

# THE RAPID SYPHILIS TEST TOOLKIT MANAGEMENT 1



Model for Integration of Rapid Syphilis Tests within Maternal and Child Health and/or Prevention of Mother to Child Transmission Programmes at Primary Healthcare Settings



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# Model for Integration of Rapid Syphilis Tests within Maternal and Child Health and/or Prevention of Mother to Child Transmission Programmes at Primary Healthcare Settings

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## 1. Introduction

This guide will help you to consider how to integrate rapid syphilis testing into an existing Maternal and Child Health / Prevention of Mother To Child Transmission programme. It also explains the benefits and challenges of integrating rapid syphilis testing within these programmes.

Integrated services provide a combination of essential services in one location, which can be used on the same clinic visit and which help to reduce missed opportunities and losses to follow up.

Reducing missed opportunities and loss to follow up are essential aspects of Maternal and Child Health services and the prevention of vertical transmission of HIV: many women will come for at least one prenatal visit but may not return for all four focused antenatal care visits. They may only be seen again at labour and delivery or after the birth of their child. To prevent vertical transmission of HIV and congenital syphilis, integration of services should be prioritized.

“ Integrated service delivery is the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money.”

<sup>1</sup> WHO Technical Brief No.1, May 2008, Integrated health services - what and why? Available from [http://www.who.int/healthsystems/technical\\_brief\\_final.pdf](http://www.who.int/healthsystems/technical_brief_final.pdf)

## 2. The Benefits of an Integrated Model for Prevention of Mother To Child To Transmission and Rapid Syphilis Testing Programmes

**These are some of the advantages to integrating rapid syphilis testing within an existing Prevention of Mother To Child Transmission programme:**

- Better health outcomes for mothers and babies, providing an earlier opportunity for pregnant women to be screened and treated for syphilis resulting in better outcomes for the newborn. Antenatal care is often the primary entry point for women of child bearing age into the healthcare system. Integrating rapid syphilis testing into Prevention of Mother To Child Transmission provides for immediate screening and treatment and better pregnancy outcomes.
- Increased availability and opportunity for syphilis testing.
- Male partner notification encourages greater involvement and testing of partners and promotes increased male involvement in sexual and reproductive health.
- Health systems are strengthened by a maximal utilisation of resources, a reduction in missed opportunities, the connection of Maternal and Child Health policies and services, and the promotion of sustainability through the utilisation of existing infrastructure.
- Training health care workers to provide integrated services increases their skill mix while at the same time motivating them and improving their job satisfaction. They are able to provide a more comprehensive package of care and higher quality services. Remember, it is important that health care workers are not overburdened with additional tasks.
- Improvements in efficiency through optimisation of existing resources and avoiding duplication of efforts. Health expenditure is minimised by maximising human resources: this results in highly skilled and motivated staff. Allows for improvements in effectiveness.
- Integration of rapid syphilis testing is a cost-effective way of reaching a large number of women of reproductive age. Syphilis causes serious pregnancy-related complications and has implications for the effectiveness of Prevention of Mother To Child Transmission services.
- Integrated services benefit those who live far from health centres, reducing client time and the cost of multiple clinic visits. These costs can be opportunity costs such as time away from family or work, or costs of transport and clinic fees. Patient satisfaction and demand for services can be increased as the quantity of services provided and information given is optimized at one visit. The integration of rapid syphilis testing into Maternal and Child Health/ Prevention of Mother To Child Transmission programmes minimises loss to follow up, because it offers Same Day Testing and Treatment (STAT) and can significantly reduce the risk of stillbirths, congenital syphilis and vertical transmission of HIV.

### 3. Situational Analysis

**To determine if integrating services is feasible in the local setting, it is important to understand the services that are already offered in target facilities and identify the gaps and priorities within the services delivered.**

You will need to present your situational analysis to decision makers in order to develop an integration model for the introduction of rapid syphilis testing within an existing Maternal and Child Health/ Prevention of Mother To Child Transmission programme, and to determine its feasibility in certain districts and new communities. It should include an analysis of current policies, as well as of the infrastructures and human resources in place for the current programme. A situational analysis can make the programme more effective and cost-effective.

These are some of the questions you need to consider before undertaking a situational analysis:

- Who will perform the situational analysis?
- What tool will be used for data collection?
- How much will the situational analysis cost?
- How long will the situational analysis take?

You should perform your situational analysis at site level before implementation. The introduction of an intervention into the health system has an effect on the entire system. Successful integration therefore requires specific actions at all levels of the health system in line with the 6 building blocks of a health system as defined by the World Health Organization (WHO, 2007). These include:

- Service delivery.
- Health workforce.
- Health information systems.
- Access to medical products, vaccines and technologies.
- Financing.
- Leadership and governance (stewardship).

