Partners In Health Inshuti Mu Buzima

Integrated Services for HIV-Exposed Infants and Mothers Living with HIV in Rural Rwanda

1. Background on HIV-Exposed Infant care in Rwanda

Currently, 412 health facilities in Rwanda provide PMTCT services, which provides an estimated 85% coverage of the total population (RBC 2011). In the overall population, 89.4% of women are aware that HIV can be transmitted via breastfeeding and that MTCT can be prevented by taking medications during pregnancy (NISR 2012). From July 2010- June 2011, among pregnant women presenting to ANC clinic with unknown HIV status, 98.4% of women are tested for HIV (88.3% of pregnant women were appropriately tested for HIV during pregnancy) and 1.9% tested HIV-positive. In total, 5960 women attended PMTCT clinics, and of those women, 98% received ARV prophylaxis or treatment (RBC 2011). 7468 infants were tested using PCR for EID, which represents 90% of the total children expected to be testing. Using national reporting data, it was estimated that 78% of HIV-exposed infants had access to ARV and cotrimoxazole prophylaxis (RBC 2012a). EID showed a rate of 3.2% HIV transmission from mother to child by 6 weeks of age. Of the 6938 HIV-exposed infants expected to be tested for HIV by 18 months, 5721 (82.5%) tests were conducted, which revealed a 2% positivity rate. A national representative household survey conducted in 2009 estimated HIV-free survival of 91.9% for HIV-exposed infants aged 9-24 months (Ruton et al. 2012).

2. Challenges and Obstacles to Care of the HIV-Exposed Infant

During pregnancy, mothers typically present for consultation once per month until the time of delivery. However, following birth of the child, the quantity and frequency of health services required by the mother dramatically increases. Under the traditional clinic structure, it is not uncommon for a mother to visit the health center for separate consultations for exposed infant monitoring, routine Adult HIV consultation, MNCH consultation, CD4 testing, DBS testing, medication pick-up, nutrition counseling, social work counseling and family planning in addition to sick visits for care of acute illness and community campaigns for infant vaccination and growth monitoring.

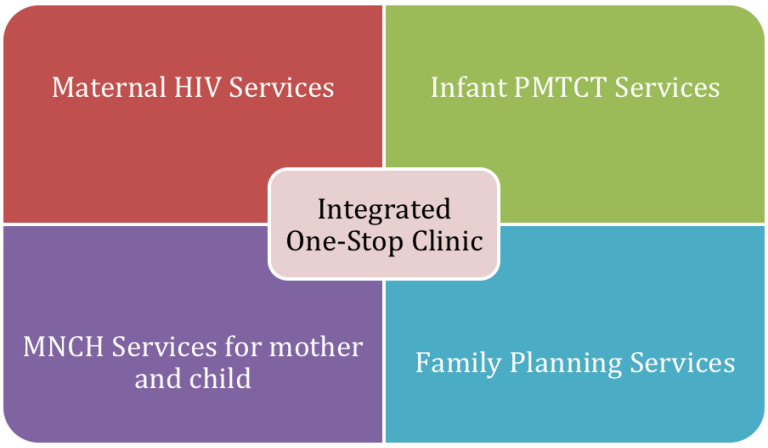
Through focus groups, mothers reported on average 2 to 3 health center visits per month. The obstacles and barriers for such visits for these women are considerable. Mothers reported up to 3-4 hours transport time to reach their local health centers, and reported that a health center visit routine takes at least 5-6 hours but typically the entire workday. Transport fees for clinic visits were reported as an average of 3000-4000 RWF per round-trip. Other costs include lunch for both mother and child (avg 300-1000 RWF) and lost wages or hiring another person to complete a day's work (avg 1000-3000 RWF) Overall, mothers report that a typical health center visit costs them 2000-5000 RWF in rural areas (>5000 RWF in urban areas and up to 14000 RWF for some respondents) in out-of-pocket costs, which they report limits the number of appointments they are able to attend.

The result is inadequate rates of retention of mothers and infants in care, completion of maternal

P.O. BOX 3432 · KG 54 ST, KACYIRU SUD · KIGALI, RWANDA
T +250 788 304 013 · F (617) 998-8973 · E RWANDA@PIH.ORG

and infant prophylaxis for MTCT, early infant testing and diagnosis, and family planning. Across sub-Saharan Africa, only 43% of women received HIV testing, 58% of HIV-infected women received prophylactic ARV medications, 40% of infants born to mothers with HIV received prophylactic ARVs and only 15% of infants born to HIV-infected women were tested for HIV within two months of life. (WHO 2010a). Ultimately, this data suggests that separate and disintegrated services contribute to higher MTCT, fertility rate, and morbidity and mortality, and lower retention in care, for mothers living with HIV and their infants.

3. Rationale and Structure of Integrated Services



The Combined Clinic for HIV-Exposed Infants is a novel model of integrated services to reduce obstacles to care for the mother-infant pair in order to improve retention in care and thereby decrease morbidity and mortality for both mother and infant.

