



CASE STUDY

RETENTION IN CARE OF HIV-EXPOSED MOTHER-BABY PAIRS IN KENYA

With support from the American people and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), Vipingo Health Centre in Kilifi County, Kenya improved retention of mother-baby pairs from 14% to 57% between April and August 2013, while Lutsangani Dispensary retained all seven mother-baby pairs identified through their prevention of mother to child transmission of HIV within the same period. This case study shares the simple steps that improvement teams in the two health facilities used to achieve these results in five months.

Background

HIV and AIDS has been a great contributor to morbidity and mortality rates in Kenya for the past 30 years. Paediatric HIV infection through mother-to-child transmission has been a major hindrance to achieving the Millennium Development Goal (MDG) 4 on reducing child mortality. In spite of numerous Prevention of Mother-to-Child Transmission of HIV (PMTCT) programmes, close to 30% of all children born to HIV positive women get infected before, during or after birth¹.

There is evidence that if effective interventions are put in place in a timely manner, then mother-to-



Process mapping by one of the pilot sites - Diani Team. Photo credit Mwaniki Kivwanga

child transmission can be reduced to manageable levels of less than 5% among breastfed infants and less than 2% for infants who are not breastfed². The PMTCT work is anchored on four prongs

of: 1) preventing primary infections among women of reproductive age, 2) preventing unwanted pregnancies among HIV infected women, 3) preventing vertical mother to child transmission

About USAID ASSIST

The USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project is a five-year project that works with local health systems and existing resources to foster improvements in healthcare, strengthen health systems and advance the frontier of improvement science.

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THEORY OF KNOWLEDGE FOR DIANI, LUNGA LUNGA & VANGA

		COUNTER MEASURE/CHANGE IDEAS				I	U	T	D
AIM TO IMPROVE QUALITY CARE FOR MOTHER BABY PAIR SURVIVAL AND DELIVERY POST NATAL FROM 75% TO 85% IN THE NEXT 2 YRS.	POOR DOCUMENTATION	SENSITIZE COLLEAGUES ON REGISTERED PRIVATE FACILITIES ON REPORTING TO FOLLOW UP THE REPORTS	3	3	2	1			
		EMBRACE TEAMWORK & COMMITMENT AMONGST HEALTH WORKERS.	3	3	2	2			
	LONG WAITING TIME	PROCESS REORGANIZATION/ INTEGRATION OF SERVICES	3	3	2	1		2	
	DEFAULTER/ LOST TO FOLLOW	CONDUCT DEFAULTER TRAINING THRO' PHDS, LHWs, SUPPORT GROUPS, COUPS, MOTHER MENTOR	3	3	1	2		2	
		CONSULTING CLIENTS ON IMPORTANCE OF GIVING THE RIGHT/ADEQUATE INFORMATION & PROPER DOCUMENTATION.	3	3	3	3		3	
		IMPROVE IN THE INTERFACILITY LINKAGES BY STANDARDIZING REFERRAL PROCEDURES Eg USE OF SYMBOLS LIKE EB, HEI	3	3	2	2		3	

Tree and matrix diagram by some pilot sites - Diani, Lunga Lunga and Vanga Teams. Photo credit: Mwaniki Kivwanga, URC

(MTCT), and 4) finally offering care and treatment to those who are infected³. The Partnership for HIV-Free Survival (PHFS) project mainly focuses on prongs 3 and 4 and hinges its success on a) ensuring that all mother-infant pairs know their HIV status, b) are retained in care, c) are optimally protected with antiretroviral treatment (ARV) and d) offered nutritional assessment, counselling and support regularly.

From July 2013, the Ministry of Health and USAID ASSIST together with other organizations in PHFS, began eliminating mother- to-child transmission of HIV by applying quality improvement (QI) approaches to the PMTCT programme in Kwale County, Kenya.

This case study presents initial results around 1) testing and counselling, 2) retention of mother-baby pairs in care and 3) a model for scale-up of the PHFS initiative in Kenya.