**Tool 1 is a sample checklist for analysis** of the management structures, policies and guidelines and financing that are currently in place for Prevention of Mother To Child Transmission services. **Tool 2 is a checklist for analysing structures in place at the service delivery level.**

**Tool 1. Situational analysis of prevention of Mother to Child Transmission Services at the Central Level**

<b>1</b>	<b>Responsibility and Management practices</b>
1.1.	What are the chain of command and communication channels within PMTCT?
1.2	What is the organizational management system for MCH/PMTCT? Who owns/governs/directs the PMTCT service – is it the HIV programme or the MCH programme?
1.3	What department is responsible for/oversees STI?
1.4	Who will be responsible for the integration of rapid syphilis testing within MCH/PMTCT programmes?
1.5	How is service delivery organized: — At the Central/National level? — At the Regional/District/Hospital Level? — At the Health facility level (including large facilities, small hospital, health centres, dispensaries, mission hospitals)?
<b>2</b>	<b>Policy Guidance: Policies and guidelines (including drug policy)</b>
2.1	Do policies already exist for the PMTCT programme and/or the HIV programme on the use of diagnostic tests, including rapid diagnostic tests and do they need to be modified to include syphilis?
2.2	Do PMTCT guidelines include testing for other STIs, including syphilis?
2.3	Are clinical management guidelines in place for PMTCT and/or the HIV programme?
2.4	Is syphilis screening and management detailed within the PMTCT clinical guidelines?
2.5	What level of staff can dispense drugs and tests?
<b>3</b>	<b>Implementation: Testing practices</b>
3.1	Is there integration of full HIV services within MCH (testing and /or treatment)?
3.2	Is there a formal system for evaluating/validating and approving diagnostic tests/devices for use in the country?
3.3	Can the rapid syphilis test be easily incorporated with other rapid tests routinely used in these populations including HIV and malaria rapid tests?
<b>4</b>	<b>Financing</b>
4.1	Who provides funding for the individual parts of the PMTCT programme — Staff? — Drugs? — Tests? — Supervision/Monitoring and Evaluation?
4.2	Who provides funding for the STI programme — Staff? — Drugs? — Tests? — Supervision/Monitoring and Evaluation?

4.3	Is funding provided by external donor organizations? How does this impact on the long term sustainability of your diagnostic programme?
4.4	How is public health financed? Are services fee paying? Is there a health insurance scheme?
<b>5</b>	<b>Surveillance or M&amp;E system</b>
5.1	Is data on PMTCT or HIV services routinely collected? — By whom? — How frequently? — Whom is it reported to? — How is the data analysed and disseminated, and to whom is it disseminated to?

#### Tool 2. Situational Analysis of Prevention of Mother to Child Transmission Programme at the Service Level

<b>1</b>	<b>Infrastructure</b>
1.1	Are MCH/PMTCT services currently linked at point of service delivery?
1.2	Does the current package of care for ANC include syphilis testing? If yes, what test(s) are currently used? How consistently is testing available?
1.3	What infrastructure is in place? — Detail equipment — Detail supply chain — Detail human resource staff and competencies — Detail laboratory services available
1.4	What are the main infrastructure elements not in place and which are required for rapid syphilis test introduction?
1.5	Do existing paper based patient records or registries need to be updated to collect data for rapid syphilis testing? Do existing electronic Information Management Systems need to be updated to collect data for rapid syphilis testing?
<b>2</b>	<b>Human Resources</b>
2.1	What are the roles required? — Assess who will be performing RST, and whether these personnel will also be performing rapid HIV testing. — Are there enough people to do this, and will the introduction of RST require task shifting and/or task sharing? — Is there a shift in testing from lab to clinic? — Is there a dedicated testing service which is separate from the other MCH services?

