

Strengthening the Integration of PMTCT within MNCH Services

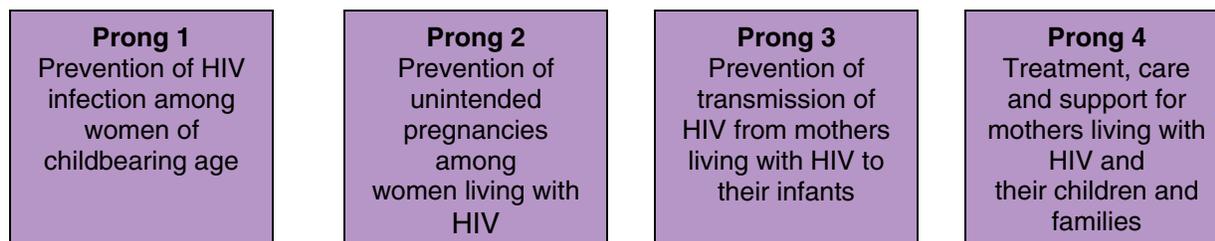
ACCESS APPROACH

While not planned as a major focus of the ACCESS Program, the prevention of mother-to-child transmission of HIV/AIDS (PMTCT) was addressed in several ACCESS countries using PEPFAR funding.

HIV is the leading cause of mortality among women of reproductive age worldwide and is a major contributor to maternal, infant and child morbidity and mortality (WHO 2009; UNAIDS 2009). Without treatment, one-third of children living with HIV will die before they reach their first birthday and more than 50% will die by their second year of life (Newell 2004). In 2008, an estimated 1.4 million pregnant women living with HIV in low- and middle-income countries gave birth, 91% of whom reside in sub-Saharan Africa (UNAIDS, 2009).

For pregnant women, access to comprehensive HIV care that is integrated with maternal health services leads to healthier outcomes for both mothers and newborns. However, despite the introduction and scale up of PMTCT services globally, the number of women accessing these services has not come close to the estimated need. Policies have been updated, space has been created and supplied with medicine, supplies and equipment, providers have been trained, and yet the number of women accessing high-quality PMTCT services remains low. To make services more accessible to women, both quality and convenience of services must improve.

Ideally and intuitively, any effort to prevent the transmission of HIV from mother to child should be based on a comprehensive and integrated four pronged approach which includes:



For the individual woman, a comprehensive, coordinated, cascading continuum of services must be provided beginning with increased access to counseling, testing and primary prevention services, as well as reproductive health choices enabling either the prevention of unintended pregnancies or appropriate planning for intended future pregnancies. There must be no missed opportunities during ANC, delivery and postnatal care to provide appropriate PMTCT services. In areas where there is limited access to facility care, outreach services are needed to ensure that women and their infants receive the care they need. While many governments have policies supporting a comprehensive/integrated approach and guidelines identifying the multiple opportunities to integrate PMTCT into routine MNH services, different funding streams, divisions within ministries, resource constraints, and the involvement of multiple implementing partners all present challenges to making comprehensive PMTCT services a reality. And, as a result, women and infants drop out of services at multiple points along the continuum.

RESULTS

Ethiopia: Integrating PMTCT into the Care Provided by Community Health Workers

PMTCT Environment

Even though PMTCT services are offered at nearly 719 sites (includes health centers and hospitals³¹) in Ethiopia, service delivery statistics reveal poor utilization³².

National PMTCT service delivery guidelines were released in 2007 by Ethiopia's HIV/AIDS Prevention and Control unit (HAPCO), which include an opt-out approach integrated into routine MCH services at all service points along the health care continuum,

including the health post. Services are available and the enabling policy environment is strong. However, with only 28% of women accessing ANC services and less than 6%³³ of women delivering in a facility, many women simply never have the opportunity to benefit from these supportive services and policies. To help bring healthcare closer to the community and rural populations, a new cadre of community health worker was created called the Health Extension Worker (HEW), whose responsibilities include provision of community-based ANC and safe, clean deliveries.



Gap Identified

Despite government policies that promote an integrated approach to PMTCT, many women do not access the health system and therefore can not take advantage of the services available.