Context

Kenya is one of the East Africa countries and one of the 22 developing countries in sub Saharan Africa which account for 80% of the HIV burden. Kenya

has an overall HIV prevalence of 5.6% with the prevalence being higher among women of reproductive age than men of the same age. HIV prevalence among children aged 18 months to 14 years is 0.9%. Over 95% of all pregnant women attend at least one antenatal care (ANC) visit, and more than 92% of them are tested for HIV during their pregnancy⁴. However there are great concerns about quality of care with a high positivity rate of at least 16% during the first testing at 6 weeks, and loss to follow-up for most of the HIV-exposed mother-baby pairs thereafter.

Methodology

The aim of PHFS is to reduce mother-to-child transmission of HIV to less than 5% by 2015 by scaling up the application of quality improvement approaches in all PMTCT sites country wide. The project has three main phases. The inception phase that started in March 2013; Phase I that began in July 2013 and focused on root cause analysis and generating a change package with quick results in seventeen pilot sites; and Phase 2 where successful change ideas will be scaled up to over 4000 PMTCT

sites country wide by 2015. Seventeen learning sites were selected from 2 counties, Kwale and Kilifi, in Coast Region of Kenya. Improvement teams were formed between May-August 2013 and trained on quality improvement approaches and techniques in October 2013.

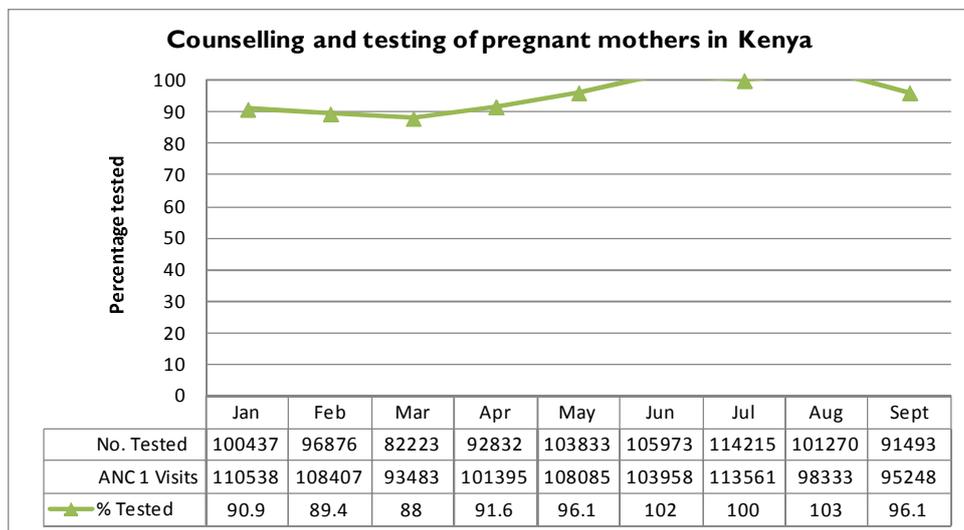
Implementation

Each of the 17 pilot sites have improvement teams of 8-13 members drawn from health workers (doctors, clinical officers, nurses, lab technologists, public health officers, support staff) and community representatives (community health workers, traditional birth attendants, religious leaders, public administrators, and people living with HIV and AIDS).

The teams meet regularly to review the retention data and analyze it. Performance gaps are identified and root cause analysis done, countermeasures formulated and prioritized using the tree and matrix diagram. The countermeasures are implemented while continuous measurement takes place. Effective change ideas will form the package that shall be scaled up to all the PMTCT sites in the country.

Results

Since January 2013, the coverage for counselling and testing in Kenya has been over 90%, and this is attributed to the integration of HIV testing during ANC clinics as shown in figure 1. Evidence from Vipingo Health Centre and Lutsangani Dispensary in Kilifi and Kwale counties respectively, demonstrates that it is possible to retain mother-baby pairs in care. Between April and August 2013 Vipingo Health Centre