2.2	Are there redeployment or training implications? Can training on rapid syphilis testing be integrated into a national training programme?
2.3	Are staff within PMTCT services familiar and experienced with other point of care testing at the service level? For example how is HIV testing performed within an ANC setting?
<b>3</b>	<b>Structural Issues</b>
3.1	What is the organizational flow of responsibilities at the clinic/lab among staff?
3.2	What is the patient flow at the clinic? (as to understand where to place the rapid syphilis testing)
3.3	For counselling services, is there adequate and confidential space available? Are staff trained to counsel on positive test results for syphilis, safe sex practice, discordant couples, etc?
3.4	Is there routine monitoring and supervision of Prevention of Mother To Child Transmission services?
<b>4</b>	<b>Quality Management System</b>
4.1	Is there a quality assurance system in place for testing? Does this include External Quality Assessment (EQA)?
4.2	If yes, what quality control methods are used? What is the frequency of quality control testing at the health centres? What are the average scores of the healthcentres for quality control testing? Is there regular follow –up or corrective actions at health centres with low scores?
4.3	Are documents and records kept up to date?
4.4	Do staff attend regular refresher training workshops?
<b>5</b>	<b>Supply Chain</b>
5.1	What supply chain is currently in place for HIV rapid testing and drug supply?
5.2	Is it consistent and reliable?
5.3	Can RST be feasibly added to the commodity supply chain?
<b>6</b>	<b>Community Involvement</b>
6.1	What community level resources are in place?
6.2	Which organizations can provide services to PLWHAs and their families and what kind of services do they provide?
6.3	Are there community nurses who can help?
6.4	Is there an understanding of community beliefs and perspectives related to syphilis?

Your situational analysis should also include some epidemiological data on HIV and syphilis among the target population, and some data on the utilisation of services by this target population. **Tool 3 provides a sample list of questions** to analyse the current burden of syphilis and HIV in antenatal care services.



**Tool 3. Sample Questionnaire for Analysis of Services for Syphilis and HIV screening**

<b>1</b>	<b>Syphilis Testing &amp; Treatment</b> In the past _____ (specify period):
1.1	How many (estimate) pregnant women live in the area of interest?
1.2	How many health facilities provide antenatal care clinics in the area of interest?
1.3	How many pregnant women attended antenatal care for the first time before 16 weeks gestation?
1.4	How many pregnant women attended antenatal care for the first time after 16 weeks gestation?
1.5	How many antenatal care clinics have the facilities to perform syphilis screening for pregnant women?
1.6	What tests are currently used in antenatal care? (Rapid plasma reagin (RPR), Venereal Diseases Research Laboratory (VDRL), Treponema Pallidum Particle Agglutination assay (TPPA), Treponema Pallidum Haemagglutination assay (TPHA))
1.7	How many pregnant women attending antenatal care were tested for syphilis?
1.8	How many pregnant women tested positive for syphilis?
1.9	How many syphilis-positive women were treated with the first dose of benzathine penicillin on the SAME day as their test?
1.10	How many syphilis-positive women received their first dose of treatment before 16 weeks gestation?
1.11	How many partners of syphilis-positive pregnant women were treated with at least one dose of benzathine penicillin?
<b>2</b>	<b>HIV Testing and Counselling</b> In the past _____ (specify period):
2.1	How many pregnant women were tested for HIV?
2.2	How many pregnant women received their HIV test results?
2.3	How many pregnant women tested HIV positive?
2.4	How many HIV positive pregnant women received a maternal dose of anti-retroviral (ARV) prophylaxis?
2.5	How many HIV positive pregnant women were referred to care and treatment?
2.6	How many partners were tested for HIV?
2.7	How many partners received their HIV test results?
2.8	How many partners tested HIV positive?
2.9	How many HIV-positive partners were referred to care and treatment?
<b>3</b>	<b>HIV &amp; Syphilis Co-Infection</b> In the past _____ (specify period):
3.1	How many pregnant women were co-infected with HIV and syphilis?
3.2	How many partners were co-infected with HIV and syphilis?

When the above data have been collected, how should you decide whether integration is the correct choice? Is it feasible to change existing systems to incorporate the rapid syphilis test? Is the health system ready for this change? Will integration negatively affect existing services?

#### Uganda

In Uganda, efforts were made to integrate rapid syphilis testing alongside a HIV rapid testing programme within an existing PMTCT programme in two districts. The programme was successful for the following reasons:

- The policy environment was conducive to integration of rapid syphilis testing at ANC because guidelines already contained screening for syphilis for pregnant women
- There was a strong PMTCT programme in place within MCH and the service delivery environment was well organised and advantageous. In addition there was an established Quality Management System for HIV rapid testing allowing for easy integration of a Quality Management System for rapid syphilis testing.
- Healthcare workers were already familiar with the use of rapid tests and this provided a good foundation for training and reduced the time required for training workshops.
- MCH Registers and data collection tools were already formatted to record data on syphilis testing and treatment for pregnant women. These registers also included data on HIV testing and treatment.
- There was an established supply chain system for HIV RT allowing for easy integration of rapid syphilis tests within the same ordering system.
- Cost effectiveness – Incremental costs of introducing rapid syphilis tests to an existing PMTCT programme were minimal because an established system existed for HIV rapid test programme and MCH services.