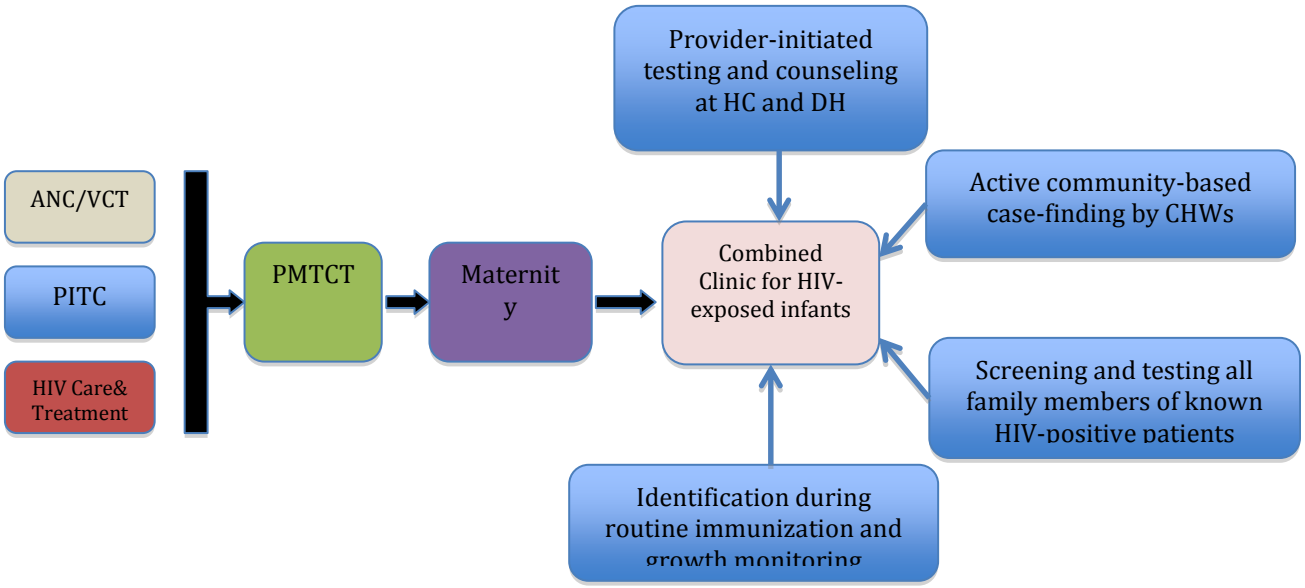
The WHO Technical Consultation on integration of PMTCT scale-up concluded: "The current status of PMTCT implementation in countries is unacceptable, with an urgent need for a renewed public health approach to HIV control that ensures improved access to HIV prevention, treatment and care intervention for women and their children. A comprehensive approach to care based on simplification, standardization, and integration is needed to scale-up interventions and strengthen health systems to support integrated service delivery and improve quality of care." (WHO 2008)

Integration of services has many well-established advantages. Importantly, integration of services, particularly those of MNCH, FP and PMTCT/HIV services, can improve access to care by offering a range of services during a single health center visit or consultation. By minimizing or avoiding traditional barriers to accessing health care services (costs, transportation, loss of productivity, child care restraints), integrated services improve clinic attendance, care participation, and treatment adherence (MSH 1998). Additionally, high-impact activities that may traditionally be poorly attended by patients (i.e., family planning, demonstrations in safe water preparation, counseling for detection of childhood illness, etc.) are improved by combining them with activities that are generally well accepted or incentivized (i.e., early infant diagnosis or HIV or anti-helminthic administration). In Rwanda, integration of HIV services into the primary health care system as positively associated with increased utilization of reproductive and preventive child health services (Price et al. 2009). From a health care systems standpoint, integration of services can improve efficiency and utilization of limited financial and human resources, increase the coverage and quality of PMTCT and pediatric HIV services, and enhance MNCH health outcomes overall (Lule 2004, Bhutta et al. 2008, PEPFAR 2011, USAID 2011).

In 2012, the Government of Rwanda released the National Strategic Plan for the Elimination of

Mother to Child Transmission. This plan established an overall rate of 2% as the national benchmark for mother to child transmission by 18 months. Within this strategic plan, the need for integration was clearly emphasized: "The goal of EMTCT of HIV is inextricably linked with and directly contributes towards improving MNCH outcomes and equally improving coverage and quality of MNCH service is also essential to achieving EMTCT targets (RBC 2012a)." This strategic plan calls for the linkage and integration of MNCH, FP, and HIV/PMTCT services and development of policies and guidelines to support integration and linkage.

Specifically, integration of care for HIV-positive and serodiscordant women and their infants during the postpartum period, includes the following key components: routine HIV testing and counseling, fertility education and family planning, basic women's health needs and education, infant feeding counseling and support, ART and ARV prophylaxis, and comprehensive child health care (USAID 2011). Experience with integration of MNCH and HIV services in sub-Saharan Africa has been concentrated in introducing VCT and ART services into existing antenatal clinic services for pregnant women and integration of FP with HIV services (Evidence to Policy Initiative 2012).



4. Preliminary Results

Since November 2010, Partners In Health has supported 37 public health facilities to integrate services as described above. As of October 2012, 973 mother-infant pairs had been served by these clinics. In addition to reported satisfaction by mothers and health facility staff, the overall HIV transmission rate as of October, 2012, for this group of infants was 1.6%, with a single transmission during the breastfeeding period. Future evaluation is planned to determine retention in care using integrated services, overall child survival, maternal outcomes, and patient satisfaction.