



CQUIN Differentiated MCH Workshop

May 25-27, 2021

Use of Dual HIV/Syphilis test kits in MCH

Dr. Linda Nabitaka Kisaakye

Senior Program Officer PMTCT , MOH Uganda

25th May 2021



HIV Learning Network

The CQUIN Project for Differentiated Service Delivery

Background

- In Uganda, EMTCT of HIV has seen a lot of progress to date:
 - Over 140,000 new HIV infections among children averted
 - Reduction of final MTCT of HIV from 14% to 7%.
- HIV testing and treatment have helped keep the early eMTCT rate of HIV infections at 2.9 % by end of breastfeeding.
- MNCH care has made significant progress in the Uganda with over 97% of pregnant women attending at least one antenatal care visit and 71% delivering in a health facility (UDHS, 2016)

There was a significant Gap between Syphilis and HIV Testing in ANC in Uganda – 2018 data

Process indicators	Target	<u>Numerator / Denominator</u>	Jan -Dec 2016	Jan-Dec 2017	Jan-Dec 2018
ANC1 coverage	≥95%	# ANC1	1,718,653	1,716,173	1,812,399
HIV testing coverage of pregnant women (PW)	≥95%	# of PW tested in ANC or already knew they were positive	1,653,484	1,646,145	1,736,644
	-	# of PW who delivered within the past 12 months (population based) OR # of PW who attended ANC (programme based)	1,718,653	1,716,173	1,812,399
	-		96%	96%	96%
Syphilis testing coverage of PW	≥95%	# of PW who have been tested for syphilis in ANC	746,753	907,934	1,038,449
	-	#ANC1	1,718,653	1,716,173	1,812,399
	-		43%	53%	57%
ART coverage of HIV-positive PW	≥95%	# Pregant women (PW) on ART	115,267	107,170	103,572
	-	# HIV positive PW	95,282	95,485	95,485
	-		>95%	>95%	>95%
Treatment coverage of syphilis-positive PW	≥95%	# syphilis positive PW receiving at least 1 IM dose of 2.4 mu BPN >30 days prior to delivery	NR	NR	NR
	-	# of syphilis positive PW in ANC	26,213	22,897	22,042

Challenges for low coverage: Syphilis testing

- Non-availability of syphilis testing kits in the facilities
- Syphilis testing was done using non rapid test kits which ultimately limited access to services
 - In most facilities, syphilis testing conducted in the laboratory while HIV testing conducting in ANC
 - Syphilis testing was done by lab staff while HIV testing had been task shifted to midwives
- Knowledge gap - health workers not updated on ANC policy- Syphilis testing at 1st visit
- *Introduction of DUO testing kit eliminates most of these challenges*

Evaluation and Pilot process

- Evaluation of performance of HIV/Syphilis DUO Assay March 2016 before Pilot

Concordance and the kappa statistic are summarized in Table 7.

Table 7: Summary of Concordance and Kappa Values for Unadjusted and Adjusted Reference Results

SD Bioline HIV/Syphilis	Reference Result Unadjusted		Reference Result Adjusted	
	Concordance (%)	Kappa	Concordance (%)	Kappa
HIV Line	97.0	0.94	98.6	0.97
Syphilis Line	89.4	0.79	99.5	0.99

Given the excellent concordance between both HIV and Syphilis results and the reference panel results after adjustment for what appear to be erroneous reference results, the SD Bioline HIV/Syphilis Assay can be recommended for use in Uganda and would find particular utility in the setting of antenatal clinics.

- A pilot was done after the in country evaluation to determine the feasibility and acceptability of using dual HIV/syphilis test kits within the country
- The MOH received a donation of 5000 HIV-syphilis Duo rapid Diagnostic tests from Standard Diagnostics Inc (SD) Korea.