Approach to Integration

To bring PMTCT services closer to the household level, ACCESS proposed using the new cadre of HEWs to provide PMTCT services at the household level. ACCESS adapted existing national PMTCT and HIV counseling and testing training materials for health care providers to create a learning resource package for HEWs. A one-week, competency based training was conducted for 40 such workers on a pilot basis to explore if this cadre—which was already focusing on MNCH services—could help expand PMTCT services to women and their children. The project also utilizes the HEWs and voluntary community health workers (VCHWs) to improve community awareness and demand for PMTCT services, and to strengthen community and health center referral linkages to improve access to care and support for women and infants found to be HIV-positive. HEWs are encouraged to train the VCHWs in their communities to ensure that they talk with pregnant women about the new PMTCT services and the importance of delivering with the HEW.

Key Achievements

Forty HEWs were trained in comprehensive PMTCT and use of rapid HIV test kits. These HEWs then counseled more than 875 pregnant women on PMTCT; tested 771 pregnant women for HIV; and identified 7 HIV positive pregnant women and referred them to health centers for continual care. Although the pilot is too small to draw conclusions about coverage, this experience demonstrates that HEWs performing ANC and deliveries at the community level represent a viable opportunity to expand the availability of—and thus increase the uptake of—PMTCT services. If these cadres are supported with training, follow-up supervision, and the necessary supplies and materials, they have the capacity to deliver community-based PMTCT

³¹ National data as of June 2008

³² www.etharc.org

³³ Ethiopia DHS 2005

services. Tentatively, the MOH in Ethiopia has indicated interest in scaling up this approach to rural areas of high HIV prevalence.

Kenya: Introducing an integrated supervision tool and standards-based quality improvement approach to improve the quality of integrated service

PMTCT Environment

Prior to 2004, PMTCT was not integrated into FANC services in Kenya. In 2004, PMTCT was integrated into ANC and scaled up to over half of Kenya’s facilities by 2007. While widely available, the quality of services was never assessed. By 2007, integrated ANC-PMTCT services were available in more than 3,000 facilities, but the quality of these services was unknown and supervision continued to occur separately through distinct HIV and reproductive health (RH) teams.

Gap Identified

There is no integration of HIV/RH supervision and an absence of information about the quality of PMTCT services.

Approach to Integration

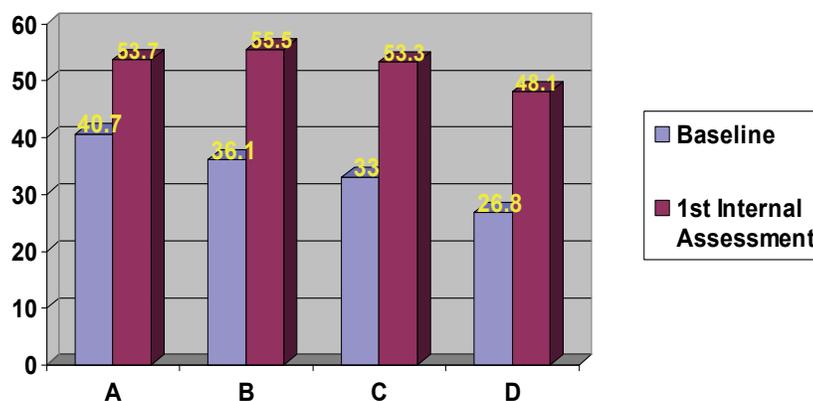
ACCESS worked with the MOH to develop an integrated supervision tool and fostered the use of this tool by both HIV and RH providers. With the Division of Reproductive Health (DRH) and the National AIDS Control Program (NASCO), ACCESS developed the performance standards and an assessment tool for PMTCT in 2008. The standards were pretested, piloted and implemented in the 8 provincial hospitals. In 2009, the standards and quality improvement process were scaled up to 19 district hospitals in three provinces, 1 sub-district hospital, 9 mission hospitals, and 3 mission health centers.

Key Achievements

The integrated supervision tool has been adopted nationally by the MOH and is now being used throughout the country to support integrated care.

Baseline assessments in four provincial hospitals revealed fairly low levels of adherence to high-quality PMTCT standards, demonstrating that the availability of services does not mean that they are standards based. A follow up survey (see Figure 5) showed steady increases in quality, but still significant gaps between actual and desired performance. Managers at the facilities where the quality improvement process was introduced were able to use the standards to identify gaps in performance and mobilize resources both from within the facilities and the partners on the ground to make improvements.

