she could do in her community.



Learn more about John

John works as a security guard, starting work at 7am and ending at 6pm. He has never tested for HIV, but knows that many people where he lives have HIV. He has heard about local HIV testing services on the radio and a lot about women being tested in ANC. He has also heard that community health workers in his neighbourhood are coming door-to-door to offer HIV testing. Getting to the local clinic during working hours is really difficult and he is definitely not keen for someone to come to his home. In the end, he decides not go for a test as it is too much effort.

Learn more about Judith, David and her family

Judith was diagnosed HIV positive in the last trimester of her pregnancy. She knows her husband has not tested for HIV and has not attended a health centre for several years. She has tried to persuade him to go to the clinic, but he keeps saying that he does not have time. She knows that he is busy, but also thinks that he is very nervous of attending the clinic and having the test, especially if he has to be tested close to home. Judith is also worried about her previous partner. Does he have HIV as well?



STEP 1: CONDUCT A SITUATION ANALYSIS

Before deciding on the strategic mix of differentiated HIV testing services, a situation analysis must be completed. The situation analysis should identify the gaps in achieving the first 90, both gaps in geographical coverage and coverage by specific populations, and assess how existing testing strategies are addressing these gaps. This analysis should consider the three core components (mobilizing, testing and linking) that compose a successful model of HIV testing. The analysis should include:

- Data related to the epidemiologic context
- Data on access and coverage of HTS for general and specific populations
- The existing policies (including HTS algorithm, quality control procedures and task sharing)
- The current service delivery models in place
- The perspectives of healthcare workers and clients.

Ideally, the national HIV programme should lead this process in collaboration with regional and district HTS coordinators and implementing partners. A template questionnaire to aid this situation analysis can be found in the online Annex 2 at <http://bit.ly/2sVehV5>.

1.1 Assess data

In order to define the best strategic mix of HIV testing models, the following data should be considered:

- Regional HIV prevalence
- HIV prevalence and incidence within specific populations

Balancing yield and need

The yield of an HIV testing model is determined by the number of HIV-positive cases found out of the number of people tested. For example, if 200 people are tested and there is one positive person identified, the yield is 1/200 or 0.005%.

The yield of any HIV testing approach needs to be balanced with needs and a human rights approach to ensure that all people have access to quality HIV testing. One approach may have a yield of 0.1% but identify five people who previously did not know they were HIV positive. Another approach may identify 50 new positives but have a yield of 0.01%. Further, HIV testing is an entry point to accessing HIV treatment for those identified as positive, as well as the first step to accessing prevention for those who are negative.

- HIV testing coverage of people living with HIV from population-based surveys
- HIV testing coverage (ever tested and in past 12 months) within specific populations (for example percentage of men versus women tested), targets, gaps and yield (this may be sourced from population-based surveys and demographic health surveys, specific reports and/or surveys performed for key populations)
- HIV testing coverage in priority clinical areas (ANC/PNC, TB, STI, malnutrition and hospital inpatient department entry points)
- Number and percentage of PLHIV on ART at national and regional level
- At site level, analysis of routine HTS data to determine current HTS activity:
 - Disaggregated by age, sex and specific population
 - Whether testing is performed in the community or facility or is the result of index client testing
 - Proportion of clients re-testing
 - Percentage positivity in different populations and through differing HIV testing service delivery models
- Data on current human resource allocation for HIV testing
- Where available, data on linkage from community-based surveys, national registries where a unique identifier is given at testing or through local tracing strategies
- Current costs of testing strategies and, where available, costs per HIV-positive client identified. Details on more resources related to costing are outlined in Annex 2.

1.2 Assess policies

A comparison of national-level policies with current WHO service delivery recommendations should be undertaken. The building blocks (when, where, who and what) described in Part 6 can be used as a frame to assess policies that will enable HIV testing and linkage services to be effectively differentiated. Critical for providing differentiated HIV testing are: policies to support decentralization of HIV testing outside of healthcare facilities (“where”); and task shifting to nurses and trained and supervised lay providers, including peers (“who”). Policies to consider related to HIV testing, beyond the specifics of differentiated HIV testing, include age of consent, legal barriers that may prevent specific key populations from accessing testing and having a validated HIV testing algorithm.



As a community health worker, I am visiting my community all the time and telling them about HIV testing. Why can't I also test them? I would be very happy to do that.

1.3 Assess the current HIV testing service delivery models implemented

Analysis of how HIV testing services are currently delivered is essential to decide whether an existing model should be adapted or whether new HIV testing service delivery models should be built (Part 5). Existing HIV testing service delivery models in many settings may already be differentiated to some extent. However, the coverage or field level implementation may be limited geographically or within a specific population. It may also be that only one of the core components (mobilizing, testing and linking) has been differentiated within a testing model, leaving room to adapt the other components to improve the model.

An initial broad mapping of differentiated HIV testing services is recommended to determine what is being implemented in-country and with what coverage (what proportion of facilities or community structures are offering a particular model). Examples of differentiated HIV testing services are given throughout this framework, described according to how mobilizing, testing and linking have been implemented. Further published examples can be found on the website, www.differentiatedservicesdelivery.org.

The mapping should be coordinated at national level and draw on subnational and/or district level data. It is encouraged that such a mapping exercise looks across the cascade of differentiated HIV care to maximize the use of resources rather than be carried out in isolation. Suggested steps in the mapping include: a desk review of existing published literature of models outside and inside the country; a review of local country and partner activity reports; a survey of district HIV coordinators and implementing partners; and selected site visits using the client-centred elements (Part 4) and the building blocks (Part 6) to assess current differentiation of HIV testing services.

The online Annex 2 template gives an outline of what may be asked to assess whether HIV testing has been differentiated. Similar templates for ART delivery can be found online at <http://bit.ly/2sVehV5>.

Case study 1:

HIV testing through lay providers and HIV self-testing, Ukraine

In the Ukraine, the HIV epidemic is highly concentrated among key populations and their partners. Thus, community-based approaches are needed for HIV testing. While lay providers are not permitted to deliver HIV testing services, there is policy provision for HIV self-testing. To work around these policies “directly assisted HIV self-testing” was implemented; this entails trusted and trained peers providing direct support to clients so that they can self-test for HIV. HIV self-testing was implemented as part of a more comprehensive package of services offered by the lay providers, which included syringe and condom distribution.

For clients with a reactive self-test result, lay providers offer referral and navigation support to confirmatory testing and treatment. With the introduction of assisted HIV self-testing, HIV testing among people who inject drugs has increased from 66,481 people testing in 2014 to 149,000 in 2015. Efforts to explore and scale up unassisted HIV self-testing are now underway.

Case study 2:

Mapping of HTS services in Tanzania

As part of a global mapping of DSD, the National AIDS Control Programme in Tanzania carried out a mapping exercise of differentiated testing services. It followed these steps:

- Literature review on HIV testing and linkage models, external and internal to Tanzania
- Questionnaire to partners and follow-up stakeholder meeting to present current HIV testing service delivery models
- Site-based visits with a standardized questionnaire.

The full report is available at <https://bit.ly/2tpur8v>

Key points identified were gaps in PITC for inpatients, clients presenting with symptoms of STIs, and community-based testing supported by the ministry of health, either for index clients or for key populations. National guidelines did not advise a systematic approach to mobilizing, or linking to ART or prevention in either facility-based or community-based testing.

1.4 Assess the perspectives of healthcare and community workers and target populations

Differentiated HIV testing services should be client centred. Speaking with representatives of the general and specific populations within a community about their perception of how testing services are currently delivered and their

expectations of services will assist in the design of a differentiated HIV testing model.

Data on these perspectives can be obtained by attending clinic services at different entry points or with community-based organizations for specific populations using surveys, focus group discussions and/or individual interviews. Healthcare workers, including clinical, lay workers and peer volunteers, should be consulted.

STEP 2: DEFINE CHALLENGES

Based on Step 1, the challenges that can be addressed through differentiated HTS should be identified. At this stage, it is useful to host a workshop that includes key stakeholders from the health system and civil society to achieve the following objectives:

- Sensitize HIV testing coordinators and implementing partners on the background and core principles of differentiated HIV testing service delivery. (Note: Ideally this would be carried out as an integrated review of DSD across the cascade.)
- Provide an opportunity for stakeholders to present existing examples of differentiated HTS implemented for adults and specific populations in their settings. Existing examples should present the “when”, “where”, “who” and “what” of each of the core components of a testing model. If a component has not been considered, this could be a useful starting point for adapting an existing model (Part 5).
- Present the outcomes of the national-, regional- and/or district-level desk review and mapping exercise on HTS.
- Engage stakeholders in a plan for defining country-level approaches, taking forward local/district situation analyses and plan local implementation strategies.

As noted, it is encouraged that the mapping process and review looks across the cascade and across specific populations.

Case study 3:

Training for lay provider testing, Côte d'Ivoire

In Côte d'Ivoire, national guidelines make provision for lay providers to do HIV testing, but the policy has not yet been implemented. Amending the guidelines required support and buy-in from the ministry of health and the inclusion of standardized training for lay providers on HIV testing.

For an individual to become an HIV testing lay provider, they must complete a six-day training course comprised of ten modules, which is then followed by three days of supervised support. An experienced tester will also provide follow-up training and coaching, primarily focused on counselling. With the guidance and training requirements in place, Côte d'Ivoire plans to start implementing and scaling up lay provider HIV testing services, particularly to reach men and key populations.

STEP 3: DEFINE FOR WHOM HIV TESTING SERVICES WILL BE DIFFERENTIATED

With a clear understanding of the current service delivery programme and current challenges, the three elements described in Part 4 may be used to identify particular differentiated HTS models that should be prioritized. It should be clear what population is selected (general,

children and adolescents, pregnant and breastfeeding women or specific key populations), whether they have particular clinical characteristics and what specificities of their context may alter how the testing model is delivered.

STEP 4: ADAPT OR BUILD MODELS OF DIFFERENTIATED HIV TESTING SERVICES

In the situation analysis, certain models may already have been implemented. Based on the review of the evidence and experience from other settings, adaptations may be made to existing models to improve their uptake or efficiency. Alternatively, the model may be adapted to suit the needs of a similar specific population. **When assessing existing testing services, all three of the core components must be addressed (mobilizing, testing and linking).**

Where there is no existing HTS model for a population within a given context, a new model should be built. To do this, the building blocks (Part 6), considering the “when”, “where”, “who” and “what” for mobilizing, testing and linking, should be defined.

I have been helping mobilize the men who have sex with men community to test in my town for the past three years. I was telling them about how important HIV testing is so they can get treatment and prevention services. An NGO just did a survey and, although a lot of men were interested in testing, very few of them had actually gone for a test. The organization discussed this with the MoH and they have suggested that we start doing the testing in the community. I now have the opportunity to train to deliver the testing service as well as distribute HIV self-test kits, which is great. I think that a lot more of my peers will test now.



STEP 5: DESIGN A STRATEGIC MIX OF DIFFERENTIATED HIV TESTING SERVICE DELIVERY MODELS –ADAPT, BUILD OR DROP

The situation analysis may identify a number of gaps in coverage of HTS involving different specific populations. A prioritization exercise should be performed at local level to determine which HTS service delivery models should be adapted or newly implemented in the immediate, medium and long term.

Factors determining this prioritization should include:

- Coverage of testing in specific high-risk populations (benefits of linking to both treatment and prevention)
- Absolute number of diagnoses by testing model
- Cost of specific models (cost per person diagnosed)
- Yield of specific models. High-yield strategies may be more cost effective, but must also ensure sufficient

coverage of testing. In settings where many existing approaches have declining yields and numbers of clients initiated on ART, alternative models should be prioritized.

- Feasibility of implementation linked to available human and financial resources.

