IMPROVING LINKAGE OF HIV POSITIVE MOTHERS AND THEIR EXPOSED INFANTS FROM MATERNITY WARD TO EID CARE BEFORE DISCHARGE FROM ANAKA HOSPITAL

BY

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DECLARATION

I, Komakech Wilfred, Olweny Simon Obari and Wanican Christopher do hereby declare that this end-of-project report entitled Improving Linkage of HIV Positive Mothers and their Exposed infants from Maternity Ward to the EID Care point Before Discharge from Anaka Hospital has been prepared and submitted in fulfillment of the requirements of the medium-term fellowship program at Makerere University School of Public Health and has not been submitted for any academic or non-academic qualifications.

Signed ………………………………… Date…………………………………………………………

Wanican Christopher, Medium-term Fellow

Signed ………………………………… Date…………………………………………………………

Komakech Wilfred, Medium-term Fellow

Signed ………………………………… Date…………………………………………………………

Olweny Simon Obari, Medium-term Fellow

Signed ………………………………… Date…………………………………………………………

Dr. Kaunda Kenneth, Institution Mentor

Signed ………………………………… Date…………………………………………………………

Dr. Nabitaka Linda, Academic Mentor
FELLOW’S ROLE IN PROJECT IMPLEMENTATION

The three fellows supported each other in implementation of the project right from project conception to report writing and dissemination. Wanican Christopher was the overall chairperson, Olweny Simon was the secretary and Komakech Wilfred was the records manager. In addition, all three fellows worked together to lead the proposal development process, report writing and making the project presentation for the dissemination workshop.
ACKNOWLEDGEMENTS

We acknowledge the special contribution made by Makerere University School of Public Health-CDC who provided this opportunity for us to participate in the fellowship. We are also grateful for the knowledge; guidance and funding they provided that made the project a success.

We appreciate the contribution made by our institutional and academic mentors who gave us the technical guidance during the implementation, monitoring and evaluation of the project.

We are grateful to the district leadership especially the Chief Administrative Officer and District Health Officer Nwoya for giving us the permission to participate in the fellowship programme and later implement the selected project in the district.

Lastly, we would like to appreciate the active participation of the hospital administration, clinical staff, project team members and the fellows from the beginning to the end of the project. Without their sacrifice and dedication we would not have completed the project.
LIST OF ACRONYM

ANC: Ante Natal Care
ART: Anti Retroviral Therapy
ARV: Anti Retroviral
CPD: Continuous Professional Development
DBS: Dried Blood Sample
DHO: District Health Officer
DNA: Deoxyribonucleic Acid
EID: Early Infant Diagnosis
EMTCT: Elimination of Mother-to-Child Transmission
MBCP: Mother Baby Care Point
MCH: Maternal Child Clinic
M & E: Monitoring, Evaluation And
MOH: Ministry Of Health
OPD: Out Patients Department
PMTCT: Prevention Of Mother-To-Child Transmission
PNC: Post Natal Care
SOP: Standard Operations Procedure
YCC: Young Child Clinic
OPERATIONAL DEFINITIONS

Continuous professional development/continuous medical education (CPD/CME): This is a structured learning approach to ensure the health workers maintain their knowledge, skills and practical experience as an obligation

Dried blood sample (DBS): Form of collecting blood sample where the sample is blotted and dried on a filter paper for transportation to a laboratory

Early infant diagnosis: A program offering diagnosis of HIV infection in infants from 6 weeks of age

Elimination of mother to child transmission of HIV (eMTCT): Refers to the health program to reduce mother-to-child transmission rate of HIV (less than 5% in a breastfeeding population) leading to a reduction in new pediatric HIV infections by 90%

HIV exposed infant: An infant whose mother was HIV positive during pregnancy, labor and delivery or breastfeeding period

Linkage: Process of engaging newly identified HIV exposed infants into care and treatment services

Linkage facilitator: A health care worker assigned the responsibility of ensuring enrolment and retention of mother-baby pairs in early infant diagnosis of HIV care

Mother baby care point (MBCP): A care point established in the maternal-child health department of the facility (MCH) to improve retention of mother and baby clients in HIV care and improve HIV services

Mother-baby pair: Refers to the HIV positive mother and the exposed infant

Polymerase chain reaction (PCR test): A technique used to determine presence of HIV by identifying the amplified traces of DNA strands found in a dried blood sample

Quality improvement (QI): Systematic and continuous actions that lead to measurable improvement in health care services and health status of the targeted population
EXECUTIVE SUMMARY

Early Infant Diagnosis (EID) of HIV infection provides the opportunity for identifying, follow up and testing for HIV-exposed infants. This potentially confers benefits to both HIV-infected, uninfected infants and their families through proper counseling, linkages to comprehensive HIV care, safe infant feeding options and follow up for growth monitoring and development. Despite the availability of EID of HIV infection testing services, many children are left undiagnosed or diagnosed late and this results in increased childhood HIV related morbidities and mortalities.