Figure 5. Kenya PMTCT National Standards Performance of Selected PGHs



Malawi: Integrating PMTCT across the MNCH Continuum of Care

Toward the end of FY 2008, USAID engaged the ACCESS Program in testing a model for PMTCT integration with MNCH services. In the FY 08 HOP, \$300,000 was provided to ACCESS to field test an integrated approach that expanded care through community-based approaches and strengthened and standardized referral linkages between the community and health facilities. USAID also provided limited

funding to BASICS and requested that the two programs combine efforts to reach the target population of pregnant and postpartum women, newborns and children under five years of age. It was determined that Malawi—where both ACCESS and BASICS were already working—would be the country for field testing to strengthen MNCH.

PMTCT Environment

Malawi's PMTCT

The full PMTCT package as presented in Malawi's 2007 draft national PMTCT guidelines, includes the following services:

- Provider initiated testing and counseling (PITC) in ANC and labor and delivery;
- Antiretroviral (ARV) prophylaxis or antiretroviral therapy (ART) according to guidelines;
- Cotrimoxazole preventive treatment (CPT) prophylaxis to HIV pregnant women following delivery given to HIV exposed infants and young children according to guidelines;
- Infant feeding counseling and support, and
- Counseling and follow-up.

The MOH intent is to integrate PMTCT-specific services with existing services of trained counselors, nurse/midwives and clinicians at MCH clinics.

Gaps Identified

Program observations of PMTCT sites concluded that each PMTCT site operates differently due to the lack of formalized national PMTCT guidelines. As a result, some sites used the most recent information for provision of multi-regimen ART, while other sites continued to use only the single regimen of Nevirapine. Another major area of concern observed in all PMTCT sites included the lack of follow up for the few mothers and infants that access the services (mother-infant pair follow-up). Part of the challenge is that postnatal check-ups are recommended within 2 weeks following delivery; however, most mothers who deliver in a facility will only return for a postnatal check up at 6 weeks to enroll their infant in the immunization program (EPI). For those who do return for postnatal care in the MCH clinic, there is no cohort register that is able to track patients and enable follow-up.

Other major gaps observed include:

- Not all ANC providers have been trained in HIV testing and counseling
- (HTC)/PMTCT; therefore, MNCH and PMTCT services are not truly integrated. Some providers are only trained as counselors and therefore they refer clients to another provider for testing. The inefficiency in patient flow and the high volume of clients in ANC results in many clients not getting tested.
- Where PMTCT has not been integrated into ANC, clients who test positive on the rapid test require two lab visits, contributing to clients not receiving the full set of services.
- No standardized register exists to document HIV tests done in the maternity ward. New registers for ANC and maternity that will have PMTCT-specific data were disseminated countrywide in December 2009, approximately one year behind schedule, after receiving funding from BASICS. Similarly, no standard PNC register exists to capture visits at one to two weeks follow-up.
- No standard system is in place for mother-infant pair follow-up. Evidence from a study in the Central Region suggests high lost-to-follow up rates nationally.
- Most infants are determined to be HIV exposed or positive only once they present at a hospital due to sickness. There is a missed opportunity for early diagnosis through PMTCT.

- There is an inadequate mechanism to link clinical assessment, treatment and care of mother-infant pair to specific PMTCT services for HIV exposed infants at various entry points in the system.
- There is very weak follow-up of HIV infected mothers and linkages to FP.
- The availability of ARV prophylaxis is perceived to provide total PMTCT protection through breastfeeding, which results in poor monitoring of breastfeeding practices and timely introduction of complementary feeding methods.

Approach to Integration

Based on the situational analysis, ACCESS/Malawi—in collaboration with BASICS, PSI, and the MoH’s Reproductive Health and HIV/AIDS units—designed an approach to integrate PMTCT content into existing MNCH packages across the antenatal to postpartum continuum of care. The first step was to integrate PMTCT content into current MNCH training and service delivery packages before piloting them in two districts (Nkhotakota and Phalombe). As the approach was implemented, the following significant actions were taken:

- Facility-based performance and quality improvement (PQI) standards were updated to include specific PMTCT standards;
- Malawi’s national BEmONC training package for Maternal and Newborn Care was updated to include PMTCT;
- National community MNCH training materials were revised to include more PMTCT content;
- Facility providers and community health workers (HSAs) were trained in the content of the new integrated training packages;
- Facilities were oriented to the new performance standards and monitored through supportive supervision; and
- Through PSI, hygiene kits refills (of soap, oral rehydration salts and Zinc)were given during ANC visits, at delivery, and in the postpartum period for HIV positive mothers (up to 4 visits) as an incentive to accessing care.