Considering these issues, a strategic mix of HIV testing service delivery models (including the three components of mobilizing, testing and linking) at both facility and community level should be made. This prioritization will assess the current resources available and lead to adapting, building or dropping some differentiated HIV testing service delivery models. Part 7 considers examples of developing this strategic mix.

STEP 6: EVALUATE AND DECIDE WHAT FURTHER DIFFERENTIATED HIV TESTING SERVICE DELIVERY MODELS ARE REQUIRED

Once selected, the implementation of the differentiated HIV testing models should be monitored through routine M&E and quality improvement initiatives to assess feasibility of implementation along with actual uptake of testing and yield of HIV-positive cases. Analysis of the models may lead to further adaptation being suggested or, if successful, allow for development of another model addressing a different population.

I'd heard on the radio that all pregnant women are offered HIV testing. When my midwife tested me in ANC, I tested HIV positive and she started me on treatment. I know my new baby will be tested, but how am I going to get my husband and other children to test? And if they test positive, where will they get treated as they can't come to ANC?

I'm also worried about my ex-partner. What if he has HIV?



Learn more about **Judith, David and their family** on page 8

Case study 4:

Mobilizing men who have sex with men, Brazil

In Brazil, men who have sex with men and their partners were engaged through a mobile phone app and secure web platform, “A hora é agora”. They were offered free HIV self-test kits (up to two kits every six months), condoms and lubricants, and support to promote linkage to care. Through the platform, HIV self-test kits were delivered to a location preferred by the client, including via mail or anonymous pick up at a pharmacy. All those with a reactive result were referred to an men who have sex with men friendly clinic for confirmatory testing and treatment.

As of January 2016, the programme website had received 67,225 visits and 2,527 unique requests for HIV self-test kits. More than 4,000 kits were distributed and 17% (432/2,527) of those requesting a kit reported their self-test results. Thirty of the testers (81%) who reported a reactive result received confirmatory testing, all of which were confirmed as HIV positive.



PART 4

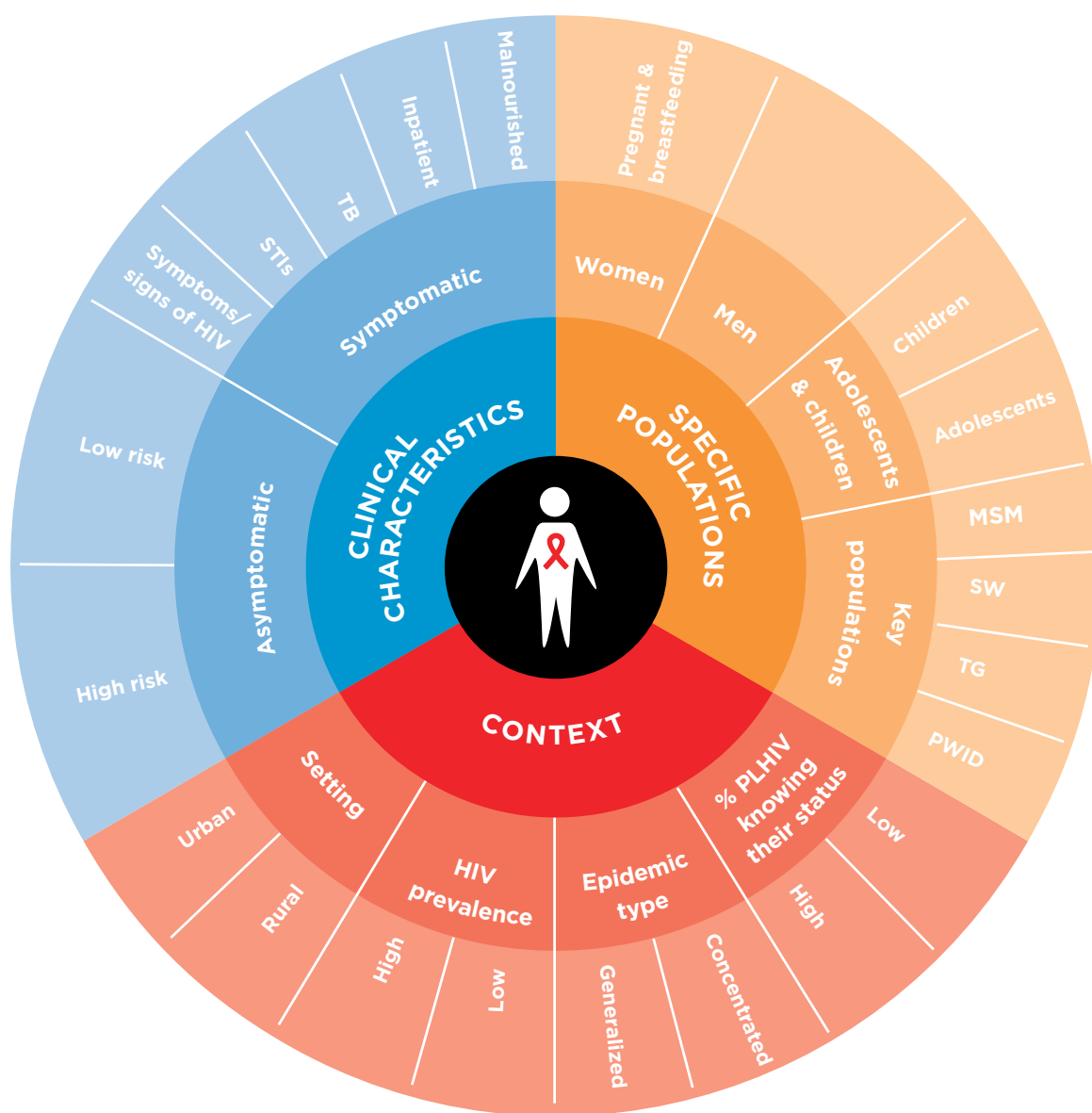
WHAT ARE THE THREE ELEMENTS?

THE THREE ELEMENTS

To provide client-centred HIV testing services, it is useful to consider where a client is placed within the following three elements (Figure 4). Does the client have specific clinical characteristics, belong to a specific population or live in a

context that will define how the HIV testing service delivery model will be designed using the building blocks, described in Part 6. Each of the three elements is described in the following section.

Figure 4: The three elements for differentiated HIV testing



HOW DO WE DIFFERENTIATE BASED ON THE CLINICAL CHARACTERISTICS?

Mobilizing can be targeted to clients presenting with symptoms of HIV or conditions associated with a high HIV co-infection rate. Healthcare workers should be mobilized to ensure that PITC is offered to clients attending services, such as hospital inpatient departments (IPDs), and TB and STI clinics. For those clients who are not yet severely immunosuppressed and have not yet presented with classical symptoms of HIV infection, facility- and community-based mobilization strategies will be required.

HIV testing should be integrated within clinical settings associated with a high co-infection rate (for example, STI, TB, hepatitis clinics and IPDs in high-prevalence settings). Clients attending care at these sites should be a priority and HIV testing services should ideally be provided as a

one-stop service (same day, same clinic, same healthcare provider). HIV testing rates should be regularly analysed from such settings, as despite often being high yield, the PITC approach is not always systematically implemented.

Assessment of the client's risk of HIV infection should also be made to determine the recommended frequency of repeat testing and to prioritize the need for linkage to different prevention strategies.

Linkage strategies should also be differentiated according to clinical presentation. For example, patients with advanced HIV, diagnosed as outpatients or through community-based testing, should be flagged as priority for tracing to ensure linkage to care.

HOW DO WE DIFFERENTIATE BASED ON THE SPECIFIC POPULATION?

HIV testing services should be differentiated to meet the needs of specific populations.

Mobilizing specific populations will require campaigns carried out at specific locations (such as schools, bars and brothels) at defined times. The role of peers and social networks in mobilization campaigns has also been demonstrated to improve uptake of testing services.

HIV testing should be adapted to the specific population. For example, a specific re-testing strategy is required for key populations with increased vulnerability to HIV acquisition. However, re-testing in the general population should be based on a clinical risk assessment. Utilization of HIV self-testing may be a particularly effective method to use for groups requiring frequent re-testing.

Linking may have to be adapted according to the needs of a specific population. Having knowledge of specialist services that offer additional medical services, for example, the package of medical services for sex workers or people who inject drugs, is required to link key populations to the most

appropriate ART delivery service. Linkage to prevention services may also be differentiated according to the risk of HIV infection in a specific population, providing those at highest risk with additional prevention interventions such as PrEP.

Linkage to ART initiation for children may also be differentiated according to the disclosure status and the age of the child. Knowledge of where ART services are provided according to age is needed (for example, ART provided through a family approach in under-five clinic) to appropriately link the child and family members to care. Healthcare workers must also be trained to address HIV disclosure within post-test counselling to effectively link the child to services and ensure disclosure counselling is continued within the ART service.

Annex 4 highlights some considerations that should be made for each building block and specific populations. Table 3 outlines some of the common challenges faced by specific populations in accessing HTS and how differentiating the model of HIV testing may address this.

Table 3: Population-specific challenges and potential solutions through differentiating HIV testing and linkage

Challenges	Potential solutions	
Men		
<ul style="list-style-type: none"> • Low attendance at health facility and reluctance to access services with women and children • Long working hours • Stigma in the community • Fear of a positive result • Lower knowledge and awareness of HIV, ART and prevention services 	WHEN	Extended hours or weekends
	WHERE	<ul style="list-style-type: none"> • Provide HTS at the workplace, e.g., military bases, police forces, mines or factories • Provide male-friendly clinics
	WHO	<ul style="list-style-type: none"> • Male providers of HIV testing services • Offer HIV self-testing
Key populations		
<ul style="list-style-type: none"> • Criminalization, stigma and discrimination • Poor attitude of healthcare workers towards key population 	WHEN	Moonlight testing
	WHERE	Provide outreach testing where key populations work or socialize
	WHO	<ul style="list-style-type: none"> • Train peers to deliver the three core components of HTS • Offer HIV self-testing
Adolescents		
<ul style="list-style-type: none"> • Low attendance at OPD 	WHEN	Offer testing outside school hours
	WHERE	<ul style="list-style-type: none"> • Testing in schools or youth clubs • Mobilize using social media
	WHO	Engage adolescent peers to mobilize and perform HIV testing and linking activities
Pregnant and breastfeeding women		
<ul style="list-style-type: none"> • Re-testing in postpartum period • Testing male partners with unknown status 	WHERE	Test HIV-negative breastfeeding women attending EPI
		Test male partners at home through community-based index client testing
	WHO	Community cadre or through client HIV self-testing

HOW DO WE DIFFERENTIATE BASED ON THE CONTEXT?

In settings where a high number of people living with HIV already know their status, it is essential that the situation analysis considers data to identify which populations remain unidentified and where they are. Defining a strategy in such settings may mean reducing testing of certain groups who are low risk, in order to focus resources on reaching those who remain untested. In countries where fewer people living with HIV know their status, the selection of testing models will be determined more by HIV prevalence and knowledge of barriers to accessing testing.

HIV prevalence in a setting will be a key factor in determining the strategic mix of HIV testing service delivery models. Within a country, there may be specific regions and specific populations with higher prevalence rates, and this is where testing should be prioritized. The WHO recommendation for testing models based on epidemic type is shown in Box 1. Adaptation of the strategic mix, however, should vary depending on the percentage of PLHIV who know their status.

In rural settings where access to health facilities is very challenging, it may be more important to integrate HIV testing into existing mobile outreach activities, such as ANC. Urban settings may also be the location for higher numbers

of key populations and, where this is the case, differentiated testing models for these populations should therefore be prioritized.

WHO Guidelines

Box 1: WHO recommendations on testing by context¹²

In generalized epidemics settings: Routine HIV testing should be offered to all clients (adults, adolescents and children) in all clinical settings.