The next step following a situational analysis is to perform a baseline survey and needs assessment for rapid syphilis test introduction. You should compare requirements with services already available as part of Maternal and Child Health/Prevention of Mother To Child Transmission programmes in order to identify service gaps and health system weaknesses. The feasibility of bridging those gaps and overcoming the system weaknesses should be investigated. It is also important to understand the community knowledge, attitudes and practice towards HIV and STI services.

The activities following a situational analysis, including stakeholder mapping and engagement and messaging, are further detailed in [Planning 1 - Advocacy and Communications Strategy](#). Further details on performing baseline survey are provided in [Implementation 4 - Monitoring and Evaluation Tool for a Rapid Syphilis Test Programme](#).

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## 4. Developing Aligned Policies for HIV and Syphilis Screening and Management

Effective integration requires coordination at multiple levels of the health service. These include governance, funding, human resources, information systems, national laboratories, and national or central procurement agencies.

You should develop a strategic framework for integration, with defined goals and objectives. It should include measurable outcomes that would increase demand and service utilisation. Refer to [Planning 1 - Advocacy and Communications Strategy](#) of this Toolkit for further guidance on developing an advocacy strategy based on the overall goals and objectives of the programme.

Defined **targets** and **milestones** should be developed to drive the process and to evaluate the impact of integration. Outcomes of the process of policy alignment could be measured as follows:

- Syphilis screening is integrated into the clinical guidelines.
- Prevention of Mother to Child Transmission guidelines include rapid syphilis testing.
- Syphilis screening and treatment is operational at the service level.
- Personnel have been identified to manage the integration of rapid syphilis testing into Maternal and Child Health/ Prevention of Mother To Child Transmission services.

Your situational analysis will determine which department is responsible for overseeing STI programme management. This will help you determine where and who to engage with. The situational analysis should have clarified the organizational structures within the Ministry of Health (MOH) and the reporting hierarchies within the health system. Through engaging with Ministry of Health officials, reviewing the guidelines and policy documents and determining the criteria for decision making, it should be clear where syphilis screening and management can fit within the Maternal and Child Health/ Prevention of Mother To Child Transmission structure and programme.

Next, you should develop a mechanism for integration which outlines collaboration and linkages between the various programmes using a coordinated organizational framework, including coordination between departments, programmes and other stakeholders. A multi-departmental technical working group could be established for syphilis/HIV and MCH activities.

Refer to the current clinical management guidelines to understand the norms and guidelines for counselling, testing, treatment and care. It may be that the management guidelines include integrated management of syphilis and HIV services. If they are not integrated, make suggestions on how best to integrate syphilis and HIV services based on the evidence from the situational assessment.

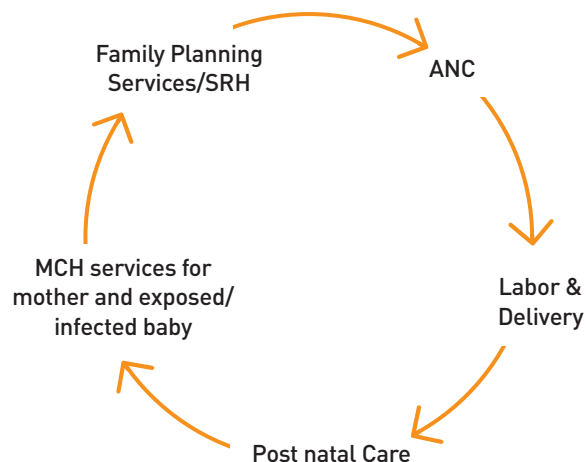
It is important to acknowledge that the reference method for syphilis testing, such as Rapid Plasma Reagin, may work well in certain contexts and it may not be necessary to change practices within these settings. An update of the current guidelines can be proposed to suggest different options for testing using Rapid Plasma Reagin or rapid syphilis testing, based on clinical settings and availabilities. Refer to [Management 3](#) on guidance and options for testing and treatment algorithms for incorporation of rapid syphilis testing into clinical practice.

Maternal and Child Health will be key for surveillance. An integrated surveillance system for syphilis prevalence among pregnant women and HIV-infected pregnant women should be established to reinforce the benefit of integrated services.