Key Achievements

When the project began in January 2009, there were indications that new maternity registers intended to capture PMTCT-specific data would be in use at health facilities in early to mid 2009, but national level delays resulted in the registers not being in use at health facilities until January 2010. Consequently, ACCESS struggled to collect PMTCT-related data over the course of implementation as PMTCT documentation was not standardized across health facilities. With the introduction of the new ANC and maternity registers in December 2009, PMTCT data collection by health facilities is expected to be stronger and analysis of the data will be more robust, reliable and valid. ACCESS and BASICS made concerted efforts in January and February 2010 to collect available HMIS indicators on coverage of HIV testing among pregnant women since 2008 for inclusion in this report, but the data should be interpreted with caution as the registers have only been in use for two months.

Figure 6 shows 2008 data for mothers who were counseled and tested for HIV and given their result, and the percentage who were given Nevirapine, CPT and/or ART (if needed). Nkhotakota District is well behind the national average in terms of percentage of HIV-positive mothers provided with Nevirapine and CPT, while Phalombe District seems consistent with the national average. This suggests further support is needed in Nkhotakota.

Figure 6: Pregnant Mothers Receiving PMTCT Services, 2008 Data (Source: HMIS)

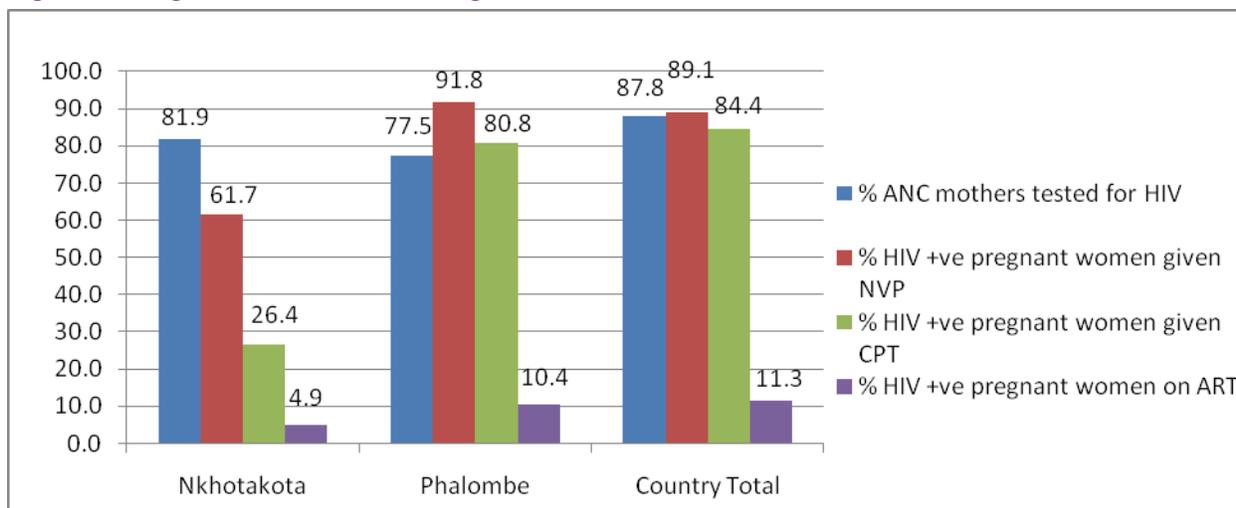
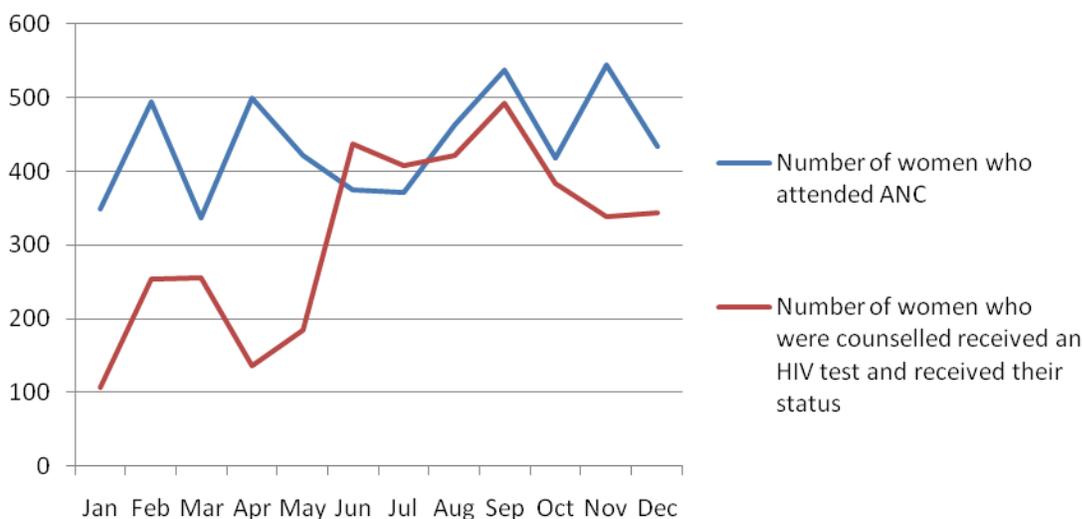