In low-level or concentrated epidemic settings: HIV testing should be offered to clients (adults, adolescents and children) in clinical settings who present with symptoms or medical conditions that could indicate HIV infection, including presumed and confirmed TB cases.

Regardless of epidemic type, routine HIV testing should be considered for: malnutrition clinics; STI, viral hepatitis and TB services; ANC settings; and health services for key populations.



PART 5

ASSESS WHETHER TO ADAPT OR BUILD

ADAPT OR BUILD

The purpose of the situation analysis (Part 3) is to identify the major gaps in HTS coverage, highlighting locations and populations that are not accessing services. Making changes to health systems to change how they deliver services requires buy-in, motivation, coordination, training and often, at least in the first phases, financial investment. An important first step is to assess if one or more of the existing models could be adapted to meet the needs of the population before building a new model.

Where a model is already understood, implemented and functioning within the health system, it is likely easier to undertake adaptations than to implement a completely new model. Adapting existing models that healthcare workers are familiar with may be easier to implement and could be prioritized as short-term activities to differentiate HTS. When assessing any HTS model for adaptation, each of the three core components should be considered.

Case study 5:

Routine opt-out testing to identify children, Zimbabwe¹⁴

In Harare, Zimbabwe, the prevalence of undiagnosed HIV among children and adolescents has been shown to be higher than amongst adults. Challenges in performing HIV testing for this population focused on lack of guardian consent for testing and lack of availability of healthcare workers. These factors have led to considerable missed opportunities for testing this group within the primary care setting. Routine opt-out testing (ROOT) replaced conventional opt in PITC and was implemented in six clinics in Harare for every child aged 6-15 years.

One additional lay counsellor was provided for each clinic, and the availability of HIV test kits was assured. The proportion of eligible children offered testing increased from 76% to 93% and test uptake improved from 71% to 95% in the ROOT compared with the PITC period. The yield of HIV diagnoses increased from 2.9% to 4.5%, and a child attending the clinics post intervention was twice as likely to be tested for HIV in the ROOT period compared with the pre-intervention period.

Case study 6:

Reaching families of HIV-positive people who inject drugs, Pakistan

In Pakistan, 42% (16,471/39,232) of people who inject drugs test positive for HIV. To reach their families, outreach workers provide home-based HIV testing to their sexual partners and children following counselling on disclosure and consent. Trained female outreach workers act discreetly to avoid attracting stigma, and visit the households of consenting clients. After building rapport with the family, the outreach workers offer rapid HIV testing to all partners and to children who meet criteria following a risk assessment.

Following a negative test, spouses/active partners receive follow-up HIV testing every three months. Following a reactive test, additional testing is done at the house or a clinic to confirm diagnosis. If confirmed as HIV positive, testers encourage disclosure where safe and beneficial, and provide follow up for treatment and support. As of January 2018, 8.2% (286/3,455) of spouses accepting testing were HIV positive. The programme is now considering introducing HIV self-tests to better reach this population and increase uptake.

Case study 7:

Improving PITC with lay counsellors, Malawi

In Kamuzu Central Hospital in Malawi, many inpatients were not receiving PITC. Instead of relying on clinicians to refer clients for testing, lay counsellor-initiated PITC was implemented. All patients admitted to the wards were automatically offered PITC by a trained lay worker, regardless of their reason for admission. Among patients, 60.4% had an unknown HIV status prior to admission and HIV prevalence after testing was 39.3%. Counsellor-initiated PITC increased HIV testing by 79% (643/2,957 versus 1,228/3,154), resulting in a two-fold increase in patients with known HIV status¹⁵. This is an example of where the “who” is adapted with task sharing from nurses to lay counsellors.

Question 1: Is there an existing HIV testing service that could be adapted for another setting or population?








Where a model has been implemented successfully in a setting or for a specific population, consider how this might be adapted for a similar setting or population.

In one example, to reach sex workers, the HIV clinic at the district hospital worked with a civil society sex worker organization to identify peers who could identify the best times and locations to mobilize sex workers for HIV testing and then to distribute and, where requested, supervise HIV self-testing. They also then gave information to link the sex workers to the prevention and care services in the district. This HIV testing service

delivery model, including mobilizing, testing and linking, worked very well.

The clinic had been approached by a group of men who have sex with men who were concerned that many men who have sex with men they knew had never had an HIV test because they were afraid to attend the clinic. By simply adapting the “where” and the “who” for the three components of mobilizing, testing and linking, the team built an HIV testing service delivery model for men who have sex with men in their community.

The building blocks with adaptations made in bold

	 MOBILIZING	 TESTING	 LINKING
 WHEN	Between 8pm and midnight	Between 8pm and midnight	Traced 3 times over a three month period
 WHERE	Identified bars in the centre of town for sex workers	Identified bars in the centre of town for sex workers	Selected prevention or ART clinic
	Identified bars in the centre of town for men who have sex with men	Identified bars in the centre of town for men who have sex with men	
 WHO	Peer sex worker	Peer sex worker distributing self tests	Peer sex worker
	Peer men who have sex with men	Peer men who have sex with men distributing self tests	Peer men who have sex with men
 WHAT	Information about HIV testing, prevention and care services.	HIV testing	For prevention - provide information on where to access prevention services
	Condom and lubricant distribution	Condom and lubricant distribution STI screening	For ART initiation - follow up by peers using SMS and with home tracing



We weren't doing well testing the male partners of our women coming to ANC. We went out to the community and spoke with the chiefs and attended some of the community forums to talk about this. We said they could come any time, not just to ANC, and that we would test their blood pressure and screen for STIs as well. More of the male partners are coming now, which is great and we can link them to our ART clinic or suggest they get VMMC.

Question 2: Is there an existing HIV testing service that is underperforming because it doesn't include mobilizing and/or linking?








In most settings, there is likely to already be some differentiation of HIV testing services. If there is still an identified gap in the access and coverage of HTS services for a specific population, how might this model be further adapted? Have all three components of HTS (mobilizing, testing and linking) been considered within the model?

In one example, a clinic analysed its HIV testing data and was concerned about how few couples were being tested. An outreach testing campaign was organized once a month at two churches in the area and at a community meeting where couples would attend. After

three months, staff discovered that the clinic had still tested mainly women at these venues and of those who tested positive, only 30% were registered in the district ART database.

Using the building blocks for mobilizing, testing and linking, they realized that they had not formally developed a strategy to mobilize the male members of the community and to provide sufficient information for linking to prevention or treatment. In the table below, the bolded cells highlight where additions were made to include the core components of mobilizing and linking.

The building blocks with the adaptations in bold

	 MOBILIZING	 TESTING	 LINKING
 WHEN	The Sunday before planned testing	Sunday mornings, once a month	Follow up after two weeks, three attempts to call
 WHERE	In the church	Outside two churches	Patients traced by phone or through home visits
 WHO	The pastor	Nurse	Lay volunteers attached to the clinic providing the testing
 WHAT	Information about importance of having a general health check including an HIV test	HIV testing, information about prevention and care services, BP check	For prevention: provide information about where to access condoms and VMMC
			For ART initiation: identify ART site and follow up by SMS

WHEN IS IT APPROPRIATE TO BUILD A NEW HIV TESTING SERVICE DELIVERY MODEL?

The aim of making any change in the service delivery model is to address a specific gap in services or a challenge identified for specific populations or healthcare workers in a particular setting. Hence any new model must address a specific challenge or gap identified. If there is a specific population that is not currently reached at all through

existing services, then a new HIV testing service delivery model may have to be considered, one that includes all three components (mobilizing, testing and linking). Part 6 guides you on how to use the building blocks of DSD to build a new HIV testing service delivery model.



PART 6

ADAPT OR BUILD DIFFERENTIATED HIV TESTING SERVICE DELIVERY MODELS

THE BUILDING BLOCKS

This section presents the four building blocks and highlights the relevant WHO recommendations that support their implementation. Real-world examples are given to illustrate how the building blocks may be applied. We also see our characters, Andrew and Namrata, as they address challenges in providing and accessing HIV testing services.

The building blocks are the foundation of designing any HIV testing service delivery model (see Figure 5).

- **When** are HIV testing services delivered (time of day and frequency of mobilizing, testing and linking)?
- **Where** are HIV testing services delivered (location of mobilizing, testing and linking)?
- **Who** is providing HIV testing services (the cadres performing the mobilizing, testing and linking)?
- **What** services are provided (the package of services)?

Figure 5: The building blocks of HIV testing service delivery models

	MOBILIZING	TESTING	LINKING
WHEN	At defined intervals; following diagnosis of a partner/family member	Clinic opening hours; 24 hours in maternity and IPD Targeted time to reach a specific population Any time for HIVST Frequency defined by vulnerability to HIV acquisition	Concurrently and/or following HIV testing; follow up over a defined period
WHERE	Online Media Community Non-health facilities Health facilities	Community (including home) Non-health facilities Health facilities	Via phone Community/home visits Non-health facilities Health facilities
WHO	Healthcare workers Lay cadres Peers Clients/family members	Healthcare workers Lay cadres Peers Clients/family members	Healthcare workers Lay cadres Peers Clients/family members
WHAT	Information about where and why to test and how to link to prevention and treatment	HIV testing, Where appropriate in combination with: TB screening, STI screening, BP and glucose measurement, nutrition screening	Provide details on where and how to access prevention services Provide details on where and how to access treatment services

Separate building blocks should be described for the three core components of HIV testing services

As described in Part 2, when designing any HIV testing service, three core components should be considered (mobilizing, testing and linking to ART or prevention services). The building blocks of “when”, “where”, “who” and “what” must be described for each of these three components. The examples given throughout this section will demonstrate how this approach can support the planning and implementation of an HIV testing service delivery model. For each building block, the three core

components may be performed at the same or different frequencies, location or healthcare worker.

In all models of differentiated HIV testing services, the needs of the client should be central to the design of the model and should be the main reason for adapting the service. It is up to the district health managers to collaborate with their healthcare workers and clients to analyse the challenges within their district and determine the “when”, “where”, “who” and “what” that address these specific challenges. The decision must balance the goal of improving access to HIV testing services for the client while making efficient use of available resources. How to determine the strategic mix of HIV testing models will be considered in Part 7.



“WHEN” are HIV testing services delivered?

Under this building block, the time of day that HIV testing services (mobilizing, testing and linking) are offered must be determined, as well as the frequency of testing.



WHO Guidelines

Box 2: WHO recommendations on the frequency of HIV testing¹²

In all settings: It is recommended that re-testing be offered at least annually to people from key populations and to HIV-negative partners in serodiscordant couples. Depending on client risk behaviours, more frequent voluntary re-testing should be offered and available.

In a generalized HIV epidemic: Re-test all HIV-negative pregnant women in the third trimester, postpartum or during labour because of the high risk of acquiring HIV infection during pregnancy.

In a concentrated HIV epidemic: Re-test HIV-negative pregnant women who are in a serodiscordant couple or who are from a key population group.

Timing

Mobilizing and HIV testing: Community-based mobilization and testing should be delivered at a time that is appropriate for the specific population being targeted (for example, for men outside of working hours and for children outside of school hours). Utilizing peers to test allows for more flexibility, and the use of HIVST allows for the ultimate flexibility by allowing clients to test themselves at their convenience.

At the facility, HIV testing delivery should be available during regular clinic opening hours and should be available 24 hours a day in maternity and IPD services. Consideration to extend availability of testing after standard working hours or at weekends may be considered in some sites and in specific clinics where HIV testing should be prioritized (ANC, TB, STI, OPD and IPD). Clear timeframes for implementation of partner notification and testing of the index client’s partner and family should be outlined within a standard operating procedure.