MOH organized National TOT for 35 facility staff in 11 Districts, and trainings were done in January 2017

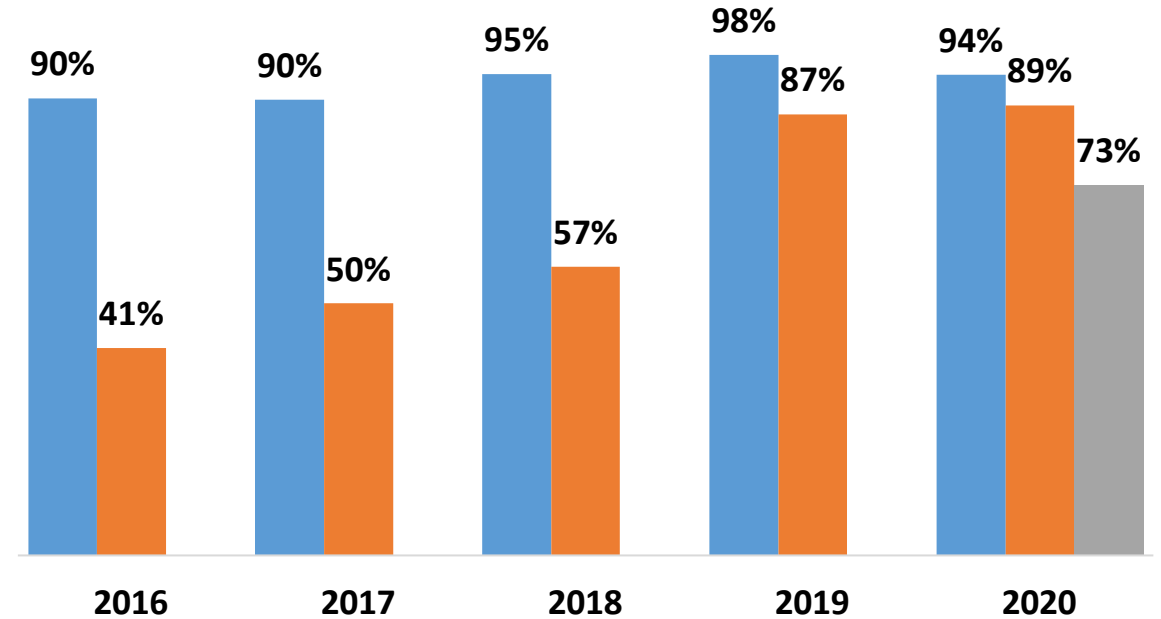
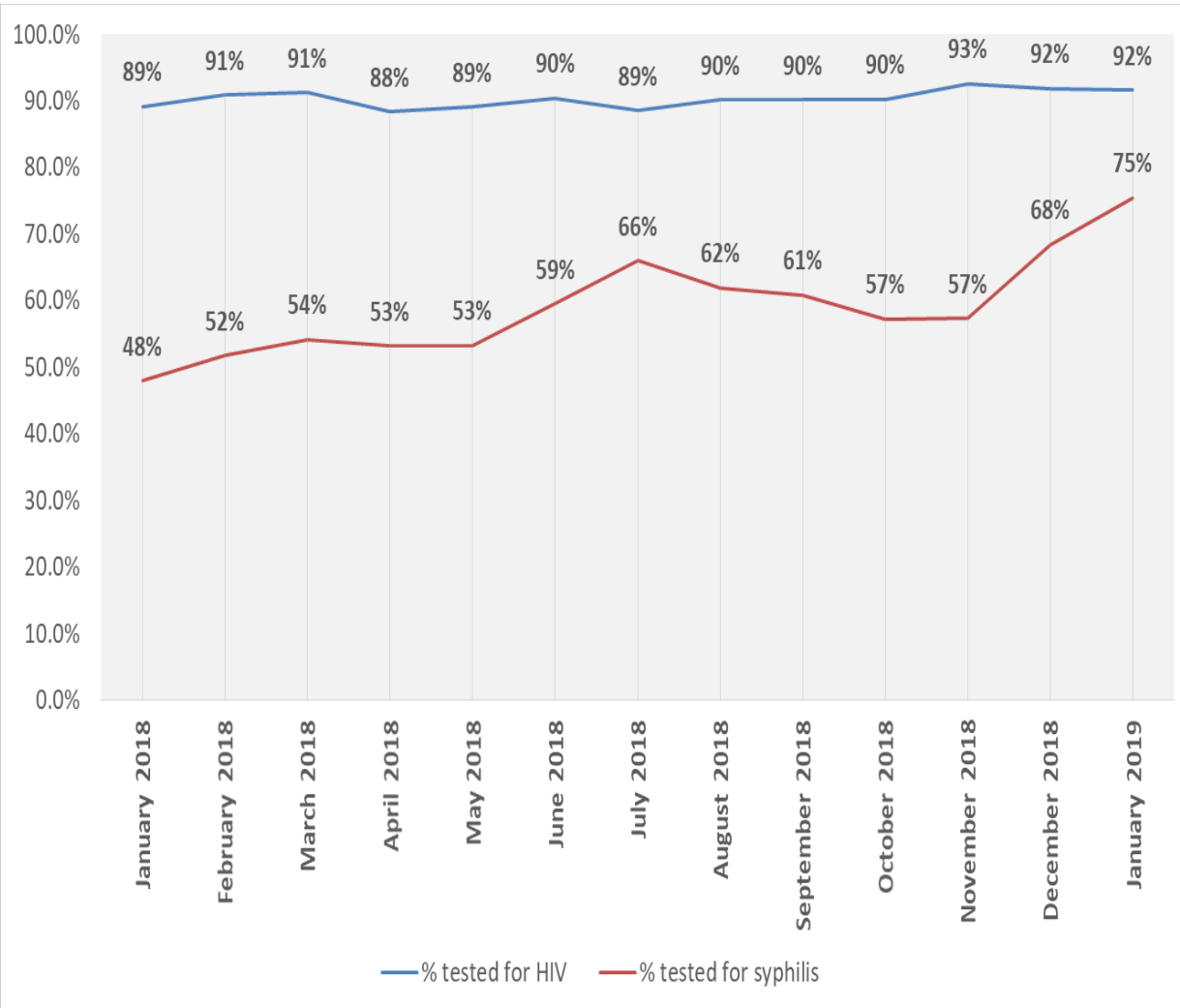
The pilot informed development of SOPs & training Mentorship guide, as well as algorithm and data needs