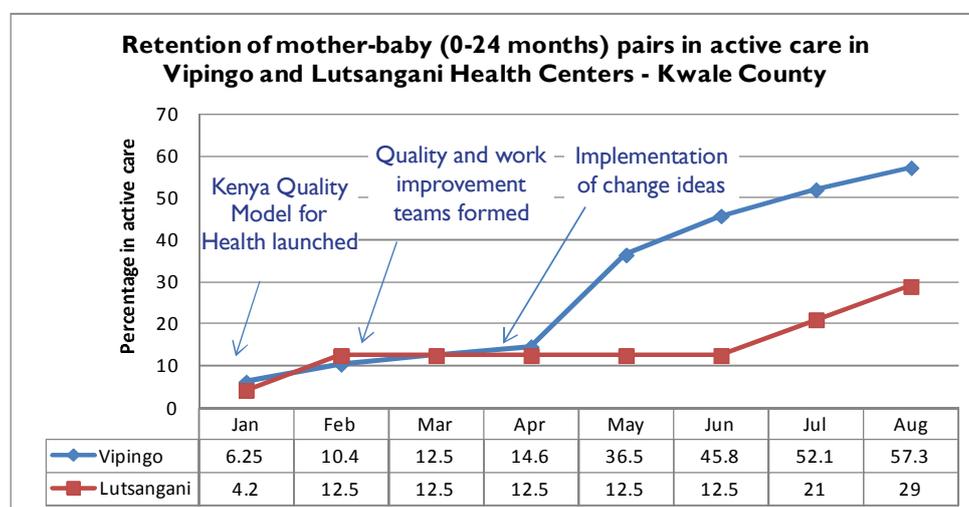
Interventions being tested:

- HIV testing integrated into MCH
- Continuous health education at community and health facility levels

Outcome: Universal coverage has almost been achieved

Challenge: constant supply of HIV testkits

Figure 1: Counselling and testing of pregnant mothers in Kenya, Jan-Sept 2013



Interventions being tested:

- File for each mother baby pair
- Integration of Comprehensive care clinic at PMTCT and Maternal Child Health Clinic (MCH)
- Active screening and linking to care at all possible entry points (Out-Patient Department, MCH)
- Active follow-up of missed appointments

Figure 2: Retention of mother-baby pairs in active care, Jan-Aug 2013

rapidly improved the retention of mother-baby pairs from about 10% to 57% as shown in figure 2. Likewise, within the same period, Lutsangani dispensary managed to retain all seven mother-baby pairs identified through their PMTCT services, though this only accounted for about 30% of the estimated number of exposed pairs in their catchment area.

The two sites above have shown that retention can be rapidly achieved by implementing simple site level ideas such as, having a file for each mother-baby pair for easy follow-up, integration of HIV and AIDS and PMTCT services

at MCH clinic, establishing some form of psychosocial support initiatives including mentor mothers, active screening and linking to care of HIV exposed mother baby pairs at every possible entry point (Outpatient clinics, Labour ward, MCH etc), and active follow up of missed clinics through phone calls and community resource persons.

Conclusion

Considerable gains have been achieved in counselling and testing for HIV during ANC clinics in Kenya though about 10% of pregnant mothers are not tested mostly because they

do not attend ANC clinics. The partnership will maintain these gains while laying emphasis on retention-in-care of mother-baby pairs which is a key pillar in the achievement of elimination of mother-to-child transmission (eMTCT).

Next steps

For eMTCT to be achieved, improvement must happen in all facilities where HIV exposed mother pairs seek care and treatment. A multi level model consisting of a PHFS subcommittee reporting to the eMTCT-technical working group under the Ministry of Health

(MOH) has been constituted to spearhead the PHFS initiative in Kenya (See figure 3).

Some PHFS work has started in six counties within the country. To scale up application of quality improvement (QI) to each of the remaining 41 counties in the country, MOH through the Directorate of Health Standards, Quality Assurance and Regulations, with support

from USAID ASSIST and other stakeholders will establish county departments/focal units to oversee the quality of devolved health services. These county focal QI units will anchor taskforces to oversee improvement in eMTCT. Core QI activities including improvement teams' meetings, coaching, active follow up of HIV-exposed mother-baby pairs will be supported by the regional implementing partners

especially those funded under the USAID APHIA Plus platform. USAID ASSIST will continuously support county and national level QI trainings and learning/sharing forums to drive the process.