Frequency

Mobilizing: Within a facility, the frequency of including messages about HIV testing in health promotion activities should be determined by the prevalence, type of clinic and available resources. In a high-prevalence context, HTS demand creation should be available daily in all clinic entry points and in ANC, STI, TB and IPD settings within every consultation.

Integrating health promotion on HIV testing services into the work of existing community cadres (CHWs or PLHIV working as volunteers in the community) and working with peers living within a specific community or key populations may allow for more frequent mobilization activities at community level. Mobilization activities aimed at reaching specific populations or during large community gatherings should be planned and frequency determined according to the likely yield in relation to resources for transport, staffing and future testing.



WHO Guidelines

Box 3: WHO recommendation on partner notification¹²

Voluntary assisted partner notification services should be offered as part of a comprehensive package of testing and care offered to people with HIV.

Testing: The frequency of HIV re-testing should be determined by the individual’s risk of acquiring HIV. The recommendations for the frequency of re-testing can be found in the WHO HIV testing guidelines (page 312)⁵. Where HIV testing coverage is high, more in-depth assessment of risk should be carried out, especially in OPD settings, to avoid high numbers of low-risk clients being re-tested.

Linkage: Standard operating procedures for linkage to prevention and ART services should be developed for both facility-based and community-based testing. These should include the timeframe for expected linkage to services, the timing of tracing and number of follow-up attempts to be made over a defined time period. Annex 5 outlines a sample SOP for linkage to ART services.

Example 1:

Community-led approaches for key populations, Viet Nam

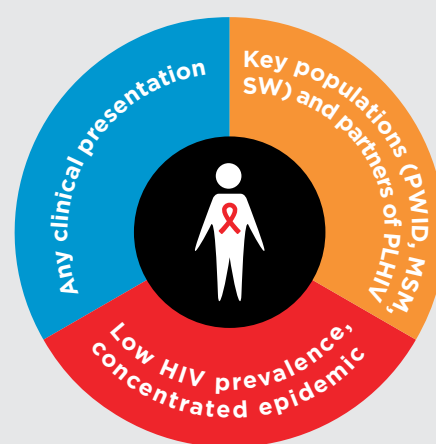
Overview

In 2016, it was estimated that only 73% of people living with HIV in Viet Nam had been diagnosed. The majority of the remaining 27%, those with undiagnosed HIV, are part of a key population group, including people who inject drugs, men who have sex with men, female sex workers and their sexual partners. HIV testing coverage through conventional facility-based testing services remains low with only 36% of people who inject drugs, 41% of female sex workers and 43% of men who have sex with men receiving an HIV test in 2016. To achieve the first 90 target – diagnosis of 90% of people with HIV – the government of Viet Nam estimated that HIV testing coverage among key populations must increase to at least 80%.

To increase HIV testing among key populations and achieve coverage targets, the government of Viet Nam implemented rapid testing for HIV and testing for hepatitis C virus (HCV) and syphilis between December 2015 and October 2017 in eight provinces. This was done through mobile outreach, conducted by peer lay providers from key population groups, using self-testing and partner notification/index partner testing among key populations and their partners. Multi-disease testing was also promoted to increase uptake of testing services. Sexual partners of

HIV-positive men who have sex with men were contacted and offered HIV testing using social media. Partners of HIV-positive female sex workers were offered HIV testing through client and lay provider referral. Active follow up for three to four months was needed for all PLHIV to successfully prompt information about partners and an additional three to four months to contact, offer and deliver HIV testing to partners of PLHIV.

The three elements of community-led key population approaches



The building blocks of community-led approaches for testing key populations, Viet Nam

	MOBILIZING	TESTING	LINKING
WHEN	Targeted time to reach a specific population; Any time for HIVST	3-6 monthly for those at highest risk	Active follow up for 3-6 months
WHERE	Social media and community outreach	Health facilities and community outreach	To selected treatment and/or prevention site
WHO	Peer providers	Peer providers	Peer and lay providers
WHAT	Social media outreach through community and partners of PLHIV	Rapid HIV testing; multi-disease testing (HCV and syphilis); and HIV self-testing	For prevention: comprehensive package of prevention tools
			For ART initiation: peer navigation to ART clinic

In 2017, community-led HIV testing was implemented and reached 2,520 people from key populations; 67% were first-time testers. Of those tested, 2,094 received lay provider testing and 426 received HIV self-testing. In total, 147 of those tested had reactive results (5.8%) and 140 of those 147 (96.6%) were confirmed as positive. Of the 140

HIV-positive cases, 128 (91%) received ART. Community-led index partner testing identified 19.3% of all HIV-positive cases (27/140). Provincial-level analysis showed community HTS diagnosed 30% and 60% of all HIV cases in Can Tho and Thai Nguyen provinces.



“WHERE” are HIV testing services delivered?

Decentralization of HIV testing services to primary care clinics and further to the community has been recommended to enhance uptake. Such decentralization may be appropriate in both high- and low-prevalence settings, but the choice of location may vary according to the specific population targeted and the observed yield. Providing HIV testing services across different levels of the health system addresses different barriers faced by clients. People concerned about the time and costs of transportation to access testing may choose a local site. Other individuals who may have concerns about stigma may opt to test at centralized sites, distant from their communities.

HIV testing services at health facilities

Mobilizing and testing may be integrated into the patient flow within a specific clinic (OPD, TB, STI, family planning or IPD) or clients may be referred to standalone HIV testing services. The selection of entry points for mobilization and testing may vary according to HIV prevalence. Box 4 outlines the WHO recommendation for the selection of entry points based on the type of epidemic.

For HIV self-testing, kits may be distributed at the facility to be performed at the facility, be taken home, or be distributed and performed in the community at homes or mobile outreach settings.

Linking to a treatment or prevention site from the testing site should be chosen by the patient, which may or may not be the same site as where they tested. Clients tested at central facilities during an inpatient admission or when attending for another OPD service should be given the option to be referred to a decentralized site when available.

HIV testing services outside of health facilities

Mobilizing and HIV testing outside health facilities may take place at:

- Non-health facilities
 - Institutions targeting specific populations (schools, workplaces, military and police)
- Community locations
 - Locations targeting specific populations (youth clubs for adolescents, bars or clubs for sex workers, taxi ranks for men)
 - Community gathering points (churches, football matches)
 - Clients' homes (community-based index client testing; general door-to-door campaign).

The mix of venues must be strategically chosen in the decision-making process and will be determined by:

- The HIV prevalence in the general population and in specific populations
- HIV testing coverage data for general and specific populations
- Demographic and behavioural characteristics of undiagnosed populations
- HTS performance metrics (such as yield, number tested positive, cost per positive).

Linking should be defined between the community testing point and the provider of ART or prevention services. Patients should be offered a choice of ART sites where feasible, encouraging attendance at a clinic closer to home, but allowing individuals to choose their ART site, particularly in settings where levels of stigma are high.



WHO Guidelines

Box 4: WHO recommendations on provider-initiated testing and counselling (PITC)

PITC should be considered for malnutrition clinics, STI, hepatitis and TB services, ANC settings and health services for key populations.

In a generalized HIV epidemic: PITC should be offered for all clients and in all services (including services for STIs, viral hepatitis, TB, children under age five, immunization, malnutrition, antenatal care and all services for key populations) as an efficient and effective way to identify people with HIV.

In a concentrated HIV epidemic: PITC should be offered for clients (adults, adolescents and children) in clinical settings who present with symptoms or medical conditions that could indicate HIV infection, including presumed and confirmed TB cases.



WHO Guidelines

Box 5: WHO recommendations on community-based HIV testing services¹²

In a generalized HIV epidemic: WHO recommends community-based HIV testing services, with linkage to prevention, treatment and care services, in addition to routinely offering PITC for all populations, particularly key populations.

In a concentrated HIV epidemic: WHO recommends community-based HIV testing services, with linkage to prevention, treatment and care, in addition to PITC, for key populations.

Example 2: Reaching men in Eshowe, South Africa

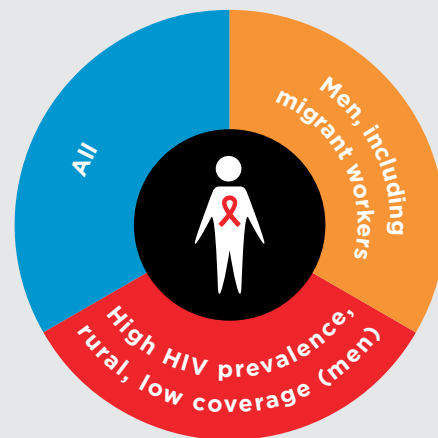
Overview

In 2016, it was estimated that 86% of PLHIV in South Africa knew their status, but this was lower for men (79%) and young people aged 15-24 years (65%). The KwaZulu-Natal province has the country's highest HIV prevalence and incidence. In the area around the provincial town of Eshowe, previously effective strategies, such as community-based outreach, including door-to-door testing, had less than a 1% yield. Efforts to reach men were needed to close the testing gap.

In a pilot project supported by an NGO, fixed HIV testing sites in settings where men spend time, such as taxi ranks, were established and staffed by all-male providers to reach men with HIV testing, as well as other important health services, including non-communicable disease (NCD), TB and STI screening. These sites are located near clinics where treatment and VMMC were available, so referrals could be made quickly. Here, it was convenient for men to link and initiate follow-up services the same day. Workplace testing at a farm was established through a formal relationship with the local farm owners' associations.

HIV testing was managed by a mobilizer and counsellor who promote and offer HIV testing to men working on the farm. The mobilizer and counsellor also encourage men who test to bring female partners and their families to test.

The three elements of reaching in men in Eshowe



The building blocks of reaching men for HIV testing in Eshowe, South Africa

	MOBILIZING	TESTING	LINKING
WHEN	Rush hour at taxi ranks Agreed times with employers at farms	Rush hour at taxi ranks Agreed times with employers at farms	Where possible, on the same day
WHERE	Taxi ranks and locations where men gather, workplace (farm)	Male-friendly satellite clinic; workplace (farm)	Local prevention (including VMMC) and MoH ART sites
WHO	Male providers, counsellors and mobilizers	Male health workers and counsellors	Male providers and counsellors
WHAT	Community mobilization by all-male counsellors and mobilizers	Rapid HIV testing and screening for STIs, NCDs and TB	For prevention: same-day referral to VMMC site
			For ART initiation: same-day ART initiation

In the last quarter of 2017, 9.4% of people tested were newly diagnosed (19.6% in Eshowe service clinics and 4.7% in Mbongolwane clinics, and approximately 4.4% through male-focused outreach and fixed sites). In 2017, 4.4% (31/709) of people reached through a farm-based programme tested positive. The majority of those identified in the male-friendly

clinics and the farm-based programme were in early disease stage. In the male-friendly clinics, approximately 30% of PLHIV identified had a CD4 count over 500 cells/mm³; and in the farm-based programme, 74% of PLHIV identified had a CD4 count of more than 500 cells/mm³.



“WHO” delivers HIV testing services?

Importance of task sharing

The rational redistribution of tasks between cadres, including lay providers and clients, has been a fundamental principle that has supported the scale up of HIV programmes, including HTS. In each HIV testing service delivery model, it is important to define who performs the mobilizing, testing and linking activities. To enable task sharing of HTS, a review of regulatory frameworks in the country is required and in some settings, policy barriers related to task sharing remain a key obstacle to the scale up of HTS.

Lay providers can be trained to perform HIV testing, but ongoing mentorship and quality assurance must be carried out at facilities and in the community. Community health workers or lay providers may also be trained to perform a single “test for triage” or supervise HIV self-testing to screen clients prior to referral for performance of the complete algorithm by a trained counsellor or healthcare worker.

In linkage activities, it should also be clearly defined who is responsible for each step of a linkage SOP. For example, within a facility, ideally the person performing the test will escort the client from the entry point to the ART service when testing positive.