## 5. Integration at the Service Delivery / Operational Level

### 5.1 Where to introduce?

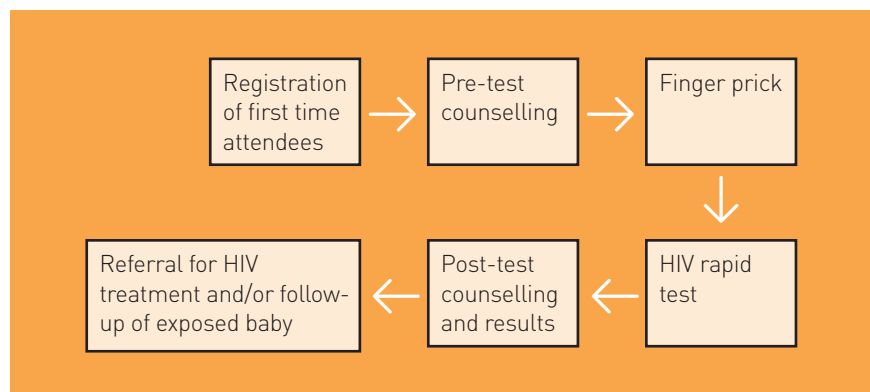
Map an organizational flow and insert where rapid syphilis testing could fit into this package of care. Infrastructures may need to be adapted to support rapid syphilis testing within Prevention of Mother To Child Transmission services.



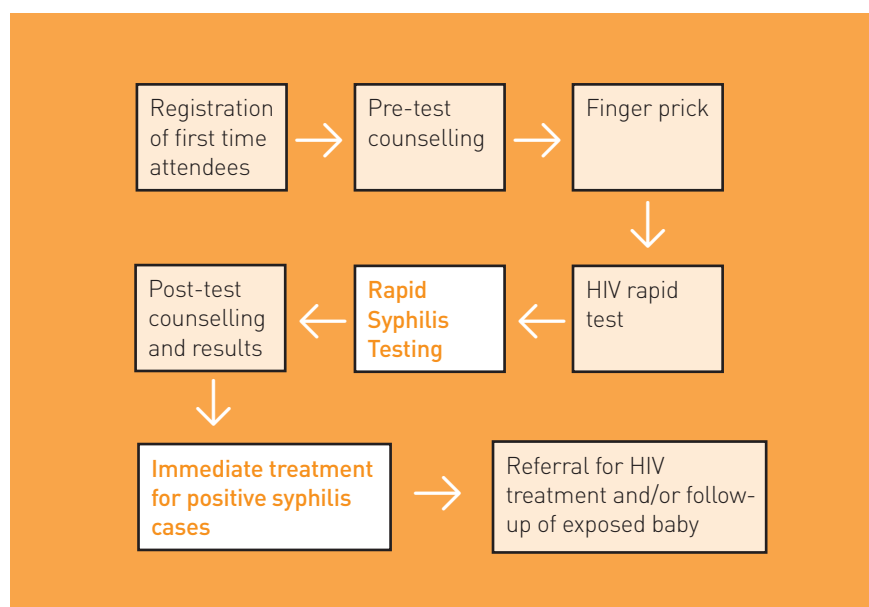
### 5.2 When to introduce?

Two service models are presented below. Figure 1 shows the patient flow in an antenatal care clinic with HIV testing services only, while Figure 2 shows the patient flow in an antenatal care clinic with integrated HIV and syphilis testing services. This is an example of how rapid syphilis testing can be integrated into an existing clinic setting.

**Figure 1. Antenatal care / Prevention of Mother to Child Transmission Service WITHOUT Rapid Syphilis Testing**



**Figure 2. Antenatal care / Prevention of Mother to Child Transmission Service WITH Rapid Syphilis Testing**



There are several opportunities to integrate services throughout the testing process. These could occur:

- Pre-test (counselling, preparation for both HIV and syphilis).
- Using the same finger prick for HIV and syphilis rapid testing.
- Running the tests concurrently.
- Post-test counselling for both test results.

If rapid tests are also used for diagnosis of HIV and other Point-of-Care tests that use finger prick or venous blood draw, rapid syphilis testing should occur in parallel with these tests to make optimal use of health care workers' time and reduce waiting times of the patient. Health care worker acceptability studies in Peru have shown that integration of rapid testing for HIV and syphilis within antenatal care services is acceptable and feasible to health care workers in both remote rural and busy urban clinics. Visit the Proyecto Cisne website for more details <http://www.proyectocisne.org/>.

Introduction of rapid syphilis testing should only begin after health care workers have received adequate training on the use and interpretation of rapid syphilis tests, and implications of rapid syphilis testing in HIV services has been discussed. Counselling and treatment for syphilis should occur in parallel to that offered for HIV. Healthcare workers need to be prepared for eventualities of partner discordancy either for syphilis, or for HIV, or for both. This can result in additional healthcare worker efforts for counselling and treatment.

## 6. Integration of Services into Hard-to-Reach Populations

### How to reach male partners – experiences from Uganda and Zambia

Partner Notification Slips were introduced in Zambia to invite partners of syphilis- positive women for treatment at the clinic. The aim was to increase uptake of syphilis testing and treatment among male partners. While in Uganda general invitation letters went out to all women attending ANC to invite partners for HIV and syphilis testing with the same aim.