We implemented a Continuous Quality Improvement project in Anaka Hospital to improve the linkage of mother-baby pairs referred or linked to EID care before discharge from maternity to 90% by the end of the project by doing the following: improving on notification of Mother Baby Care Point (MBCP) about E-MTCT (elimination of mother to child transmission) deliveries needing linkage, providing registers and forms/slips in maternity and MBCP respectively, increasing staff knowledge on effective screening and counseling for E-MTCT, ensuring completeness of referral forms filled for all clients referred to EID and ensuring regular periodical review of performance.

This project ran from July 2014 to December 2014 and it registered remarkable results evidenced by an increase in the percentage of HIV Exposed Infants delivered in maternity and subsequently linked for EID care before discharge from 50% at the end June 2014 to 100% at the end of November 2014.

We hope that the quality of linkage achieved will be sustained by utilizing the existing opportunities to implement the activities initiated and the lessons learnt will be used the replicate the success story in other departments and health care facilities linking HIV Exposed Infants to EID care.
1.0 INTRODUCTION AND BACKGROUND

According to UNAIDS, half of the estimated 33.3 million people were living with HIV/AIDS (PLWAs) in 2009 were women. Mother-to-child transmission of HIV (MTCT) accounts for about 90% of the HIV infection in infants and young children (UNAIDS, 2010). It was also reported that over 370,000 infants acquire HIV infections globally each year with approximately over 1000 children acquiring HIV every day (UNAIDS, 2010). HIV infection in infants and young children occurs during pregnancy, labor and the postnatal period through breast feeding. It is estimated that up to 30% of untreated HIV-infected children die before 12 months and more than 50% die before 2 years of age (Cook et al, 2011), implying the urgent need for identifying and enrolling them into care and treatment programs early. Early Infant Diagnosis (EID) of HIV determines early HIV status and referral to comprehensive HIV/AIDS care and treatment of infected infants for proper intervention including institution of life-long antiretroviral therapy (ART).

It is estimated that only 15% of HIV exposed infants in resource-constrained settings accessed early diagnosis for HIV in 2009 (WHO progress report, 2010) and approximately 85% of HIV exposed infants had unmet needs for HIV diagnosis using DNA PCR testing, leaving many of children undiagnosed hence leading to increased childhood HIV related mortalities.

This project to improve linkage of HIV exposed infants to care was carried out in Anaka Hospital. This Hospital located in Nwoya district, Anaka town council is a 100-bed General hospital which was established in 1971. The hospital serves as a referral hospital for Nwoya district with a total Population of 54,000 according to District planning unit projection 2014. The hospital provides both outpatient (OPD) and inpatient services including clinical consultations, diagnostic, comprehensive HIV/AIDS care, maternity and other services. The Maternity ward has 8 Midwives. The EID care point has three staff and provides identification of HIV Exposed infant, DBS sample collection for DNA PCR testing, follow up for the results, growth monitoring and final HIV status determination after complete weaning of HIV Exposed Infants as basic services to ensure care for many HIV exposed infants and young children.

Care in the Mother-Baby Care Point (MBCP) is initiated based on referrals from maternity ward, pediatric ward, Young Child Clinic (YCC), Out-patient clinics, ART clinic, Antenatal Clinic
(ANC), Postnatal Clinic (PNC) and the community. The referral from maternity is crucial as it identifies the HIV Exposed Infants at the earliest opportunity after delivery and it’s directly within the influence of the hospital system for continued care.

The project therefore intended to increase the percentage of mother-baby pairs linked to EID care at the Mother-Baby Care Point before discharge from maternity. This is in line with the Ministry of Health guidelines which emphasize that the maternity and postnatal units should be active in identification and linkage of HIV exposed infants after delivery so that they are linked to care on the same date of identification. This should be done even if there had been a referral made during pregnancy and in which case the appointment date given during pregnancy becomes void when the new date is given from the EID care point (now MBCP) based on this post-delivery linkage from maternity or postnatal clinic (PMTCT-EID strengthening program guidelines, 2010)
2.0 LITERATURE REVIEW