The role of peers

The role of peers in all three components of an HIV testing service delivery model has been shown to enhance the uptake of testing in specific populations (adolescents, key populations) and has been recommended by WHO in supporting clients to link to care. Peers will need specific training, but their ability to access certain communities may overcome barriers related to stigma and build strengthened links between the specific population and the health system.

The role of the client

HIV self-testing has introduced the client as the active participant in the HIV testing delivery component. HIV self-testing may be directly assisted by a healthcare worker, a community cadre or a trained peer or unassisted, being performed independently by the client.



WHO Guidelines

Box 6: WHO recommendation on HIV testing by trained lay providers using rapid diagnostic tests (RDTs)¹²

Lay providers who are trained and supervised can independently conduct safe and effective HIV testing using RDTs.

Remember Namrata?



Namrata has been trained to distribute HIV self-tests and, where her peers prefer, to directly assist self-testing. After the self-test is performed, she encourages her fellow sex workers to attend the clinic to access either treatment or prevention services and, when needed, makes arrangements to go with them.



Remember John?

His employer is planning a week where all the employees can book a medical check-up at headquarters. The check-up will not just be for HIV; he can also get his blood pressure checked and have a sexual health screen. It seems much more worthwhile to get tested for a few different things at the same time and he does not have to take any time off work.

Example 3:

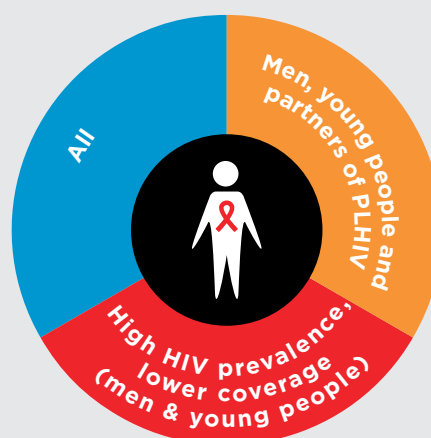
VMMC outreach and partner notification with self-test kits, Malawi

Overview

In Malawi, to increase the proportion of men and young people who know their HIV status, a study to introduce HIV self-testing was conducted.

Approaches for distributing HIV self-test kits focused on distribution by trained individuals through: (a) those responsible for mobilizing men to access VMMC; (b) pregnant women who could deliver a kit to their male partners; and (c) distribution by a trained community member going door to door to households and local hangouts. Distributors would demonstrate the self-test for HIV and provide information on what to do after a positive and negative self-test.

The three elements of VMMC outreach and partner notification



The building blocks of VMMC outreach and partner notification with self-test kits, Malawi

	MOBILIZING	TESTING	LINKING
WHEN	Fixed period over one month	Once per year in community Routine offer to women with untested male partners at first ANC visit	Referral cards distributed with self-test kits
WHERE	Community ANC	Test conducted at home or other private place	Any health facility offering HIV testing and VMMC sites
WHO	Trained community member/ mobilizer	Individual tests themselves alone or with partner	Trained community member/ mobilizer
WHAT	Community and ANC facility mobilization to explain and promote HIV self-testing in community and clinic	HIV self-testing using OraQuick HIV Self-Test	For prevention: same-day referral for VMMC (for men) For ART initiation: home-based ART initiation and/or same-day referral to closest ART clinic

HIV self-testing implementation through community-based distribution and VMMC models reached 26% and 68% of first-time testers, respectively. Uptake of HIV self-testing was highest among young people (50%) and men (49%). Secondary distribution to male partners of pregnant women was shown to increase uptake of HIV testing among men receiving standard of care invitation letters from 17% to 92% when HIV self-testing was offered.

Overall, HIV positivity was approximately 5%, with 1% positivity among men at VMMC sites, 1% positivity among men in secondary distribution, and 4% positivity in community-based distribution. This is comparable to average positivity of 3% in facilities in Malawi. When home-based ART initiation was offered, linkage was three times higher than referral to facilities.



“WHAT” services are delivered?

Standalone HIV testing services

HIV testing services may be provided as a service by themselves at health facilities and institutions and in the community. Clients specifically seeking HTS should be mobilized to attend these specific services.

Integrated HIV testing services

HIV testing services may be integrated into existing OPD, disease-specific clinics (TB and STI) or other services (cervical cancer screening, VMMC). Likewise, additional screening activities may also be integrated into an HIV testing model, such as TB, STI, nutrition and NCD screening. Integration of activities may be a more cost-effective mode of delivery of HTS, particularly at community level.

Remember Judith, David and her family?

After a month of encouraging self-referral, her nurse asked Judith if it would be OK if a community health worker came to her house one evening or on a weekend when her husband was there, or whether she would like to take a self-test kit home for her husband to use. Judith knows and likes her local community health worker and agreed for her to come to her home. As well as offering an HIV test to David, the CHW checked his blood pressure and screened the family for nutrition and TB.

Judith did not feel happy contacting her ex-partner and so the nurse agreed to contact him anonymously.



Remember Andrew?

After assessing the situation analysis, Andrew discovered that HTS was not available overnight and at weekends in the IPD departments and maternity in the district hospital. In the VCT service, it also seemed that there were an increasing number of people re-testing very frequently, and the majority of them tested negative. He also acknowledged that there were no testing services adapted for key populations.

As a first action, he decided to ensure 24-hour access in the IPD and maternity department and start an HIV service delivery model (including mobilizing, testing and strategies for linking) at hot-spot locations for sex workers in the evening once a month. In the VCT, he discussed whether the counsellors could apply a risk assessment tool to advise clients of the need for re-testing.



Example 4:

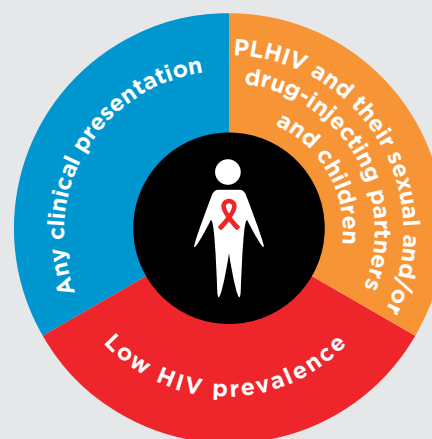
Facility-based partner notification and index partner services, Cameroon

Overview

In Cameroon, the highest prevalence of HIV is among men who have sex with men, sex workers, pregnant women and men in the military. The national programme has focused on HIV testing in health facilities and index testing. To enhance the efficiency of HIV testing services, there has been an increased focus on reaching partners of PLHIV diagnosed in facility settings.

Partner HIV testing services were routinely implemented at health facilities. Following initial diagnosis, trained health workers followed up and offered to assist with confidentially contacting partners and/or coming to their household to offer HIV testing services. Through counselling and discussion, PLHIV voluntarily provide contact information for partners they think should be contacted and how to contact them, whether by client referral, contract referral or provider referral (see Annex 1). Trained health workers then followed up with these partners by telephone and/or a home visit to offer HIV testing and to schedule a time for them to come to the facility.

The three elements of facility-based partner notification



The building blocks of facility-based partner notification and index partner services, in Cameroon

	MOBILIZING	TESTING	LINKING
WHEN	Client or healthcare worker contacts at agreed time	At agreed time with partner	Follow-up tracing
WHERE	Facility or home	Facility or home	Linked to local prevention or ART site
WHO	Trained health workers and index client	Trained health workers	Trained health workers Lay providers
WHAT	Index client notifies partner Healthcare worker telephones or carries out home visit	Rapid HIV testing at facility or in the community	SMS Home-based tracing

Between January and June 2016, 1,407 people with HIV were diagnosed and 1,884 partners who may have been exposed to HIV were identified. In total, 94% (1,774/1,884) of partners were notified and of those notified, 93%

(1,655/1,774) received HIV testing. Of those who received HIV testing, 32% (315) of adults and 6% (40) of children were HIV positive and, of those diagnosed, 93% linked to ART.



PART 7

**DESIGN A
STRATEGIC
MIX OF
DIFFERENTIATED
HIV TESTING
SERVICE
DELIVERY
MODELS – ADAPT,
BUILD OR DROP**

A STRATEGIC MIX

A strategic mix of approaches to HTS service delivery is required to increase the proportion of people living with HIV who know their status. The goal of this mix is to facilitate the diagnosis of as many people living with HIV as early as possible, maximizing yield, efficiency, cost effectiveness and equity. By carrying out the situation analysis (Part 3), the mix of HIV service delivery models should be implemented,

focusing on those who remain undiagnosed and populations most vulnerable to HIV acquisition.

The following two case studies illustrate a summary of the decision-making processes in two settings to determine the strategic mix of HTS models implemented.

Strategic mix example 1:

Low HIV prevalence; low HIV testing coverage; ART coverage 40%

HIV prevalence in the 10 provinces of a hypothetical country ranges from 0.7% to 2.7%. HIV prevalence among clients attending STI clinics is 7%, among sex workers 13% and among men who have sex with men 17%.

From the most recent demographic and health survey (DHS), an estimated 15% of men know their status versus 40% of women. In the past year, 80% of all HIV tests performed were in pregnant women in ANC where HIV testing is done on an opt-out basis.

PITC at all clinic entry points is advocated for, but data shows that less than a quarter of STI clients receive an HIV test versus 70% of TB clients.

Surveys of key populations in the capital reveal that only 30% of sex workers and 25% of men who have sex with men know their HIV status.

A mapping of HTS services is carried out through a desk review and site visits using the questionnaire in Appendix 3:

- HIV testing is promoted and offered systematically at ANC and TB clinics.
- In the past 12 months, there have not been any ministry of health led campaigns promoting HIV testing and nothing specifically directed at key populations.
- Although HTS is promoted in OPDs and STI clinics, the majority of sites (85%) do not have anyone within the clinic trained to test, and there are limited supplies of test kits.
- Last year, no community-based testing was carried out.
- HTS services have been differentiated in an NGO pilot for sex workers and men who have sex with men (provided at night time and at places where they gather in the community), but peers are not engaged in mobilization and testing.
- No specific guidance on how to link HIV-positive clients to treatment or prevention services is available, and

testing sites included in the survey do not systematically assess HIV risk.

Strategic mix of HTS services (mobilizing, testing and linking) proposed:

MOBILIZING

Build: Index client testing of any identified HIV-positive case should be ensured through partner notification and be offered both at the facility and in the community. Community-based index client testing may be offered through engaging community cadres to perform HIV tests or through distribution of HIV self-testing kits.

Adapt: Train key population peers to create demand for HIV testing and prevention services.

Drop: Promotion of testing for general asymptomatic population in OPD to focus on those with symptoms of HIV, TB or STIs.

TESTING

Adapt: Facility-based provider-initiated testing and counselling (PITC): All clients presenting with STI and TB symptoms and clients presenting with symptoms and signs of HIV should be tested with priority.

Build: Offer HIV testing services in workplaces, such as military institutions or security firms (see an Example 2 on page 27), to increase testing among men.

LINKING

Adapt: Utilize trained key population peers to support peer navigation linking clients with prevention and/or ART initiation

Build: Develop an SOP with clear timelines and methods for linking clients to prevention and treatment both at the facility and community to standardize this process. Adopt the WHO rapid initiation guidelines.

Strategic mix example 2:

High prevalence; high HTS coverage; ART coverage 78%

HIV prevalence in this hypothetical country is 15.5%. A community-based survey in a selected province, where differentiated testing strategies are being considered, showed that, overall, 86% of people living with HIV knew their status: 91% of women knew their status versus 78% of men. Coverage among young men aged 15-24 years was much lower, at approximately 50%. HIV prevalence in sex workers was estimated at 73%, and an estimated 40% knew their status.