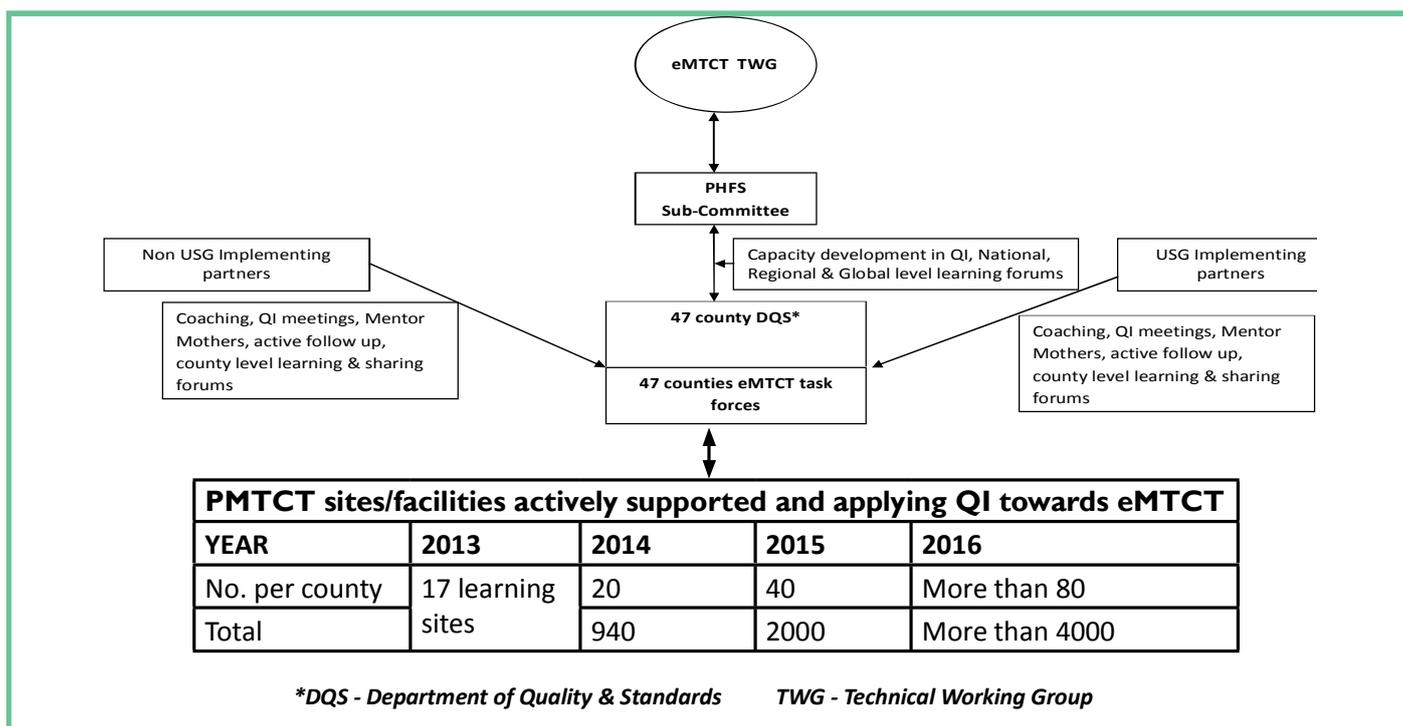


Figure 3: Proposed multi-level scale up model

References

¹Stringer JSA, et al. (2013) Measuring Coverage in MNCH: Population HIV-Free Survival among Children under Two Years of Age in Four African Countries. PLoS Med 10(5) pp doi:10.1371/journal.pmed.1001424

²Renaud Becquet et al (2009) ,Universal Antiretroviral Therapy for Pregnant and Breast-Feeding HIV-1–Infected Women:Towards the Elimination of Mother-to-Child Transmission of HIV-1 in Resource-Limited Settings. Clin Infect Dis. 15;49(12): pp1936-45. doi: 10.1086/648446.

³Ministry of Health (2012) National Guidelines for prevention of mother to child transmission of HIV/AIDS in Kenya, 4th Ed. Nairobi:Author

⁴National AIDS and STI Control Programme & Ministry of Health (2013). Kenya AIDS Indicator Survey 2012: Preliminary Report. Nairobi, Kenya: Author