There have been challenges related to discordant results for some couples, which have led to counselling and treatment challenges for health care workers.

The increase in the numbers of partners attending for testing and treatment of both HIV and syphilis has challenged the already overburdened health care facilities for space and personnel. Some health facilities have overcome this by providing an out of hours service in the evenings and at weekends specifically for testing and treatment of male partners. This allows partners with jobs, or who work in another town/ district to be tested and treated with minimal wait times.<sup>2</sup>

<sup>2</sup> Male involvement in PMTCT: Reaching men through syphilis testing. Elizabeth Glaser Pediatric AIDS Foundation Study Brief. Program brief available at: [http://www.pedaids.org/Publications/Program-Briefs/Syphilis\\_MaleInvolve\\_ltr\\_April2011\\_4web](http://www.pedaids.org/Publications/Program-Briefs/Syphilis_MaleInvolve_ltr_April2011_4web)



## 7. Resource Mobilisation

### 7.1 Human resources

Economies of scope can be gained by integrating services and using existing personnel. Efforts should be made to use resources/points of contact with pregnant woman to reduce missed opportunities and optimize care. However, integration should be closely monitored to ensure that it is successfully incorporated without overburdening staff. Integration of services builds capacity and knowledge at the health centre and can improve the motivation of health care workers. Positive messaging (such as a decrease in newborn mortality, or achievement of Millennium Development Goals (MDG), careful planning and ongoing oversight will help to make this happen.

#### Peru and Zambia

- In Peru, the introduction of rapid syphilis and HIV tests within antenatal care services motivated health care workers, who felt empowered by their ability to diagnose patients for both HIV and syphilis and providing the treatment at first antenatal care visit.
- In Zambia, health workers successfully incorporated rapid tests for HIV, Malaria, and syphilis together within Maternal and Child Health/ Prevention of Mother to Child Transmission programmes.



Training for rapid syphilis testing in Prevention of Mother to Child Transmission programmes should be integrated with existing training workshops. Integrated training workshops reduce costs and require less of health care workers' time. Programme managers should be provided with training tools to facilitate the integration process at country level, and a hard copy of training materials should be kept at clinics to support information sharing amongst staff. Although there are some technical differences between the rapid HIV and syphilis tests, many of the operational principles of testing and counselling will be similar. An integrated training package for rapid syphilis testing and rapid HIV testing should be developed (refer to [Implementation 3 - Training Package for Rapid Syphilis Testing](#) for guidance on developing a Training Package for rapid syphilis testing). The training programme should reference existing guidelines for rapid testing in Prevention of Mother to Child Transmission programmes. As far as possible, new training materials should be harmonised with existing national training materials.



In-service training should strengthen health care workers knowledge. Training should be streamlined to build capacity without removing health care workers from practice for extended periods. Training should include basic facts about Prevention of Mother to Child Transmission and how to integrate rapid syphilis testing within current Prevention of Mother to Child Transmission programme, in particular alongside rapid HIV testing if available. This should include aspects of testing, keeping records, counselling, infection prevention and partner notification.

### 7.2 Supervision/Monitoring & Evaluation

Routine supervision should provide a spot check of programme progress and performance. This should be done through direct observation of patient flow and/or testing, to ensure the programme is being implemented according to standard operating procedures (SOPs) and evaluating the impact of the programme by assessing inefficiencies, successes and challenges.

Integrated monitoring programmes allow for sharing of programme data between Prevention of Mother to Child Transmission and other programmes, allowing for more effective problem solving and improvement measures.

#### Tanzania, Uganda and Zambia

- In Tanzania and Uganda, monitoring of the rapid syphilis testing programme is integrated within the existing supervision system for the Maternal and Child Health/ Reproductive and Child Health programmes, which involve weekly to quarterly visits to individual clinics.
- In Zambia, existing antenatal care registers were easily modified to record rapid syphilis test use. The Safe Motherhood register is an example of an integrated tool which collects and records information on mother and baby in antenatal and postnatal care services, including HIV status, treatment and follow-up.





### 7.3 Information Systems

Record keeping systems, patient reports and files should be standardized. They should allow for recording of both HIV and syphilis testing and treatment. In addition, Standard Operating Procedures should be standardized as far as possible with those for Prevention of Mother to Child Transmission services, in particular in places where HIV rapid testing is performed, to ensure consistency and quality of service and care.

### 7.4 Laboratory Networks and Quality Assurance

An effective Quality Assurance (QA) system for rapid testing aims to standardize the process of testing for diagnosis and treatment, thereby improving quality of diagnosis and quality of care.