Elimination of Mother-to-Child (eMTCT) programs have generally reduced rates of infection among infants tested at six weeks of age but an unacceptably large proportion of HIV-exposed and HIV-infected infants remain unidentified. Early Infant Diagnosis of HIV infection provides the opportunity for identifying, follow-up and testing of HIV exposed infants. This has potential benefits to the exposed infant, uninfected infant and their families through proper Counseling, linkages to comprehensive HIV care, safe infant feeding options and follow-up for growth monitoring and development. The inaccessibility and inadequate uptake of EID services has resulted in a lag of care for the millions of HIV exposed infants who remain unidentified (Gamaliel, 2012)

Contrary to adults, disease progression in HIV-infected infants is rapid. Without treatment 20% of perinatally infected infants will die by three months of age, and half will not survive beyond their second birthday (Marston et al, 2011). The risk of mortality for HIV-infected infants during the early period of life can be up to twelve times higher than among uninfected infants. For infected infants who survive beyond two years of age, poor health outcomes are often irreversible, with increased occurrence of malnutrition, opportunistic infections, and permanent developmental challenges (Landes, et al, 2012). However, recent studies show that early ART can significantly reduce infant mortality. This evidence suggests that the risk of mortality for infants infected in utero is significantly greater in comparison to those with later infections (Newell et al, 2004). Early ARV treatment reduces early mortality by 75% (Violari et al, 2008), but these results are less likely to be achieved without the swift diagnosis of HIV infection.

In most cases ART is initiated later than the peak age at which HIV-related mortality occurs due to delayed diagnosis. For example an urban PMTCT program in South Africa recorded a median interval of ten weeks between a PCR test and an ART initiation (Lilian et al, 2012), and the ART initiation occurred at a median age of sixteen weeks, which is after the documented peak of HIV-related mortality at twelve weeks of age (Bourne et al, 2009). Given the extraordinary success of ART in reducing morbidity and mortality in infants, the early identification of HIV-infected infants must be prioritized (Stevens et al, 2008). EID is therefore a key strategy to retaining HIV-
exposed infants through the end of the exposure period, as it provides an opportunity to offer early clinical care and continuous follow up. It is imperative that maternal and child survival programs become sensitized to the urgency of early identification of HIV in infants and their retention in care.

The current approach to EID testing in PMTCT programs misses far too many children as almost 40% of pregnant women never access ANC during their pregnancy (UNAIDS 2012). In addition, current ANC attendance estimates document at least one visit, but no reliable estimates are available for infected women who complete the PMTCT cascade, with some studies showing up to 80% are lost six months postpartum (Marcos Y, Phelps BR & Bachman G, 2012). It is safe to assume that the HIV-infected children of these women are also lost to follow-up, and may only enter the health system much later, after they have begun to develop symptoms of advanced disease (Anoje et al, 2012).

The Uganda national PMTCT-EID strengthening program guidelines (2010) note the importance of early linkage and state that exposed infants identified at less than six weeks of age must be linked to the MBCP on the same day even if they are not yet eligible for DBS to make an appointment and get an exposed infant clinical chart opened. However more innovative new approaches to EID testing are needed to ensure these children are identified earlier. One method is to utilize existing systems wherein infants have routine contact with the healthcare system. For example, immunization programs have achieved success in the uptake of routine vaccinations and can be used as a platform to schedule other routine health services. The six-week EID test visit currently coincides with the first diphtheria, pertussis, and tetanus vaccination; however, subsequent visits at ten weeks, fourteen weeks, and nine months provide additional opportunities for finding infants who have been missed. A study of such a program in Tanzania demonstrated the potential to improve early identification of HIV-infected infants through integration with immunization services if carefully managed (Goodson et al, 2013).

Although PMTCT programs have been able to document low rates of transmission at six weeks (UNAIDS, 2013), the current emphasis on the initial six-week PCR test ignores the continued
risk of infection for exposed infants (World Health Organization, UNAIDS & UNICEF, 2011), which has resulted in millions of HIV-exposed infants without a definitive HIV status and thousands of HIV-positive infants without true diagnosis after cessation of breastfeeding.

Standardized data management tools and adequate training in their use will help EID programs run more efficiently by enabling healthcare workers to collect accurate and consistent data (Hassan et al, 2012). Capturing EID data requires coordination across all levels of an EID program, to improve both the quality of HIV-exposed infant follow-up programs and the early identification of HIV infected infants and referral for early ART.