Results of the pilot

	Total number tested:	Number positive for HIV alone:	Number positive for syphilis alone:	Number of invalid tests:	Number negative for all:
Total Number of Tests Provided 5000					
Results of tests done	4931	309	166	69	2228
Percentage reach	98.62%	6.3 %	3.32%	1.38%	
Linkages to Management	NA	100%	100%	NA	
Acceptability of the test by users	100%	NA	NA	NA	

By the end of 2020, syphilis testing coverage is almost equivalent to HIV testing coverage.



- Overall Known HIV Status (TRK, TRRK, TR, & TRRK) Coverage
- Syphilis Testing Coverage
- Linkage to Syphilis Treatment

Conclusion

- The introduction of rapid syphilis tests strengthened the health system by:
- Shifting tasks from laboratory personnel to nurses and midwives in ANC clinics, creating a point-of-care system;
 - Enabling health-care workers to provide services that they feel are helpful to their clients;
 - Increasing access to syphilis screening and treatment for traditionally underserved populations both the pregnant women and her partner are tested for HIV and syphilis within MCH and treatment provided at the same point;
 - Increasing health-care provider knowledge and capacity;
 - Facilitating the integration of HIV and syphilis screening in eMTCT and HIV services
 - Increasing involvement of male partners to utilize rapid HIV and syphilis testing

Way forward

- Introducing the duo rapid kit fast tracked scale-up because midwives had already been trained on HIV rapid testing and easy to ride on the successful implementation of HIV, the country plans to sustain the gains made
- There has been recognition by HIV program of need to incorporate both and willingness to procure the dual commodity (cost neutral),
- Collaboration between PMTCT and lab to get algorithm developed and retraining done, training on the dual kit is now integrated in the PMTCT training
- Uganda is now aiming for Triple elimination, integrating Hepatitis B testing and treatment on the MCH platform