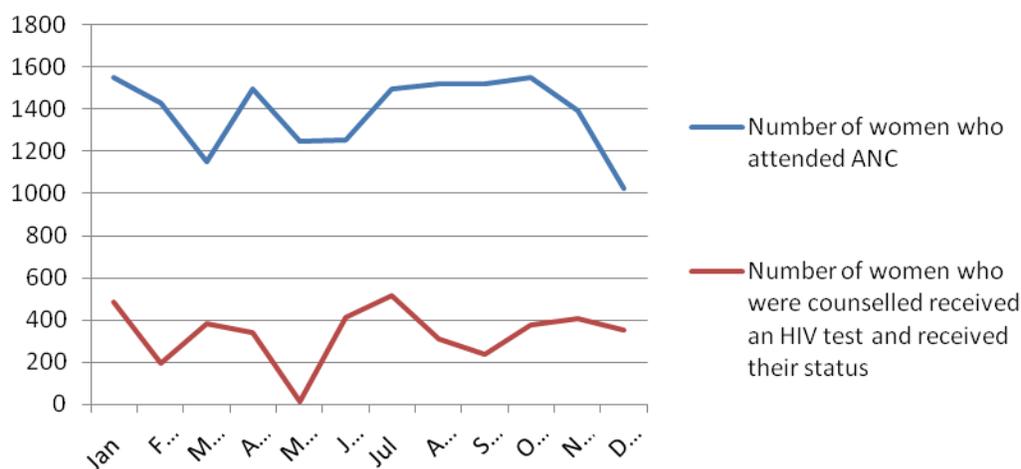
Figure 7 shows the data from Nkhotakota District Hospital from January 2008-February 2009. Beginning June 2008, Nkhotakota had a surge in the number of ANC clients being both counseled and tested for HIV and receiving their results. The original community MNH package included some content on PMTCT, with HSAs primarily referring pregnant women for HTC. Since the implementation of the original community MNH package occurred in early 2008 (at the start of ACCESS), it is possible that the surge in clients was a direct result of the increased community interventions implemented by the Program. Since that time, the majority of ANC clients in Nkhotakota have received HTC and their results.

Figure 7: PMTCT Services in ANC, Nkhotakota District, 2008-2009 (Source: HMIS)