Earlier virological testing should be considered as part of a comprehensive EID testing algorithm that would catch all intra-partum and post-partum infections. The benefits of earlier testing must also be evaluated in terms of feasibility and in the context of different settings. Factors such as hospital delivery rates, lost to follow-up of infants, and time between testing and ART initiation should lead to developing optimal strategies for earlier case finding and ART initiation, thereby reducing morbidity and mortality of peri-natally infected infants (Lilian et al, 2012).
3.0 STATEMENT OF THE PROBLEM

The number of HIV exposed infants delivered in Anaka Hospital and subsequently linked to the MBCP before discharge was found to be low in the hospital. However, establishing clear care pathways within and between facilities is an important part of establishing an effective EID and pediatric ART system.

HIV-exposed and positive infants may enter the health system at a number of different entry points and it is critical that at each possible entry point, health care workers are trained to identify these infants and refer them to the appropriate service delivery point. This patient flow from various points of entry to EID and pediatric HIV services represents the care pathway in a health care system. A maternity ward being one of the entry points is crucial in this process as it can link the mother-infant pair to EID care at the earliest opportunity during the postnatal period and is within the influence of the health system.

According to Uganda PMTCT-EID strengthening program, every HIV exposed infant delivered in a health facility must be linked to a MBCP at the earliest opportunity and before discharge from the facility. This ensures the infant is registered for EID care and an appointment for the first PCR test is given.

However in Anaka hospital only 11 out of 26 (42%) of the exposed infants delivered at the facility between November 2013 and March 2014 were found to have been linked for EID care (Hospital maternity register and EID register). This scenario prevailed despite the fact that 62% of the staffs working in the facility had basic EID training and mentorship and escorting the mother-infant pair before discharge to the EID clinic by the midwife on duty is emphasized as a routine.

This meant that 58% of the PMTCT mothers and their exposed infants missed this important initiation to care at the earliest possible time before discharge home and subsequently many didn’t return for care according to standard recommendation. In essence these infants got delayed HIV diagnosis, delayed initiation on ART and co-trimoxazole prophylaxis, as well as delayed
infant feeding and nutritional support. These together lead to increased risk of postpartum HIV infection to the HIV Exposed Infants and affects overall health outcomes.

This was most likely due to lack of staff duty assignment for linkage, lack of standard operations procedure, inadequate counseling skills, poor documentation during referrals, distances of the MBCP from maternity and lack of routine performance review.

The project was intended to increase the number of mother child pairs referred or linked to EID care before discharge from maternity from 50% at the beginning of the project to 90% by the end of November 2014. It was hoped that this would reduce the HIV transmission rate among exposed infants, reduce the HIV related infant mortality and morbidity, improve the performance indicators of the health facility and reduce the resultant HIV related work burden for health workers in future.

Figure 1: A Fish Bone diagram showing the root causes of poor linkage
4.0 PROJECT OBJECTIVES

4.1 General Objective

To Increase the percentage of mother-baby pairs from maternity enrolled at the mother-baby care point before discharge from 50% at baseline to 90% by the end of November 2014 so as to reduce on HIV exposed infants that miss care.

4.2 Specific Objectives

- To ensure staffs take responsibility for linkage
- Develop Standard operation procedures for internal linkage
- Ensure availability and completeness of registers and forms in maternity and MBCP
- Ensure regular periodical review of performance

Below is a graph showing the baseline proportion of infants linked to EID before discharge from maternity and the target

![Graph](image)

**Figure 2:** A graph comparing the baseline and the target performance
5.0 METHODOLOGY

The following project activities were implemented based on the identified root causes of poor linkage and were expected to lead to the achievement of the set target. These interventions addressed specific identified major root causes.

**Root cause. No staffs assigned to facilitate linkage from maternity ward to MBCP**

**Countermeasures**

Each week a staff from maternity ward was assigned by the ward in charge to actively link mother-baby pairs from maternity ward to the MBCP. This staff carried out the responsibility of linkage for one week; from Monday to Sunday, and another staff was then assigned.

![Figure 3: A roster for linkage facilitators compiled for the months of August and September 2014](image)

Each morning the assigned staff identified the HIV exposed infants delivered during the previous day and night duty shifts from the ward reports so that they are counseled and referral forms filled from maternity ward. After the exposed infant is registered on the same date at MBCP, the
staff then transfers the exposed infant number and date of appointment given to a registration form (appendix 1) kept by the maternity ward in charge before signing.

![Image](image.png)

**Figure 4:** Section of a filled copy of daily registration form for linkage facilitators in maternity ward

**Root cause.** Lack of Standard Operations Procedures for internal linkage

**Countermeasures**

Two Standard Operation Procedures were developed to facilitate linkage of HIV Exposed Infants; one for Linkage of Mother-Baby Pair from Maternity to MBCP (appendix 3) and another one for active mother baby pair tracking after registration for EID (appendix 4).

