



AMERICAN INTERNATIONAL HEALTH ALLIANCE

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**CAPACITY BUILDING TO PREVENT  
MOTHER-TO-CHILD TRANSMISSION OF HIV  
IN UKRAINE  
2005-2008**

**UPDATE TO THE FINAL REPORT**

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**December, 2008**

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## **Update on the Capacity Building to Prevent Mother-to-Child Transmission Project**

Building on a highly successful model PMTCT-Plus program in Odessa funded by USAID and utilizing substantial local training capacity established in association with that effort, the USAID-funded **Capacity Building to Prevent Mother-to-Child Transmission Project** worked with the Ukrainian Ministry of Health (MOH) and departments of health administration of eight key oblasts in a 30-month human and organizational capacity building effort that resulted in the reduction of HIV transmission to infants. The project was designed to contribute to USAID's overall goal of providing comprehensive PMTCT services to 90% of affected women in each oblast by 2008. When the project ended in the fall of 2007, a preliminary estimation of the MTCT rate in the Phase 1 PMTCT Group, conducted in October 2007, demonstrated an average decrease of 75% compared to the Phase 1 baseline group (6.1% and 18.5% respectively). Given the eighteen-month delay in officially confirming HIV status of infants, however, AIHA could only report the final outcomes of the project eight months later in 2008.

The final report for the project was completed in the fall of 2007 and submitted to USAID in November of that year. At the time of the preparation of the close-out report, AIHA reported interim indicators, and continued to track those data for another eight months in order to definitively conclude that the project had achieved its ultimate outcome indicators of significantly reducing transmission rates in the target sites. Now that eighteen-months have elapsed, this update report provides final data on the outcomes of the project.

**The final data show a decrease of the MTCT rate from 21% to 6%. This means that the investment in a comprehensive PMTCT program resulted in 15% of cases of HIV/AIDS were averted among babies exposed to HIV/AIDS.**

### **Background**

**The Capacity Building to Prevent Mother-to-Child Transmission Project** project involved thirty-two health care institutions and community-based NGO's in the eight oblasts. The project was implemented in close cooperation with other governmental and nongovernmental organizations, United States Government (USG)-funded PMTCT projects and other international agencies.

The project's human and organizational capacity building included:

- Technical assistance in the development of comprehensive community-based PMTCT operational plans for each project site that effectively organized the activities of all key stakeholders including the non-governmental sector and;
- Support for the development of model programs and methodological centers of excellence in each oblast that incorporated quality improvement processes and evidence-based practices, reached large numbers of women directly, and in turn served as replication and training sites for the development of affiliated programs in underserved areas.

The project's related workforce development included the following components:

- On-site knowledge-based training utilizing the WHO/USG PMTCT Generic Training Package (GTP) adapted for Ukraine (AIHA with USAID E&E Bureau funding) and endorsed by the Ministry of Health (MOH);
- Clinical skills-based training at the South Ukrainian AIDS Education Training Center (SUAEC) for targeted caregivers from each site using curricula developed in Odessa for region-wide replication;
- PMTCT organizational workshops for decision-makers from each of the target oblasts in Odessa;
- Several Training-of-Trainers (ToT) using the adapted Ukrainian version of the WHO/USG PMTCT GTP for new oblast faculty to help insure sustainability of training programs in each oblast.

Project implementation activities were staged in two phases of four target oblasts each. Project implementation activities for Phase 2 oblasts took into account challenges and lessons learned during Phase 1.

Through the AIHA project, the target sites developed new operational frameworks to address the problem of PMTCT in a comprehensive, multisectoral manner, gained new knowledge and skills, developed and implemented a case management system to monitor and improve quality of care delivery, and trained healthcare professionals. The project created local capacities that will not only serve as a foundation for continued improvement in the target areas, but also as a model that can be utilized and disseminated across other regions in Ukraine.

Specifically, this translated into:

- Strengthened ability of the Oblast Health Administrations to conduct PMTCT program assessments, establish task forces, and develop strategies and annual work plans.
- An expanded pool of trained healthcare providers, managers, and allied health staff providing quality, evidence-based PMTCT and related services. The pool was expanded to a total of 303 project caregivers who participated in 15 trainings.
- Strengthened the capacity-building infrastructure through project site support which established the Methodological Centers of PMTCT Excellence in each oblast.
- Improved early identification and referral of HIV-infected pregnant women (45% of HIV infected women were registered for prenatal care before the second trimester in the project PMTCT groups compare to 27% in baseline groups).
- Improved system of prenatal care to HIV+ women; decreased risk of MTCT HIV during labor and delivery; and improved post-natal care for infants and their HIV-infected mothers (84% of HIV infected women and 96% newborns received antiretroviral (ARV) prophylaxis in PMTCT groups compare to respectively 67% and 50% in baseline groups).
- Increased number of HIV-infected pregnant women receiving key non-medical services from non-governmental organizations (NGOs) (70% of HIV-infected pregnant women were referred to NGOs to receive non-medical care and support in PMTCT project groups compared to 7% in baseline groups).
- Wide dissemination of PMTCT results/lessons learned and coordination with broader maternal-and-child-health (MCH) and HIV/AIDS programs through regular meetings both locally and nationally.