A review of current HTS services using the questionnaire in Appendix 3 demonstrated that:

- PITC is offered at all entry points within hospital settings and all PHC clinics have staff trained to perform HTS. Of TB patients, 95% were tested for HIV versus 75% of STI clients.
- Partner notification and index client testing is not performed systematically and where it is partners are just invited to the facility.
- Last year, four mobile outreach testing campaigns were held for the general population, but with low yield (1.7% of tests performed had an HIV-positive result).
- HTS has not been differentiated for adolescents and young adults or key populations.
- HIVST has not been implemented.

For the following year, the following strategic mix of HTS services (mobilizing, testing and linking) is proposed:

MOBILIZING

Build: Improve partner notification and index client testing including community based index client testing.

Build: Launch HTS campaign in colleges and universities; including the introduction of HIV self test kits.

Build: Mobilize key populations for testing through trained peers.

TESTING

Adapt: Continue with facility-based PITC, but with emphasis on risk assessment prior to any re-testing and improve rates of HIV testing in clients with STI symptoms.

Adapt: Promote key population testing through distribution of HIV self-test kits by trained key population peers and provide during moonlight hours.

Build: Introduce routine HIV testing services in workplaces, such as military and security firms, to target men.

Drop: General population community-based HIV testing.

LINKING

Adapt: Introduce standard operating procedures for linkage, including peer navigation for specific populations, within health facilities.

Adapt: Utilize SMS follow up after community testing of key populations to support linkage to prevention and ART initiation.

Within a given country, the proportion of undiagnosed PLHIV may vary by geography (by province and between rural and urban settings) and population (such as men, KPs, adolescents). This leads to the need for a strategic mix of differentiated HIV testing approaches, as a one-size-fits-all approach will not address country-specific or local challenges. As a result of reconsidering the strategic mix of HTS approaches, **some current testing strategies may need**

to be reduced or stopped altogether. In addition, testing frequency may need to be reduced among individuals with a low risk of HIV acquisition.

Further examples of how countries have analysed and developed a strategic mix of testing strategies and tools to support this process are listed in Annex 2 and can be found online at <http://bit.ly/2sVehV5>.

Case study 8:

Lessons in efficiency from testing approaches in prisons, Malawi

HIV testing in Malawian prisons has been differentiated to increase uptake and reflect the three-phase approach to prison healthcare. HIV testing is offered when the prisoner enters the prison, biannually during their stay and at exit. Prisoners are mobilized to have HIV testing through health talks at the prison clinic and by peer educators (prisoners who have had some basic health education training) in the cells. The prison wardens who have been trained in HIV testing and counselling perform HIV testing at the prison clinic.

During the biannual screening where all prisoners are offered HIV testing, if not tested within the past six months, prisoners are organized in groups of 10 to receive information about HIV testing. Each prisoner is then invited individually into the testing room and their full details recorded in the HTS register. The unique identifier number from the HTS register is written onto the test kit and on a paper, and the documented time when the buffer is added. To meet the demand for testing, the counsellor does not wait one by one for each test result. The next prisoner is invited into the room to be bled and the same steps described above carried out. This is repeated for the group of 10.

Using a timer, it must be ensured that no test is read before 15 minutes has passed and no test is read later than 60 minutes from the addition of buffer. Once all 10 prisoners have been bled, each prisoner is then called back individually to receive their result. If a positive HIV test is confirmed, post-test counselling is given and the client is linked to care and treatment services at the prison clinic.

By implementing this model, HIV testing coverage in two central prisons (population of 1,500-2,000 inmates) increased from 43% to 97% and 19% to 96% between 2014 and 2017. Similar adaptations to patient flow have also been documented in OPD and community testing settings.

Case study 9:

Piloting a symptom and risk screening tool during community HIV testing, Tanzania

In Tanzania, ICAP at Columbia University is implementing a CDC PEPFAR-funded community-based HIV prevention intervention, known locally as the FIKIA project (Fikia means “to reach” in Swahili). Testing in the community needs to be specifically targeted to ensure adequate yield, unlike in health facilities where the patient populations are already presenting with illness. ICAP piloted a screening tool as part of a combination of interventions to increase yield and number of HIV positive clients identified through community testing. The screening tool assessed self-reported symptoms and key risks, including: i) whether or not they experienced any symptoms (including fever, lymphadenopathy, mouth ulcers, rash, headaches or sore throat) in the past two months, ii) whether or not the client is a key population member and/or adolescent girl or young woman, iii) contact of an HIV positive index client and iv) whether or not the client suspects HIV exposure since their last test. From the initial results, the screening tool has been incorporated in additional project regions as a method to improve targeting of testing activities particularly with men, large events, and geographically distinct communities such as fishing villages and mining camps.



PART 8

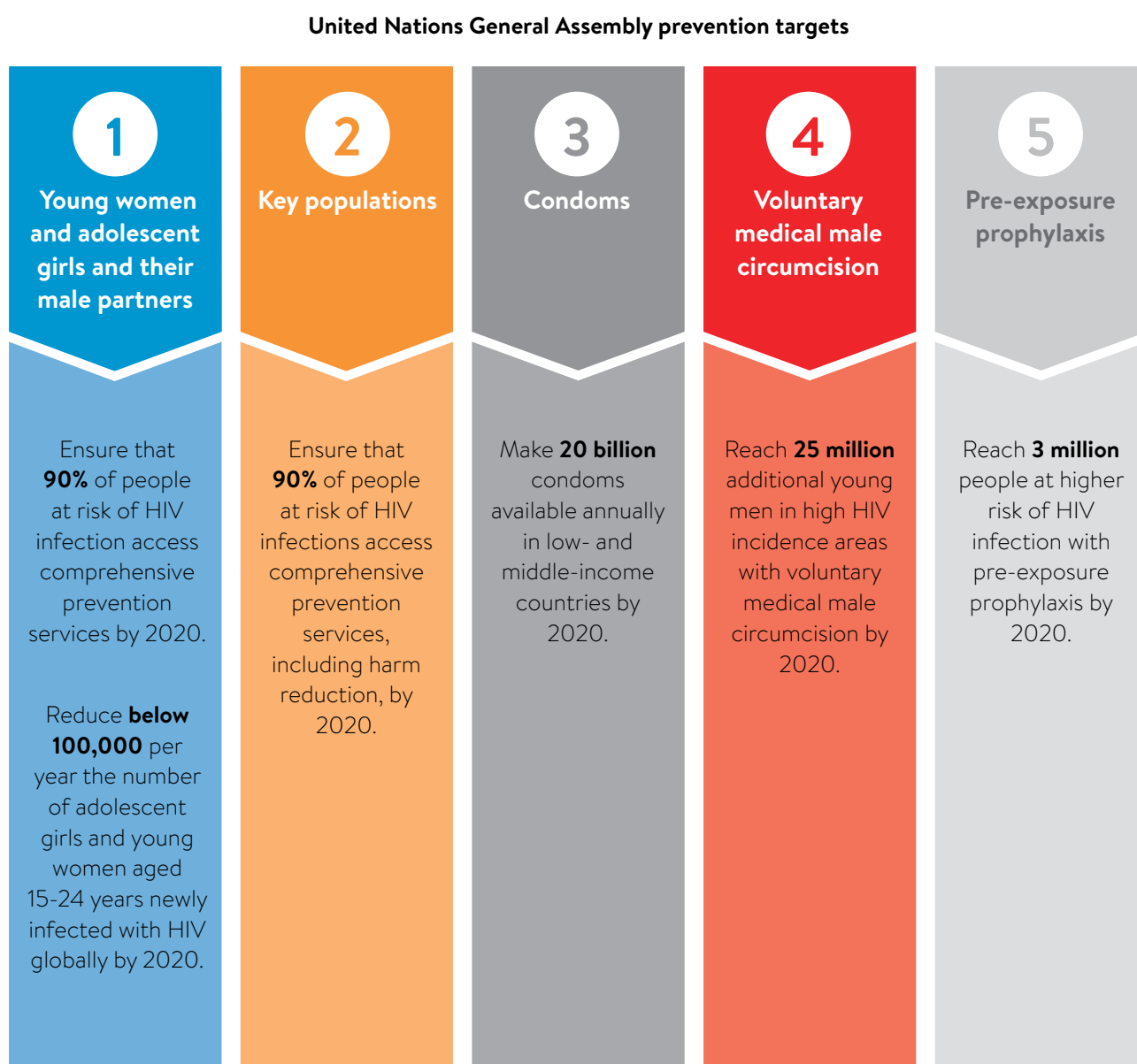
LINKAGE TO HIV PREVENTION AND ART INITIATION

LINKAGE TO PREVENTION

An HIV test presents an opportunity to link those with a non-reactive test to prevention strategies. Through linkage to prevention, new infections can be prevented. UNAIDS

outlines five prevention pillars and targets to reduce HIV incidence (Figure 6).

Figure 6: UNAIDS five prevention pillars*



* Adapted from *The Prevention Gap Report*, UNAIDS, 2016.

LINKAGE TO ART INITIATION

In this framework, linkage to ART is defined as when a client initiates ART.

A specific package of screening and prophylactic interventions is recommended for those clients presenting with advanced HIV disease (Box 8). Decentralization of the package and task sharing of point-of-care testing, including CD4, cryptococcal antigen testing and LAM testing for TB, allows for delivery of the prophylactic package interventions and rapid ART delivery at primary care level. For clients who are more seriously ill, clear referral criteria should be in place.

Testing services should be alert to HIV-positive clients who are repeating their test. Such patients may or may not be linked to ART services. Reasons for repeating the test should be explored along with the reasons for stopping ART where this has occurred. ART initiation should also be adapted for the increasing cohort of clients who are returning to care after a period of default. ART services should be encouraged to enquire whether clients have previously been on ART in order to address reasons for defaulting and to be alert to possible treatment resistance.

Figures 7 and 8 illustrate how the building blocks may also be used to develop models of service delivery for ART initiation. Figure 7 highlights the building blocks of baseline laboratory investigations, ART initiation and immediate follow up for client in early HIV disease. Figure 8 highlights the building blocks for clients with advanced HIV disease.

WHO Guidelines

Box 7: WHO recommendations on rapid initiation of antiretroviral therapy¹⁶

Rapid ART^a initiation should be offered to all people living with HIV following a confirmed HIV diagnosis and clinical assessment.

ART initiation should be offered on the same day to people who are ready to start.

^a Rapid initiation is defined as within seven days from the day of HIV diagnosis; people with advanced HIV disease should be given priority assessment and initiation.

WHO Guidelines

Box 8: WHO recommendation on the management of advanced HIV disease¹⁶

A package of interventions, including screening, treatment and/or prophylaxis for major opportunistic infections, rapid ART initiation and intensified adherence support interventions, should be offered to everyone presenting with advanced HIV disease.





Advanced HIV disease

- For adults, adolescents and children \geq five years, advanced HIV disease is defined as a CD4 cell count <200 cells/mm³ or a WHO clinical stage 3 or 4 event at presentation for care.
- All children with HIV younger than five years should be considered as having advanced disease at presentation.

“Community-based testing is so convenient and friendly. I can be tested at any time, any place, and I feel very comfortable doing so. The test is also fast—I don’t have to wait long for the results.”