All ward managers were sensitized and trained on the SOP for linkage of HIV Exposed Infants. The Standard operations procedure emphasized that the Staff on duty should only discharge the mother-baby pair after confirming evidence of registration and appointment (that is, exposed
infant number and the appointment date) from appointment slip issued by the MBCP, except for the mothers/caretakers requesting to continue care from another health facility.

Figure 5: A copy of Standard operations procedure displayed in maternity ward

Root cause. Unavailability of registers and forms in maternity and MBCP

Countermeasures

The HIV exposed infants’ referral form was requested and made available for use from August 2014. An appointments register was kept at the maternity ward (referring unit) to compliment the appointment book at the MBCP. This was to remind the MBCP workers of scheduled appointments, double check for compliance and initiate follow-up process for appointments missed.

An appointment slip (appendix 5) was developed for use by the MBCP. The MBCP issued the appointment card for all HIV exposed infants referred from maternity to serve as evidence of
registration and as a reminder for the next appointment date. This clients’ hand held card was important for all the clinicians initiating discharge from maternity ward to be certain that the mother-baby pair have actually been linked to the mother-baby care point.

**Root cause. Lack completeness of registers and forms in maternity and MBCP**

**Countermeasures**

It was emphasized during mentorships on eMTCT/EID data that for every referral from maternity and subsequent registration at the MBCP, the caregiver’s or mother’s contact information should be documented at the time of collecting information especially phone number, ANC number, Mothers ART clinic number, the physical address including use of hand-drawn maps.

![Figure 6](image)

**Figure 6**: Mr.Olweny (a fellow) during one of the mentorship sessions on data management

**Root cause. Inadequate eMTCT/EID counseling skills**

**Counter measures**
The project trained staff on eMTCT/EID Counseling and linkage to care. Key staffs (30) were trained on referral system put in place between maternity and MBCP including use of referral slips and new registers. Knowledge on the internal referral system in place will ensure effective linkage.

Figure 7: Participants during the e-MTCT/EID training conducted at Anaka Hospital ANC clinic

**Root cause. Irregular periodical review of performance**

**Countermeasures**

Conducted weekly review of maternity and EID registers to monitor access and identify the mother-baby pairs who have missed registration before discharge so as to rectify at the earliest opportunity the causes of the missed opportunities for linkage.
Figure 8: Mr. Wanican (a fellow) chairing a weekly review meeting at Anaka Hospital

Conducted 5 monthly Case Conferences/Continuous Professional Development Sessions to improve linkage and address challenges identified (during weekly reviews) together with the service providers

Conducted 2 quarterly review meetings between the relevant departments to compare experiences and review progress
6.0 PROJECT OUTCOMES

1. The percentage of HIV Exposed Infants delivered in maternity and linked for EID care before discharge increased from 50% at the end June 2014 to 100% at the end of November 2014.

![Graph showing the percentage of HIV exposed infants linked from maternity to EID care before discharge](image)

Figure 9: A graph showing the percentage of HIV exposed infants linked from maternity to EID care before discharge

In addition the following outcomes were also realized:

2. Relative increase in number of linkages initiated from maternity to EID from a total of 14 (24%) during the six months before the start of the project to 43 (54%) during six months of the project

3. Linkage of HIV Exposed Infants to EID care point before discharge has become a routine duty of the maternity staff
4. Utilization of the tools developed especially the Standard operations procedure, appointment slips and registers for documenting linkage

5. A spirit of teamwork has been developed among the different units involved in working on this project

6. Clinical team now had a documented evidence of linkage (i.e. appointment slip) before making any decision to discharge a mother baby pair from the maternity ward

7. There was improvement in the completeness of the registers at maternity and the MBCP as a result of the mentorship on data completeness

Figure 10: Section of the maternity register before and during the project implementation
7.0 LESSONS LEARNED

- The realization that a problem exists and there is something that can be done with available resources stimulated action towards the achieving desired goal
- The project also showed that as staffs of the hospital, we have the potential to cause positive change in the identified problems
- When a change is suggested for implementation, it’s important to involve all the stakeholders in the project for successful implementation
- A good referral out system using the National standard exposed infants referral form was important because not all the mother baby pairs desire to continue care in Anaka Hospital

8.0 CHALLENGES EXPERIENCED AND HOW THEY WERE OVERCOME

There was the problem with the inadequate number of midwives during the duty shifts in maternity ward and therefore, the assigned linkage facilitators could not escort all the HIV Exposed Infants to the MBCP as planned due to overwhelming ward routines work and therefore, other methods of ensuring that the mother baby pair has been registered had to be used especially by employing the appointment slip issued from the MBCP showing the ART number, signature of the person who registered the clients