#### Uganda

- The Uganda Virus Research Institute (UVRI) has an established Quality Assurance programme for HIV rapid testing at health facilities. Dried Tube Specimens (DTS) are used as a Quality Control (QC) measure and proficiency testing method for HIV rapid testing. (refer to [Implementation 2 - Quality Management Guidelines for Rapid Syphilis Testing](#)). The method has been adopted for rapid syphilis testing, using dried tube specimens prepared from known syphilis-positive and -negative samples. Dried tube specimens for both HIV and syphilis are prepared side-by-side using the same laboratory facilities and personnel. Follow-up of results at the clinic and corrective actions and re-trainings are provided by existing staff who manage the HIV Quality Control system. Efforts are underway to standardize the recording and documentation system for ease of use.

#### Zambia

- In Zambia, the Lusaka based Kalingalinga lab developed dried tube specimens which were used to test health care worker proficiency in sites using rapid syphilis testing. Assessment of health care worker performance using dried tube specimens allowed for follow up training and mentoring, and improved quality assurance of this rapid diagnostic.



### 7.5 Procurement and Supply Management System/Distribution network

Supplies for rapid syphilis testing should be provided within the national or central supply management system. Integrated procurement and supply management systems should be supported. Refer to [Management 2](#) for further guidance on maintaining an efficient supply chain system for rapid tests.

## 8. Challenges to Integration and Strengthening of Health Services

### 8.1 Integrated services can result in overburdened staff

Overburdening of staff can be reduced if community workers and other volunteers such as retired health care workers are involved in the screening and/or counselling process through successful task sharing.

#### Task shifting and sharing at different levels of the health system in Uganda to integrate Rapid Syphilis Testing in PMTCT Services

Streamlining of health care services is an increasingly popular set of strategies for ensuring expanded access to high-quality care, including maternal and child health (MCH) and HIV-related services. <sup>1</sup>Task shifting is one such strategy, in which “specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of available resources for health.” <sup>2</sup>Task sharing, while sometimes equated with task shifting, is used here to denote a related strategy in which health care workers take on additional tasks to share the overall workload, rather than shifting existing tasks to others. <sup>3</sup>For example, in order to improve access to testing and treatment, front-line health providers can perform point-of-care testing using rapid diagnostic technology alongside other care services, decreasing the number of specialized staff needed to perform more labor-intensive tests.

Prior to the introduction of rapid syphilis testing, syphilis testing for pregnant women in Uganda (if available) was performed by laboratory technicians. With the introduction of rapid testing as part of the study, midwives were given the responsibility of performing the tests during routine ANC visits. ANC services at the regional referral hospital and health centers are operated entirely by midwives. Tasks related to provision of rapid syphilis testing are organized as follows:

- Midwives working in hospitals rotate responsibilities. On a given day, a midwife is either running rapid syphilis and HIV tests in the laboratory or providing pre-test and post-test counseling and treatment. Typically one midwife is assigned to perform blood draws.
- At lower-level health centers, tasks are split into three areas. One midwife is responsible for registration; another midwife handles recording of client information, measurement of vital signs, and later, post-test counseling and treatment (if needed); and a third midwife is responsible for pre-test counseling, blood draws, and physical exams. Physical exams are conducted while the HIV and syphilis tests are being processed to maximize efficiency. A laboratory technician will run testing samples on busier clinic days.

### Impact of task shifting on client flow

All healthcare workers representing five facilities (out of nine involved in the study) in Uganda reported that clients spent additional time at the clinic after the integration of rapid syphilis testing into HIV testing services; this ranged from three reporting an extra 1-10 minutes to one provider estimating an additional 21-40 minutes. As documented in the costing report, this extra wait time was attributed to the need to perform both tests and, if the client tested positive for syphilis, to administer treatment and observe for reactions to the medication. The time needed to counsel a client or a couple on both syphilis and HIV test results varied considerably, with two healthcare workers reporting less than five minutes (from 1 HC and 1 hospital), two reporting 6-10 minutes (both from the national referral hospital) and three reporting over 10 minutes (from 1 HC and 1 hospital). According to the costing report, test result and individual client/couple contributed to the variable amount of time spent on counseling. One strategy employed to reduce client waiting times was multi-tasking (e.g., performing the physical exam while syphilis tests are running).

### Acceptability of Rapid Syphilis Testing among HCWS

Overall the findings suggest that HCWs found integration of syphilis testing within HIV services to be feasible. The majority of HCWs interviewed (57.1%) reported acquisition of a new skill/ knowledge as a benefit, as they were able to provide an additional service to their clients. They also reported confidence in diagnosing and treating syphilis.