– Client, Viet Nam

Figure 7: The building blocks of ART initiation in early HIV disease

	BASELINE LABORATORY INVESTIGATIONS	ART INITIATION	IMMEDIATE FOLLOW UP
 WHEN	Performance of baseline testing (CD4, TB screening), where possible through POC or on-site testing on the same day. If same-day testing is not available, results should be available within one week	Rapid initiation should be offered within 7 days with the offer of same-day initiation	If same-day initiation, week 1, 2 All month 1, 3, 6
 WHERE	IPD, OPD, primary care clinic	IPD, OPD, primary care clinic	Health facility, consider community-based follow up or mobile outreach
 WHO	Laboratory technicians, doctors, clinical officers (COs), nurses, lay workers	Doctors, COs, nurses	Doctors, COs, nurses
 WHAT	Assessment of readiness (clinical and psychosocial) for ART	ART initiation	Clinical and psychosocial follow up

Early disease: Individuals presenting or returning to care when clinically well (absence of WHO clinical Stage 3 or 4 disease and CD4 cell count ≥ 200 cells/mm³)

Figure 8: The building blocks of ART initiation in advanced HIV disease

	BASELINE LABORATORY INVESTIGATIONS	ART INITIATION	IMMEDIATE FOLLOW UP
 WHEN	Performance of baseline testing (CD4, TB screening, CRAG and LAM where indicated), where possible through POC or on-site testing on the same day. If same-day testing is not available, it should happen within one week	Where the client has TB or cryptococcal meningitis, initiate ART according to clinical guidelines. If no OI is being treated, rapid initiation should be offered within 7 days with the offer of same-day initiation	Clinical visits should be more intense (e.g., weekly to two weekly) until stable; community-based follow up weekly to two weekly
 WHERE	IPD, OPD, primary care clinic	IPD, OPD, primary care clinic	Health facility, consider additional community-based and/or home-based follow up
 WHO	Laboratory technicians, doctors, COs, nurses, lay workers	Doctors, COs, nurses	Doctors, COs, nurses, community-based cadres
 WHAT	Package of care for advanced HIV ¹⁶ Assessment of readiness (clinical and psychosocial) for ART	ART Prophylaxis package as indicated	Clinical and psychosocial follow up

Advanced disease: Individuals presenting or returning to care with advanced HIV disease, determined by clinical (Stage 3 or 4) and/or immunological (CD4 < 200 cells/mm³) criteria; such individuals may be ART naive or have interrupted treatment



PART 9

CONCLUSION

The principles of DSD and differentiated HIV testing services should be expanded to improve the coverage of HIV testing and to identify the remaining people living with HIV who are unaware of their status. The choice of model will be context specific based on the situation analysis, and the models will be adapted, built or dropped to respond to local challenges and specific needs of the client.

Differentiated service delivery for HIV: A Decision Framework for HIV testing services uses the six-step approach to guide HIV programme managers to examine changes that can be made to existing HIV testing models

or design new ones for specific populations in specific contexts. By following these steps, quality HIV testing service delivery models can be designed. This framework should be used in parallel with the WHO guidelines on HIV testing¹², HIV self-testing and partner notification¹⁷ and rapid initiation¹⁶. Further examples and tools may be found on www.differentiatedservicedelivery.org. We welcome your feedback.

Please email us at dsd@iasociety.org and visit www.differentiatedservicedelivery.org for more details.

With differentiated HIV testing services ...



Andrew has been able to identify which specific population to target and will use the building blocks to design the exact model that his district will use for mobilizing, testing and linking clients to prevention and treatment services.



Namrata will be able to test herself for HIV when her peer distributes the HIV self-tests where she works. The peer will also follow up to make sure everyone links to either a prevention or treatment service.



Judith and her family have all been tested by the community health worker who performed partner notification and community-based index client testing. Judith's partner tested negative and so the community health worker referred him to the clinic for advice on prevention.



John and his colleagues at the security firm are feeling positive about continuing in their jobs and appreciate the annual health screen, including having his BP checked and an HIV test. They have been advised of a number of ART clinics nearby and he was grateful when the counsellor who tested him gave him a call to check that he had gone to the clinic and started on ART.

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ANNEXES



ANNEX 1:

Approaches within the three components of differentiated HIV service delivery models

As outlined in Part 2 any HIV testing service delivery model should include mobilizing, testing and linking. In this annex, options for these three components are outlined.

Mobilizing

Mobilizing strategies are required both for healthcare workers to be encouraged to offer testing and for populations to accept HIV testing. Healthcare workers at facility level in all entry points where HIV testing is indicated in a particular context should be sensitized about the benefits of HIV testing to link to both prevention and treatment services. This therefore requires collaboration and coordination across departments within larger institutions. Staff within the ART clinic should be mobilized to ensure that all partners and family members of index clients are tested.

Mobilization of the population may be achieved through a range of strategies and using multiple strategies in parallel. These strategies include mass/group, network-based approaches and partner notification and index testing.

Mass/group

Including information about HIV testing in local radio or press publications may be a strategy to reach communities with key messages about where, when and how to access HIV testing services. Recruiting prominent members of the community to promote HIV testing through such campaigns may also help reduce stigma and normalize HIV testing¹⁸.

Network-based approaches – the role of peers

Utilizing peers to act as “HIV testing ambassadors” to provide information and encourage others to attend for HIV testing has been shown to be a successful strategy, especially among specific populations, such as adolescents and key populations. Such a “snowball” strategy, where clients identify other potential clients among their acquaintances, can support peers to provide information, distribute invitations or incentivize their peers to test. This may also be carried out in specific institutions, for example, within schools or workplaces.

Partner notification and index testing

Testing the partners and children of known HIV-positive clients is a priority. Index testing involves mobilizing the household, family and partners of people diagnosed with HIV to be offered HIV testing services (HTS). Partner notification is a form of mobilization and is a voluntary

WHO Guidelines

Box 9: WHO recommendation on partner notification¹²

Voluntary assisted partner notification services should be offered as part of a comprehensive package of testing and care offered to people with HIV.

process where a trained healthcare worker asks people diagnosed with HIV about their sexual partners, and if the client agrees, offers these partners HTS. Partner notification may be passive or assisted. In addition, any children of an HIV-positive client should also be offered HIV testing. Index client testing may be performed by inviting partners or children to the facility or through community-based or home-based testing, including the option for HIV self-test kits to be distributed by the index case or community cadre.

Notification of partners may be passive (performed by the client) or assisted (where the client gives permission for the healthcare worker to contact their current and previous partners). WHO recommends voluntary assisted partner notification.

Passive notification (also known as patient referral) is when HIV-positive clients are encouraged by a trained healthcare worker to disclose their status to their sexual or drug-injecting partners by themselves and to suggest HTS to the partner. This strategy may be augmented by providing HIV self-test kits to the index client to provide to their partners as an alternative testing modality.

Voluntary assisted partner notification is when a consenting HIV-positive client is assisted by a trained healthcare worker to disclose their status or to anonymously notify their sexual partners. The provider then offers HTS to these partners. Assisted partner notification is done using contract referral, provider referral or dual referral.

- **Contract referral** is when the client makes a contract with a trained provider and agrees to disclose their status by themselves and to refer their partner to HTS within a specific time. If the partner does not access HTS, the health provider will contact the partner directly to offer HTS.
- **Provider referral** is when, with the consent of the HIV-positive client, a trained provider confidentially contacts

the person's partner directly and offers the partner voluntary HTS.

- **Dual referral** is when a trained provider accompanies and provides support to the HIV-positive client when they disclose their status and may then provide HTS to the partner.

Testing

Testing refers to the service delivery model implemented for distributing, performing and recording the results of the HIV test. The time of day that HIV testing services are offered, frequency of testing, the location where HIV testing is carried out and who performs the test must be defined for each model. Each of these aspects of testing delivery is considered in more detail in Part 6, the building blocks of HIV testing services.

Accurate and quality HIV testing must follow the defined testing strategy based on high ($\geq 5\%$) or low ($< 5\%$) HIV prevalence and utilize WHO prequalified tests within a validated testing algorithm as outlined in the WHO HIV testing guidelines¹². Re-testing prior to ART initiation to verify HIV status is important to ensure quality HIV testing and prevent unnecessary use of ART. Frequency of re-testing for those clients with ongoing risk should also be clearly defined for the model.

In addition to healthcare workers performing the full HIV testing algorithm, a strategy known as **“test for triage”** may also be delivered. This is often performed at community level where a lower cadre or peer worker performs one HIV test. If positive, the client is linked to a facility where the full algorithm is then performed by a cadre trained in HIV testing and counselling. Similarly, in HIV self-testing, confirmation of a positive self-test must be completed for diagnosis.

An HIV test can be completed either at a facility (a health facility or non-health facility) or in the community. Different testing modalities can be used at each location, including an HIV self-test.

Health facility

HIV testing may be delivered as a standalone service or integrated into other facility health or screening services. WHO recommends that PITC be offered in facility-based services according to the type of epidemic (Box 4, page 26)¹⁷. HIV testing may also be accompanied by other screening activities, such as for TB, STI, nutrition, hypertension or diabetes.

Non-health facility

Distribution and access to HIV testing should also be expanded to other non-health facilities depending on where the target populations for testing are located. Examples

include HIV testing within workplaces, prisons and other closed settings, schools and education institutions and other facilities where the same population can be accessed on a recurrent basis.

Community

HIV testing may also be delivered within the community. This may be through home-based testing or door-to-door outreach, mobile outreach campaigns and testing in places of worship, parks, bars and other venues.

Self-testing

HIV self-testing should be considered as a testing modality alongside traditional healthcare worker testing within any HIV testing delivery model. Within the building blocks (when, where, who and what) of any testing model (Part 6), the “who” carrying out the test therefore becomes the client. HIV self-tests kits may be distributed either at the facility or within the community, including in the private sector, community, social networks, partners, other venues and institutions, and may be performed unassisted or directly assisted.

Linking

Following an HIV test, there should always be an action – linking clients to a comprehensive package of prevention services (both HIV-positive and HIV-negative clients) and linking HIV-positive clients to ART initiation and care (Part 8). Linkage to care can be influenced by individual, community and health system factors¹⁹. Different types of testing delivery models (for example, health facility, non-health facility, community) and HIV testing modalities (PITC versus self-testing) may impact opportunities for linkage and hence will require different linkage approaches^{20,21}. It has also been shown that a combination of linkage strategies (such as use of SMS, early ART and more rapid diagnostics) may be required to enhance uptake of ART^{22,23}. Different strategies to support linkage to prevention or ART initiation are outlined below.

Referral

Once tested, clients will require written, verbal or electronic referral to a service providing HIV care or prevention services. Standardized forms and procedures should be in place to support this process.

Accompaniment

When HIV testing is performed at a range of entry points within large facilities, it may be challenging for clients to physically locate the ART site and emotionally challenging to present themselves for care. Likewise, if tested in the community, there may be a number of challenges for a client to locate an ART site. After any testing delivery,

direct accompaniment of the client to an ART service by the person who has performed the test or a designated member of staff (such as a lay provider or peer) has been demonstrated to improve rates of linkage to care²⁴. Working with peers to accompany clients to an ART site has also been shown to be particularly beneficial, for example, for adolescents²⁵ and key populations.

Compensation/incentives

Providing compensation for travel expenses has been proposed as a good-practice intervention to improve linkage to care²⁶⁻²⁸. Provision of other financial incentives has been used in other study settings and has not always provided a positive impact on linkage²⁹. Further evaluation of such incentives may be needed.

Same-day ART initiation

Offering rapid and same-day ART initiation to people who are ready to start ART has demonstrated improvements in the proportion of newly identified HIV clients initiating treatment. Increasingly, ART initiation is being decentralized further – from hospital to primary care centres and, in recent years, to communities. In Lesotho, improved ART initiation outcomes were observed for clients initiating treatment at home following home-based HIV testing³⁰. For key populations, a growing number of community-based organizations are linking with clinics and providing on-site ART initiation and ART refills within community-based organization premises, such as drop-in centres³¹.

Friendly services

Knowledge and experience of healthcare services may significantly influence the likelihood of a client linking

to care. If HIV services within a specific community are perceived as “unfriendly”, overcrowded or are not open at convenient hours, clients may well be deterred from attending. Hence improving the quality of ART services through a client-centred differentiated care approach may in itself improve linkage between HIV testing and initiation of ART.