Lack of information on on-going initiatives to solve the problem of linkage meant that there was always the possibility of duplicating interventions that were already being implemented. To minimize duplication, the fellows always consulted with other team members and staffs from maternity ward, ART clinic and ANC during review meetings to find out what they have already accomplished with other partners

Some clinicians discharged patients before registration but this was later solved by involving the clinicians and medical officers attached to maternity ward in the monthly meeting to update them on the agreed standard operations procedure.
The MBCP was closed on weekends making it difficult for mother-baby pairs requesting for discharge during this period. It was however agreed that the EID register should be left accessible for use in maternity ward to avoid the missed opportunity for registration before discharge. After training the staffs on how to the register, it was possible to help these clients over the weekends.
9.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This project that started in May 2014 and ended in November 2014 was implemented in Anaka hospital. The project showed that it is possible to improve the quality of health service delivery with minimal resources provided staffs are guided to identify gaps and the implication to service quality. This project managed to improve linkage of HIV Exposed Infants from maternity ward to the EID care point from 50% in May to 100% in November 2014, exceeding the set target of 90% within six months.

Conclusions

The project showed that it is possible to link all HEI delivered in the facility immediately after identification. This was made possible by assigning linkage facilitators, empowering H/Ws through training, availing SOPs and periodical evaluation of linkage efforts. The task now remains the retention of these infants linked in care at the MBCP through the strengthening of this new care point established in the MCH.

Recommendations

- The district should speed up the recruitment process for health workers especially midwives for maternity and EID so that there are enough staffs to actively link HIV Exposed Infants to EID care point
- The Medical Superintendent should ensure that the available Community Linkage Facilitators are re-oriented to help in internal linkage. Currently they are more concerned with ART clinic activities at the expense of EID linkages.
- The in-charges of maternity, EID care point and records should work together and ensure completeness and accuracy of data entry in registers through continuous mentorship and Continuous professional development sessions
- The hospital administration should plan for funds to sustain some of the initiatives like the production of EID cards introduced during the project implementation
• The unit in charges and the Hospital Quality Improvement team should strengthen ME & R using the existing opportunities like review meetings, Continuous professional development sessions and unit meetings
10.0 NEXT STEPS

Dissemination

- Dissemination of the final report to Chief Administrative Officer, District Health Team & facility staff by the project team

Follow-up strategy for the linked HIV exposed infants

- Mother-baby to have care cards kept together, attend one care point, be seen by one care provider and given same appointment dates at the MBCP

- Continue holding coordination meeting between health workers and health workers on the follow-up of lost infants by the HIV/AIDS focal persons

Scale-up strategy to other units within the facility

- Project team could be facilitated to train all facility staff on E-MTCT/EID linkage

- The hospital administration and health partners should support the continued availability of the tools for documentation and data collection

- Community should be sensitized during outreaches, dialogue, IEC messages etc. to accept the procedures for linkage

- Funding partners should work with the hospital quality improvement team to make available standard procedures, policies and current documents for linkage
REFERENCES


UNAIDS. *Together We Will End AIDS.* UNAIDS; 2012
APPENDICES

Appendix 1: Anaka Hospital Health Services Improvement Project tool for linkage facilitators

Month...........................................................................................................................................................................

Page number........................................................................................................................................................................

<table>
<thead>
<tr>
<th>Date Of Delivery</th>
<th>Mothers Name</th>
<th>IP No.</th>
<th>Mothe r ART No.</th>
<th>Villag e /Parish</th>
<th>Phone No. of caregiver</th>
<th>Exposed infants No.</th>
<th>Appointment date</th>
<th>Linkage Facilitator’s Name</th>
<th>Signature</th>
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Appendix 2: Anaka Hospital Health Services Improvement Project tool for data collection

Month ........................................................................................................................................................................

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<table>
<thead>
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<th>From maternity register</th>
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Appendix 3: Standard Operation Procedures for Linkage of Mother-Baby Pair from Maternity to EID Care Point

PURPOSE:
To ensure that all HIV exposed infants delivered in the hospital are linked to EID care point before discharge from maternity.

SCOPE:
This procedure applies to all the staffs in the maternity ward, Antenatal, young child and ART clinic.

KEY WORDS:
HIV exposed infant, mother-baby pair, EID care point, discharge.

