

SD BIOLINE HIV/SYPHILIS DUO

SAME-DAY TEST & TREATMENT





THE CHALLENGES

- No ability to test and treat same day
- Requires electricity, instruments, laboratory equipment etc.
- HIV cannot be tested for at the same time
- Waiting for taking two tests in different site
- Blood collecting twice
- Patient has to revisit hospital for results
- Heavy workload
- Hard to access antenatal clinic (ANC) services: walking >1 hour

THE PAN AMERICAN HEALTH ORGANIZATION (PAHO)'S PROGRAM FOR EMTCT OF HIV AND CONGENITAL SYPHILIS ²

Objectives:

- Coverage for the detection of HIV and syphilis in pregnant women > 95%
- Reduce the incidence of pedriatric HIV to 0.3 or less per 1000 live births
- Reduce the incidence of pedriatric Syphilis to 0.5 cases or less per 1000 live births
- Coverage of antiretroviral use for PMTCT of HIV and treatment of syphilis among pregnant women and children >95%



PATIENTS

- Convenience of one sample
- Reduces time for testing
- Same day Test & Treatment
- Enables immediate partner notification

CLINICIANS

- Reduces workload
- Reduces training time
- Single procedure, two results

PROGRAM MANAGERS

- No instruments, electricity or laboratory equipment required
- Increasing test coverage
- Cost-effective by reducing cost of storage, logistics, local distribution
- Contributes to SDG

PERFORMANCE³

Background (Lima, Peru)

- The aim of this study was to evaluate the clinical performance of the BIOLINE HIV/Syphilis Duo test.
- Participants were recruited at two clinical sites in Lima, Peru.
- Reference tests were conducted at the laboratory of UPCH.

Results

Implementing an accurate and low cost dual rapid testing strategy for HIV and syphilis could improve screening uptake and accessibility of testing to accelerate time to treatment.

ніу		REFERENCE TEST			
		POSITIVE	NEGATIVE	TOTAL	
an n.a	Positive	104	2	106	
SD BIOLINE HIV/SYP Duo	Negative	1	308	309	
111 1/311 1200	Total	105	310	415	
HIV LINE : 99.1% / 99.4%					

SYPHILIS		REFERENCE TEST		
21141	LI2	POSITIVE	NEGATIVE	TOTAL
SD BIOLINE HIV/SYP Duo	Positive	149	3	152
	Negative	18	243	261
	Total	167	246	413
SYPHILIS LINE : 89.2% / 98.8%				

COST EFFECTIVENESS 4

The dual point-of-care screening algorithm had lower overall costs and decreased life-time disability when compared to the other screening choices.

SUMMARY RESULTS FROM THE COHORT DECISION MODEL COMPARING THE EXPECTED EFFECTS (DISABILITY-ADJUSTED LIFE-YEARS (DALYS)) OF THE PREGNANCY AND COSTS PER DALY (2012 U.S. DOLLARS) FOR HIV AND SYPHILIS TESTING ALGORITHMS.

	Total Costs	Cost increase from no program	DALYs	DALYs prevented compared to no program	CER comparing screening to no program	ICER*
No program	\$20,783,454	-	269,400	-	-	-
Dual HIV/syphilis	\$21,274,678	\$491,224	228,829	40,571	12.11	12.11
HIV test only	\$21,583,611	\$800,158	235,716	33,684	23.75	Strictly** dominated
Single rapid tests for HIV & syphilis	\$21,593,145	\$809,692	235,023	34,377	23.55	Strictly** dominated
HIV rapid test & RPR/TPPA for syphilis	\$21,605,356	\$821,902	235,094	34,306	23.96	Strictly** dominated

^{*} Incremental cost effectiveness ratio (ICER) is the ratio of the change in costs to incremental benefit of an algorithm

^{**} If an algorithm is both more costly and less effective than another algorithm it is considered "strictly dominated" and would not be recommended

ACCEPTANCE STUDY⁵

Background (Maternity Hospital and Ventanilla-Callao, Peru)

- This study was carried out to evaluate the acceptability among ANC service providers.
- There were problems using separate HIV and Syphilis rapid tests from technicians:
 - Confusion with reagent and results
 - Stock outs of HIV test
- SD BIOLINE HIV/Syphilis Duo tests were provided to 10 ANC health centers

Results

- 100% reported satisfaction with SD BIOLINE HIV/ Syphilis Duo test
- 100% considered the SD BIOLINE HIV/Syphilis Duo test to be better than separate tests
- 32% mentioned difficulties with reading results (now printed 'HIV' and 'SYP' below the test lines)

ACCEPTANCE SURVEY



MAXIMIZE PMTCT SERVICE WITH HIV+SYPHILIS DUO

SIMPLE | RAPID | ACCURATE







RESULTS IN 15-20 MINUTES SERUM, PLASMA, WHOLE BLOOD 1-30°C 24 MONTHS

35
/ WB
e
Kit
110 x 75 mm

ORDERIN	FORMATION		
Cat. No.	06FK30	06FK35	
Specimen	S/P/WB	S/P/WB	
Type	Device	Device	
Pack Size	25T/Kit	25T/Kit	
Dimension	177 x 110 x 75 mm	177 x 110 x 75 mm	
Weight	250G	300G	
Contents	Devices, Diluent	Devices, Diluent, Capillary Pipettes, Alcohol Swabs, Lancets	
Carton	565 x 415 x 395mm (55Kits)	565 x 415 x 395mm (55Kits)	
Certification	CE Marked (06FK30CE, 06FK35CE)		

References

- World Health Organization (WHO)/TDR. (2006) The use of Rapid Syphilis Tests. [Online] Available at: http://www.who.int/reproductivehealth/publications/rtis/ TDR_SDI_06_1/en/ Accessed 28 Aug 2015.
- PAHO, 2014 Update: Elimination of Mother-to-Child Transmission of HIV and Syphilis in the Americas.
- Universidad Peruana Cayetano Heredia, F INAL REPORT: Clinical Evaluation of a Dual Rapid Diagnostic Test for HIV and Syphilis using SD BIOLINE HIV/Syphilis
- UCLA Program in Global Health, Klausner, J. (2014) Dual rapid tests are costeffective
 to prevent mother-to-child transmission of HIV infection, syphilis and adverse
 pregnancy outcomes. [Online] Available at: http://www.dualelimination.org/#!costeffectiveness/cnqx Accessed 28 Aug 2015.
- Acceptance of HIV/Syphilis Duo Rapid Testing: Survey of Attitudes of Antenatal Care Providers in Peru by Maria Valderrama MSH. [Online] https://cdc.confex.com/cdc/ std2014/webprogram/Paper34834.html

© 2019 Abbott. All rights reserved. All trademarks referenced are trademarks of either the Abbott group of companies or their respective owners. Any photos displayed are for illustrative purposes only. Any person depicted in such photos is a model. 120002317-03, 04/19