Post-test counselling must therefore provide sufficient information about the choice of clinic available and how and when to access services. For clients still facing stigma as a key barrier, the choice of clinic must be made by the client and, even where decentralization has taken place, individuals should decide whether to travel to a clinic close by or outside their community.

The linkage intervention or combination of interventions should be planned for every model and can be designed using the same building blocks of differentiated ART delivery (Part 6). Standard operating procedures (SOPs) for linkage to care and prevention services should be developed both for facility-based and community-based testing models, including defining who is responsible for linking the client to services and the timeframe for the activity to be completed.

Tracing

If initial strategies for linkage are not successful, having a procedure for tracing clients who have not linked to care is required. At initial contact, when tested, clients should consent to be traced and ideally provide telephone and location contact details. Tracing may be done by phone call, SMS or home visits performed by facility-based or community cadres. Annex 5 gives an example of a SOP for linking clients to HIV care. A similar SOP could be developed for linkage to prevention in priority vulnerable populations.

ANNEX 2:

Online annexes available to support implementation

Available at <http://bit.ly/2sVehV5>

- **Online Testing Annex 1:** Template for assessing differentiated HIV testing services at a national level (excel)
- **Online Testing Annex 2:** Template for assessing differentiated HIV testing services at a facility-level
- **Online Testing Annex 3:** Template for assessing relevant policies related to differentiated HIV testing services
- **Online Testing Annex 4:** Policy and regulatory frameworks to consider to optimize implementation of HIV self-testing
- **Online Testing Annex 5:** Additional resources and examples to support developing a strategic mix of HIV testing services

Additional resources available related to HIV testing and costing

Available at <http://bit.ly/2sVehV5>

- The WHO and the Cost-EffectiveNess of HIV Testing Services working group (CENTS) multipart webinar series – slides and recordings
- A web-based SPECTRUM module for HIV testing will be available through Avenir Health later in 2018:
<http://www.avenirhealth.org/index.php>

ANNEX 3:

Questionnaire to assess differentiated HIV testing services

Mobilizing

General population		Facility
Describe mobilizing activities carried out at the facility		
Are mass group mobilizing campaigns carried out (media, radio campaigns)? Y/N		
If yes (mass group), how frequently are they carried out?		
Is index client testing carried out? Y/N		
Is there an SOP for performing partner notification and index client testing? If yes, please share the SOP.		
Is assisted partner notification performed by healthcare workers? Y/N		
Is assisted partner notification performed by lay providers? Y/N		
Describe any new approaches or successes in mobilizing the general population for HIV testing		
Describe challenges for mobilizing the general population		
Are men engaged in mobilizing their communities for HIV testing? Y/N		
Children & adolescents		
WHERE	Are any mobilization activities carried out in schools? Y/N If yes, please specify the age group.	
	Are any mobilization activities carried out in youth centres? Y/N	
WHO	Are peer adolescents involved in mobilizing activities? Y/N Give examples	
Key populations		
WHEN	Are mobilization activities carried out at adapted times for key populations? Describe.	
WHERE	Are mobilization activities carried out at specific locations for key populations? Describe.	
WHO	Are peer sex workers engaged in mobilizing their communities for HIV testing? Y/N	
	Are peer men who have sex with men engaged in mobilizing their communities for HIV testing? Y/N	
	Are peer transgender people engaged in mobilizing their communities for HIV testing? Y/N	
	Are peer people who inject drugs engaged in mobilizing their communities for HIV testing? Y/N	
	Are peer prisoners and other people in closed settings engaged in mobilizing their communities for HIV testing? Y/N	

Testing

General population		Facility
WHEN	Are out-of-office-hours testing services available at health facilities? Y/N	
	Is testing available at weekends at health facilities? Y/N If yes, please specify days and times.	
	Is testing available 24 hours in IPD? Y/N	
	Is testing available 24 hours in maternity? Y/N	
	When are community testing services provided?	
WHERE Which of the below facility or community sites provide HTS?	PITC at ANC clinic? Y/N	
	PITC at TB clinic? Y/N	
	PITC in STI clinics? Y/N	
	PITC at OPD? Y/N	
	VCT at facility? Y/N	
	Schools? Y/N	
	Workplaces? Y/N	
	Prisons? Y/N	
	Community home-based door to door? Y/N	
	Community outreach & mobile testing for general population? Y/N	
	Community fixed site testing for general population? Y/N	
	Other mode of testing delivery (please describe in comments)	
	Community-based index client (active outreach to index cases in community)? Y/N	
	Facility-based index client testing (inviting partners and family members in)? Y/N	
	Self testing distribution from facility? Y/N	
Self testing distribution in the community? Y/N		
Other – please specify		
WHO Which of the following cadres are able to perform HIV rapid tests?	Doctor? Y/N	
	Clinical officer? Y/N	
	Nurse? Y/N	
	Counsellor? Y/N	
	Community health worker (who is not a counsellor)? Y/N	
	Expert client/Peer/Lay provider? Y/N	
Other – please specify		
Children and adolescents		
WHEN	Is testing provided out of school hours?	
WHERE	Is testing provided in schools?	
	Is testing provided in MCH clinics?	
	Is testing provided in EPI clinics or EPI outreach?	
	Other-please specify	
WHO performs DBS for EID	Doctor? Y/N	
	Clinical officer? Y/N	
	Nurse? Y/N	
	Counsellor? Y/N	
	Community health worker (who is not a counsellor)? Y/N	
Other – please specify		





Key populations		
WHEN	Is testing performed at adapted times for key populations? Describe.	
WHERE	Are testing activities carried out at specific locations for key populations? Describe.	
WHO	Are peer sex workers engaged in testing their communities?	
	Are peer MSM engaged in testing their communities?	
	Are peer TG engaged in testing their communities?	
	Are peer PWID engaged in testing their communities?	
	Are peer prisoners and people in other closed settings engaged in testing their communities?	





Linking





General population		Facility
Is there an SOP for linking positive clients to care and treatment from facility and community testing points? Y/N If yes, please share.		
Is a referral form provided for linkage? Y/N If yes, please share.		
At facility level is there an escort system between testing points and ART clinic?		
After community testing, is the client linked with a community health worker?		
After community testing, is the client linked with an expert client/peer?		
Are clients tested positive in the community traced if not linked to care?		
If yes: Is tracing by phone performed?		
If yes: Is community-based tracing to clients homes performed?		
Are male clients testing HIV negative linked to VMMC services? Y/N		
Describe any other linkage strategy in place to support linkage to HIV care after testing		
What recommendation is given for the timing of initiation following a positive diagnosis?		
Please share any SOPs for ART initiation (counselling and clinical) - both for patients who present well and patients who present with advanced HIV		
Children and adolescents		
How are positive children linked to ART services?		
Are adolescent peers engaged in linking positive adolescents to ART services?		
Key populations		
Sex workers	How are positive sex workers linked to ART services?	
	How are sex workers linked to prevention?	
	Are peer sex workers engaged in linking clients to services?	
Men who have sex with men	How are positive MSM linked to ART services?	
	How are MSM linked to prevention?	
	Are peer MSM engaged in linking clients to services?	
Transgender people	How are positive TG linked to ART services?	
	How are TG linked to prevention?	
	Are peer TG engaged in linking clients to services?	
People who inject drugs	How are positive PWID linked to ART services?	
	How are PWID linked to prevention?	
	Are PWID engaged in linking clients to services?	
Prisoners and people in other closed settings	How are positive prisoners and people in other closed settings linked to ART services?	
	How are prisoners and people in other closed settings linked to prevention?	
	Are prisoners and people in other closed settings engaged in linking clients to services?	

ANNEX 4:





Building block considerations by specific population

MEN	
 WHEN	During working hours at workplaces; after working hours, at facilities and for community testing
 WHERE	Facility, workplaces, meeting places (bars, football matches, male community forums)
 WHO	Healthcare workers, lay cadres, male peers, partners (partner-notification, including with HIV self-test kits)
 WHAT	HTS integrated with health screening package: STIs, hypertension, provision of prevention services (condoms, linkage to VMMC)





KEY POPULATIONS	
 WHEN	Specific time when key population gathers (evening in bars or clubs)
 WHERE	Community-based location where key population is known to gather or drop-in centre
 WHO	Healthcare workers who have been sensitized to deliver HIV testing services for the specific key population Engagement of peers in all three components of HTS Using HIV self-testing as a modality for testing delivery
 WHAT	All: HTS, STI screening and treatment, family planning, prevention services (condom and lubricant distribution, PrEP) PWID: Clean needle distribution and opioid substitution therapy

CHILDREN	
 WHEN	Outside school hours; once tested, not to re-test unless new exposure
 WHERE	Under-5 clinics and OPD; malnutrition clinics; schools and youth centres; homes as part of community-based index client testing
 WHO	Healthcare workers and trained lay cadres
 WHAT	Combine with assessment of nutrition and provision of EPI

ADOLESCENTS

 WHEN	Outside school hours
 WHERE	OPD and family planning clinics; schools, youth centres and other community-based locations where adolescents gather
 WHO	Involvement of adolescent peers; healthcare workers and trained lay cadres
 WHAT	HIV awareness and sexual health education, including family planning and STI services, prevention services

PREGNANT AND BREASTFEEDING WOMEN

 WHEN	Same day as antenatal, postnatal and EPI services Specific schedule for re-testing of HIV-negative women to identify seroconvertors
 WHERE	ANC, PNC, EPI, family planning clinics; facility based and during community-based services
 WHO	Nurses and midwives integrating HTS within ANC and PNC services Consider training of peer mothers to mobilize, test and support linkage to services
 WHAT	HIV testing integrated with ANC, PNC and EPI and FP services

ANNEX 5:

Example for linkage to ART services, Ghana

3.4 Linkage to ART services



- All clients testing HIV positive should be proactively linked to ART services.
- The person performing the HIV test should ensure that the client is linked to ART services.
- With the client's consent, their contact details should be documented in the HTS register and the client's chosen ART site recorded.



- In large facilities, linkage may require escorting the client to be registered in the clinic where ART services are offered.



- For clients identified as HIV positive when they are inpatients, ART should be initiated in the ward (unless delayed initiation is indicated due to clinical reasons, such as treatment of cryptococcal meningitis) and a clear referral plan made with the client's preferred ART site.



- Where the client has been tested in the community, the healthcare worker or lay cadre performing HIV testing should discuss options for ART sites and the client should, with their consent, be linked to a healthcare worker or volunteer (for example, model of hope) from their community.



- Clients who tested HIV positive in the previous month should be followed up to ensure that they have linked to care either through cross-reference in the ART register or by contacting the client by phone.
- If the client has not linked to care, they should be provided with further counselling if reached by phone.
- Where they are not contactable by phone, the community health nurse or model of hope volunteer should schedule a home visit as part of routine health promotion activities to encourage the client to access services.

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DIFFERENTIATED SERVICE DELIVERY FOR HIV: A DECISION FRAMEWORK FOR HIV TESTING SERVICES

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Follow these characters as they find solutions to common challenges around testing for HIV

How am I meant to have an HIV test when the queues in the clinic are so long? I'm also not sure where I can get a regular supply of condoms and I heard some of my friends have started to take PrEP. Where should I go?



Namrata, a female sex worker

How am I going to reach the remaining people with HIV who don't know their status with the resources we have? We have to reach our 90-90-90 targets.



Andrew, a district ART manager

I wonder if I should be tested for HIV? It's not easy for me to go to the clinic to be tested because I'm at work.



John, a security guard

I tested positive during my pregnancy, but my husband says he's too busy to go to the clinic for a test.



Judith, David and their baby