INSTRUCTIONS AND PROCEDURE
1. Follow national e-MTCT/EID requirements for linkage
2. Maternity in charge will assign a staff to facilitate linkage weekly, from Monday to Sunday.
3. Record information on all the mothers coming for delivery in the integrated maternity register including the ANC No., Mother’s pre-ART number, Address, phone No. (and the owner, if of another person)
4. Fill all the applicable fields in the integrated maternity register immediately the information is available
5. The staff on duty should confirm the HIV status of all mothers coming for delivery before conducting any delivery
6. If mother’s HIV status is confirmed, the staff on duty should counsel the mother on the benefits of EID to HIV-exposed infant and the family including continuous counseling, linkage to comprehensive HIV care, safe infant feeding options and follow-up for growth monitoring and development
7. Ensure that all HIV negative mothers have had their most recent HIV tests within the last 3 months. If not, re-test to confirm HIV status

8. The staff on night duty should alert the staff Assigned to facilitate linkage during the week about all the HIV Exposed infants delivered during the last night and the previous day so that they are directed for vaccination at young child clinic and registration at the EID Clinic

9. The assigned linkage facilitator should ensure that the referral form for HIV exposed infants is filled for all the referred clients

10. The assigned linkage facilitator should ensure that the exposed infant’s is registered at the EID clinic and exposed infant’s number and appointment date for DBS given before any discharge is processed.

11. Staff on duty should discharge after confirming evidence of linkage and appointment (exposed infant number and appointment date) from appointment slip except for those requesting to continue care from other health facilities

12. The linkage facilitator should then proceed to fill the daily registration form for linkage facilitators which must include the exposed infant's number from the exposed infants register, facilitators name and signature

13. Ensure all HIV exposed infants are kept in maternity ward for at least 24 hours before discharge to ensure adequate counseling, documentation and linkage to care

**FOR MORE INFORMATION CONTACT THE FOLLOWING**

<table>
<thead>
<tr>
<th>Key person</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanican Christopher</td>
<td>Team leader</td>
<td>0794 808020/0779169320</td>
</tr>
<tr>
<td>Akwang Susan</td>
<td>I/C maternity ward</td>
<td>0794808009/0777204070</td>
</tr>
<tr>
<td>Obal Stanley</td>
<td>I/C EID clinic</td>
<td>0774 805770</td>
</tr>
</tbody>
</table>

Date compiled………………………………………..Team leader…………………………Sign………………

Date reviewed……………………Reviewed by………………………………………Sign………………
Appendix 4: Standard operating procedures for active mother baby pair tracking after registration for EID

Purpose
To ensure that all the HIV exposed infants delivered in the hospital and linked to EID care return for testing according to the testing algorithm

Scope
This procedure applies to all the staff in the EID care point, young child clinic, postnatal, ART, OPD clinics and pediatric ward

Key words
HIV exposed infant, mother-baby care point, EID care point

Instructions and procedure
1. The EID care point Focal person will ensure accountability for all follow-up of HIV exposed infants’ referral for testing from all entry points
2. The EID care point will serve as referral linkage point between all access points and EID testing, including Maternity, ANC, YCC, ART, OPD and pediatric wards
3. There will be an appointment book at the EID care point so that caregivers know when to return and healthcare workers know when to expect mother baby pair
4. Should the caregiver or mother miss an appointment for more than 2 weeks, follow up tracing should be initiated by the EID focal point person
5. The EID focal point person will identify when a mother baby pair has not come for the appointment and immediately assign the community linkage facilitator from that parish to make follow up and link them back to the facility for proper care
6. A tracking system by phone or home visits should be employed by the EID care point and the linkage facilitators and the means for contacting the patients provided for linkage
7. During each referral from the various points and registration at the EID care point, the caregivers/Mothers contact information should be documented at the time of collecting
information especially phone number, physical address including the use of hand-drawn maps

8. The caregiver/mother should be informed and should give her consent on how contact information will be used

9. Mothers of HIV exposed infants receiving ART services in the hospital should have same appointments whenever possible and the exposed infant card matched with caretakers/mothers card so that they are seen together

For more information contact the following

<table>
<thead>
<tr>
<th>Key person</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanican Christopher</td>
<td>Team leader</td>
<td>0794808020/0779169320</td>
</tr>
<tr>
<td>Akwang Susan</td>
<td>In-charge maternity</td>
<td>0794808009/0777204070</td>
</tr>
<tr>
<td>Obal Stanley</td>
<td>In-charge EID clinic</td>
<td>0774805770</td>
</tr>
</tbody>
</table>

Date compiled................................................................................................................

Team leader.......................................................................................sign..................................................