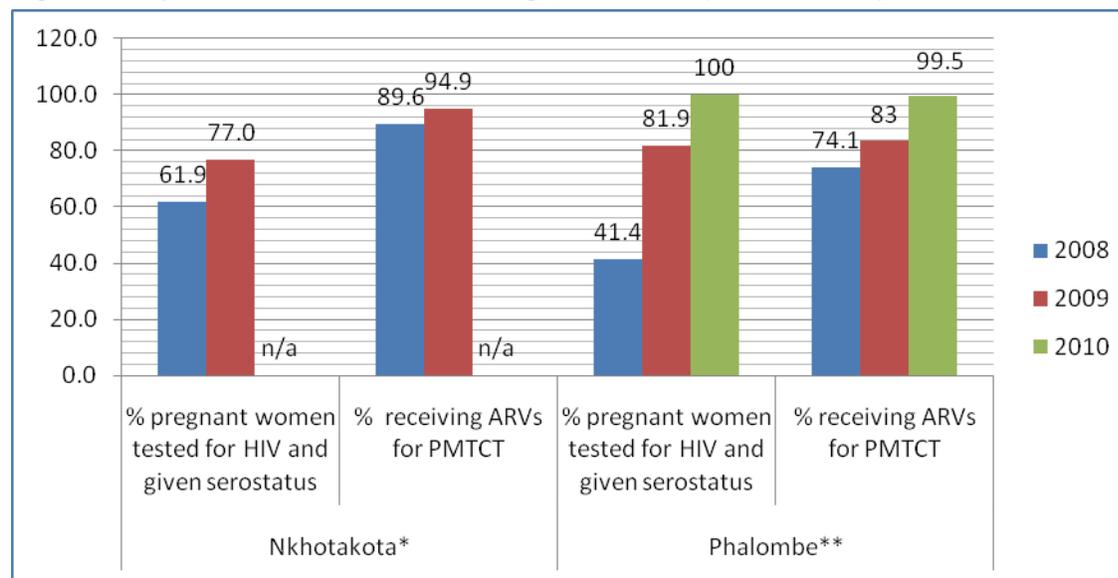
Unlike Nkhotakota District, the data for Phalombe (see **Figure 8**) indicates there is a significant gap between the number of ANC clients and those who receive HTC. One reason may be the lack of HIV test kits considering the high volume of ANC visits. It was noted that in May 2008 there was a stock out of test kits. However, 100% of clients who receive HTC also receive their results.

Figure 8: PMTCT Services in ANC, Phalombe District, 2008-2009 (Source: HMIS)



An analysis of two indicators show improvements in coverage from 2008 (pre-intervention) to March 2010 (post-intervention) in the target sites in both districts. While the validity of the data may be interpreted with caution, **Figure 9** clearly indicates significant coverage improvement in HIV testing among pregnant women at the target sites as well as provision of antiretrovirals to reduce mother-to-child transmission. Prior to 2009, these facilities were primarily using single dose Nevirapine as the chosen prophylactic drug. In 2009, facilities were introduced in a phased manner to a combination prophylactic regimen using two antiretroviral drugs.

Figure 9: Improvement in PMTCT Coverage, 2008-2010 (Source: HMIS)



* Facilities include: Benga, Malowa (2009 only) and Ntosa

** Facilities include: Mpasa and Holy Family Mission Hospital

Another important result is the improvement in administering antiretrovirals as a prophylactic according to current guidelines. The guidelines no longer recommend sdNVP as a first option. Prior to the full roll-out of the draft guidelines in 2008, all pregnant women received sdNVP. As of March 2010, the registers allow facilities to track patients according to regimen. In Phalombe, 68.9% of pregnant women now receive the recommended combination ARVs (see **Table 3** below).

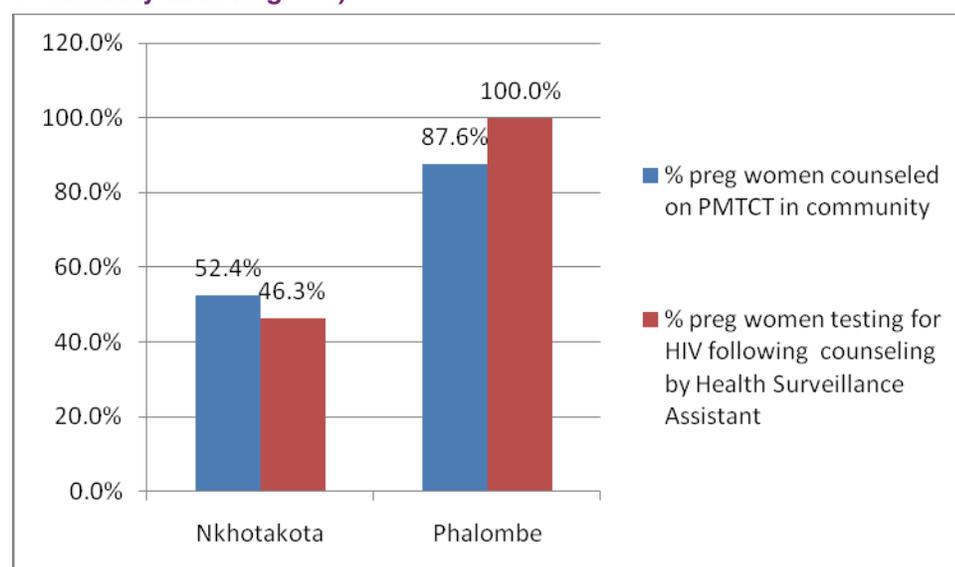
Table 3: PMTCT coverage 2008 vs. 2010 in Phalombe (Source: HMIS)