Nearly all (6 out of 7) HCWs reported satisfaction with the quick result turnaround times, with nearly half indicating that more male partners came in to ANC once rapid syphilis testing was available. HCWs at three high-volume sites indicated that they experienced an increased workload as a result of rapid syphilis testing integration, but this issue did not appear to hinder their acceptance of the test. HCWs felt that adding rapid syphilis testing would improve the quality of ANC services, primarily because this would increase the proportion of syphilis-positive clients receiving treatment and improve the identification of syphilis-exposed infants. All respondents felt that rapid syphilis testing had been successfully integrated within ANC settings offering PMTCT services and said they would support syphilis screening as a routine offering in their facilities.

Extracted from program brief "Sharing tasks among health care workers in Uganda to integrate rapid syphilis testing in PMTCT services", in press and to be posted on EGPAF website at <http://www.pedaids.org/>

<sup>1</sup> Callaghan, M, Ford N, Schneider H. **A systematic review of taskshifting for HIV treatment and care in Africa.** *Human Resources for Health.* 2010;8:8.

<sup>2</sup> WHO. 2008. **Task shifting: rational redistribution of tasks among health workforce teams: global recommendations and guidelines.** WHO: Geneva

<sup>3</sup> Walsh A, Ndubani P, Simbaya J, Dicker P, Brugha R. **Task sharing in Zambia: HIV service scale-up compounds the human resource crisis.** *BMC Health Serv Res.* 2010;10:272.

### 8.2 Supply chain issues can be a barrier for rapid syphilis test introduction

Supply chain problems can act as a barrier to effective screening as a result of interruption to services due to stock-outs. To overcome this, try to develop stock management systems for forecasting and managing supplies based on patient flows from the patient registers. This will enable you to plan testing for a defined period. By providing health care workers with training in stock and supply chain management, and introducing Stock Cards for rapid syphilis tests, health centres can build capacity and help prevent stockouts of essential supplies.

### 8.3 Community attitudes and perception of rapid tests as being ineffective and unreliable

In *Peru*, health care workers were trained in the correct use of rapid syphilis tests and were offered continual support as part of a routine monitoring and supervision system. Health care worker perceptions of rapid tests as being “bad rapid tests” were changed following the success of rapid syphilis test intervention. The introduction of rapid syphilis testing into primary health care settings resulted in health care worker empowerment and increased motivation.

In *Tanzania*, reduced patient waiting times improved uptake for screening and resulted in a high level of satisfaction with the services provided.

In *Zambia*, the rapid tests also improved health care worker motivation and enthusiasm to provide an integrated package of care. An improved package of care for pregnant women in turn increased uptake of testing among partners. In some districts, out of hours services for screening and treatment were provided for partners who could not take time off during the working day.

### 8.4 Competing priorities

The burden of syphilis can be overshadowed by the HIV burden among policymakers, funders and the general public. Here are some considerations when advocating for integration of syphilis rapid testing into HIV programmes:

- Position syphilis as a problem closely linked to HIV that can and should be addressed through integration with minimal incremental cost.
- When HIV is recognized as having a greater disease burden than syphilis (through surveillance systems), it should be advocated that existing resources can be used for rapid syphilis testing with minimal incremental cost.
- Prepare a budget for all integration plans.
- Discuss the sustainability of funding rapid syphilis testing.
- Educate stakeholders on the prevalence of HIV and syphilis co-infection in pregnant women in their community/country (if known or refer to recent reviews of regional data) and the increased risk of vertical transmission of HIV with co-infection.

## 9. Cost and Sustainability

Programme plans need to include budgets, which should balance ambition with realism, and should be linked with national development planning. Integrated services offer cost savings in staff resources, transport and activities, management, monitoring and supervision and distribution of supplies.

Guidelines on costing for the introduction of rapid syphilis testing are provided in [Implementation 1 - The Costing Guidelines for Syphilis Screening Strategies](#) of this Toolkit and a web based costing tool will soon be available.

### 9.1 Economies of Scope

Economies of Scope are realised by sharing overhead, HR, management and infrastructure costs. This allows for savings to be gained by integrating activities within one programme, compared with the cost of implementing these activities separately.

### 9.2 Sustainability through Integration

Development of national guidelines including aligned policies for syphilis screening within Prevention of Mother to Child Transmission ensures sustainability of testing. Integration of services at primary health care settings creates a linked and integrated facility and community service, which offers a more comprehensive and sustainable service for the mother and baby and allows for easier follow-up of clients. Integration allows for improvements in efficiency through optimisation of existing resources, avoiding duplication of efforts and minimising health expenditure, by maximising human resources and results in highly skilled and motivated staff.

The sustainability of funding, from pilot stage to nationwide scale-up, should be determined at an early stage of the programme to ensure feasibility of programme continuation and interest and uptake by key stakeholders.

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