Date reviewed...............................................................................................................

Reviewed by..................................................................................sign..................................................
Appendix 5: Anaka Hospital EID appointment card

ANAKA HOSPITAL

E I D A P O I N T M E N T C A R D

<table>
<thead>
<tr>
<th>Surname</th>
<th>Other name</th>
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<tbody>
<tr>
<td>Mothers Name</td>
<td></td>
</tr>
<tr>
<td>Child’s Name</td>
<td></td>
</tr>
<tr>
<td>Date of birth</td>
<td>Exp. Infant No.</td>
</tr>
<tr>
<td></td>
<td>Mother’s ID</td>
</tr>
<tr>
<td></td>
<td>Clinic No.</td>
</tr>
<tr>
<td>Dates of appointment</td>
<td>Facility</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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### Appendix 6: Activity schedule for the Continuous Quality Improvement Project, Anaka Hospital

<table>
<thead>
<tr>
<th>No.</th>
<th>Activity</th>
<th>MAY</th>
<th>JUNE</th>
<th>JUL</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assign a staff to actively escort HIV positive mothers and their exposed babies to the EID clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Daily, Monday to Friday</td>
<td></td>
<td></td>
<td></td>
<td>Total 100 days</td>
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<tr>
<td>2</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Mentorship on E-MTCT/EID data(maternity staff)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7&lt;sup&gt;th&lt;/sup&gt; 07, 2014</td>
<td></td>
<td></td>
<td></td>
<td>2 mentors</td>
</tr>
<tr>
<td>3</td>
<td>Strengthening the appointment system: appointment register</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>2 registers</td>
</tr>
<tr>
<td>4</td>
<td>Meeting to plan and develop the SOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4&lt;sup&gt;th&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>5 participants</td>
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<tr>
<td>5</td>
<td>Developing 5 posters for SOP for the various referral points</td>
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<td></td>
<td></td>
<td></td>
<td>6&lt;sup&gt;th&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Sensitizing and Training other staff on SOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>08&lt;sup&gt;th&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>10 participants</td>
</tr>
<tr>
<td>7</td>
<td>Training staff on E-MTCT/EID Counseling and linkage to care (referral system)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13&lt;sup&gt;th&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>30 participants, 2 facilitators</td>
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<tr>
<td>8</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Mentorship on E-MTCT/EID data(EID/ART clinic staff)</td>
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<td></td>
<td></td>
<td></td>
<td>15&lt;sup&gt;th&lt;/sup&gt; 08, 2014</td>
<td></td>
<td></td>
<td></td>
<td>2 mentors</td>
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<tr>
<td>9</td>
<td>Strengthening the appointment system: developing and printing appointment slips</td>
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<td>1&lt;sup&gt;st&lt;/sup&gt; 09, 2014</td>
<td></td>
<td></td>
<td></td>
<td>100 appt slips</td>
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<tr>
<td>10</td>
<td>Submit 1&lt;sup&gt;st&lt;/sup&gt; report on progress of the projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5&lt;sup&gt;th&lt;/sup&gt; 09, 2014</td>
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<tr>
<td></td>
<td>Activity Description</td>
<td>Date(s)</td>
<td>Time/Session Notes</td>
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<tr>
<td>11</td>
<td>1st Review meeting on project progress</td>
<td>10th 09, 2014</td>
<td>30 pots/session</td>
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<td></td>
<td></td>
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<tr>
<td>12</td>
<td>3rd Mentorship on E-MTCT/EID data (community linkage facilitators)</td>
<td>19th 09, 2014</td>
<td>2 mentors</td>
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<tr>
<td>13</td>
<td>2nd Review meeting on project progress</td>
<td>19th 11, 2014</td>
<td>30 pots/session</td>
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<td></td>
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<tr>
<td>14</td>
<td>Submit 2nd report on progress of the projects</td>
<td>24th 11, 2014</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>15</td>
<td>Weekly review of and reconciling registers to track any clients who could have missed linkage to EID care</td>
<td>From 1st 07, 2014 and every Tuesday of the week</td>
<td>5 pots/session, total of 20 sessions</td>
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<tr>
<td>16</td>
<td>Monthly case conference/CME to improve linkage and address challenges encountered</td>
<td>From 14th 08, 2014 and every second Thursday of the month</td>
<td>30 pots/session, total of 5 sessions</td>
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<tr>
<td>17</td>
<td>Dissemination of the final report to Chief Administrative Officer, District Health Team &amp; facility staff</td>
<td>16th 12, 2014</td>
<td>35 pots</td>
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</tbody>
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