Percent pregnant women receiving antiretrovirals to reduce MTCT by prophylactic regimen		
	2008	2010 (Jan-Mar)
2 ARVs	0%	68.9% (n=84)
HAART	0%	0%
SD NVP only	100% (n=545)	31.1% (n=38)
Percent of pregnant women newly counseled and tested for HIV and received results in Maternity	0%	35.1% (n=26)

Community Intervention Results and Coverage

Emerging data also supports improvements in PMTCT counseling through HSAs during antenatal home visits. In Phalombe, after the introduction of an integrated PMTCT-community MNH package, 87.6% identified pregnant women in the catchment areas of the target health facilities received PMTCT counseling. HSAs visited pregnant women at home to deliver counseling on the importance of testing for HIV, couples counseling, and counseling on skilled delivery and safe infant feeding. One hundred percent of the women to receive PMTCT counseling by HSAs in Phalombe were tested and received results at a health facility. Nkhotakota's coverage and follow-up rates were lower.

Figure 10: Community-level PMTCT Coverage (counseling and referral) Post Intervention (Source: Community MNH Register)



Importantly, the integration activity served as a catalytic strategy by motivating partners to understand the benefits of integration and employ similar approaches, for example:

- The Clinton HIV/AIDS Initiative incorporated the use of the hygiene kits as incentives to increase ANC attendance, male involvement, skilled birth attendance and mother-infant followup in their focus district Machinga;
- Two districts (Balaka and Chiradzulu) receiving funding from the Partnership of Maternal, Newborn, and Child Health (PMNCH) introduced the integrated community MNH package in selected health center catchment areas;
- BASICS is introducing a mother-infant pair followup register in Chikwawa district;

- MCHIP is scaling up integrated PQI standards to 12 hospitals and 12 health centers, integrated BEmONC training to 60 tutors, and integrated community MNH to 8 health center catchment areas; and
- Save the Children is scaling up the integrated community MNH package in 3 districts (Chitipa, Dowa, Thyolo), saturating the entire district.

WAY FORWARD

The examples presented here demonstrate various approaches used to address different gaps along the ideal continuum of PMTCT services. Most countries support integrated PMTCT services along an integrated continuum of care, but are unable to provide such services seamlessly for many different reasons. Lessons learned and recommendations drawn from the examples presented here include:

- More examples of PMTCT-HIV integration are needed to address Prong 2: prevention of unintended pregnancies amongst women living with HIV. Under the ACQUIRE project, an interesting effort was undertaken by the Ugandan Organization, TASO to integrate FP into ART clinics.³⁴ This project had promising results and at the same time revealed some biases amongst ART providers about FP use by people living with HIV/AIDS. This suggests that much remains to be done to ensure that women living with HIV have access to a broad range of FP methods to prevent unintended pregnancies. A project currently underway by ACCESS-FP to integrate PMTCT and FP in Tanzania, focusing on the postpartum period, should provide additional contributions for addressing this often neglected prong.
- To achieve an integrated, comprehensive PMTCT program funding should be provided for an integrated comprehensive program. Aligning vertical programs that are already underway is cumbersome and time consuming. In Malawi, multiple partners were involved, each with separate funding streams. The time it takes to coordinate among partners with different mandates and different operating structures reduces the time and resources available for program implementation.
- Malawi expended significant effort on developing an appropriate set of monitoring tools. To some extent, tools are specific to the country context; however, a standardized set of tools to monitor and evaluate the impact of integration activities that could be adapted to the country context would be helpful to move programs forward.
- Any intervention to strengthen the PMTCT continuum of care should be based on a careful analysis of prevailing gaps in existing services. Programs should strengthen the weakest link in the continuum and optimize resources based on where the greatest coverage could be achieved. In countries where only 10% of women deliver in a facility, using community health workers or other peer-to-peer approaches become essential.

³⁴ The Acquire Project, Research International – Kenya/Uganda. Evaluation of a Family Planning and Antiretroviral Therapy Integration Pilot in Mbale, Uganda E & R Study #13, September 2008