## **Final Data**

### **Summary of PMTCT main clinical indicators improvement in Ukraine PMTCT project sites (as of June 30, 2008):**

- Early identification and referral of HIV+ pregnant women improved (45% of HIV infected women were registered for prenatal care before the second trimester in PMTCT groups compared to 27% in baseline groups).
- The system of prenatal care to HIV+ women; labor & delivery practices; and post-natal care for infants and their HIV-infected mothers improved (84% of HIV infected women and 96% newborns received ARV prophylaxis in PMTCT groups compared to respectively 67% and 50% in baseline groups).
- The number of HIV-infected pregnant women receiving key non-medical services from NGOs increased (70% of HIV-infected pregnant women were referred to NGOs to receive non-medical care and support in PMTCT project groups compared to 7% in baseline groups).
- PMTCT results/lessons learned were disseminated and coordination with broader MCH and HIV/AIDS programs was implemented through regular meetings.
- The MTCT rate decreased from 21% in baseline group to 6% in the PMTCT group as a result of PMTCT interventions implemented during the project.

<b>Main Indicators</b>	<b>Baseline Group (Average)</b>	<b>PMTCT Group (Average)</b>
HIV test result known before delivery	99%	99%
Prenatal registration during 1st trimester	27%	45%
ARV prophylaxis for HIV+ pregnant women	67%	84%
ARV prophylaxis for newborn	50%	96%
C-section	11%	37%
Replacement feeding	95%	96%
Family planning counseling	46%	98%
Referral to NGO/follow up care	7%	70%
MTCT rate	21%	6%

### **Detailed analysis of PMTCT main clinical indicators and trends in improvement at individual project sites:**

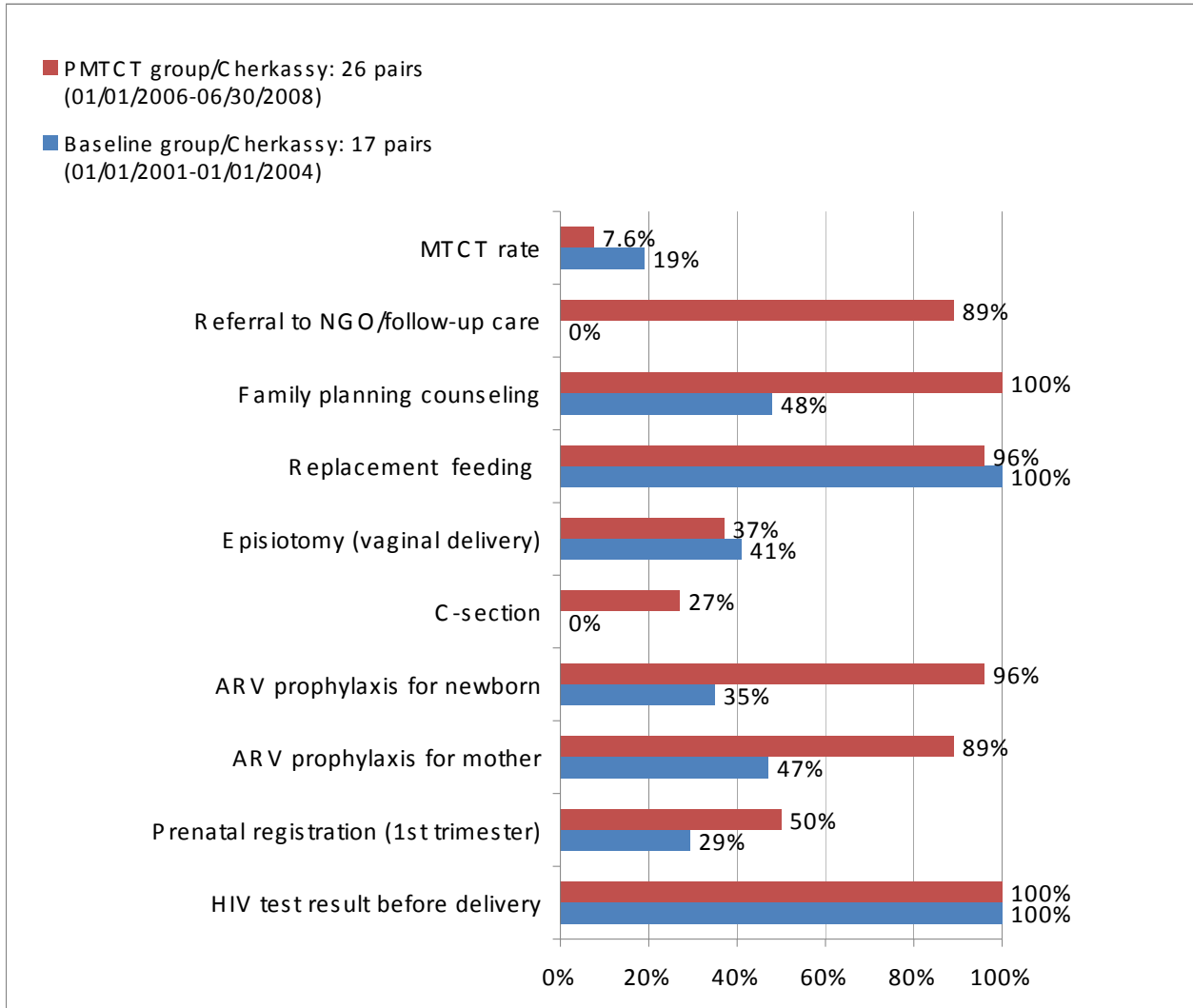
#### **PHASE I PROJECT SITES**

##### **Cherkassy:**

- Increase of early prenatal registration of HIV-infected pregnant women (from 29% in baseline group to 50% in project group);
- Increase to 89% of ARV prophylaxis for mothers (compared to 47% in baseline group);
- Increase to 96% of ARV prophylaxis for newborns (compared to 35% in baseline group);
- Increase in elective C-section from zero (baseline group) to 27% in project group;

- Increase in family planning counseling from 48% in baseline group to 100% in project group;
- Increase in referrals to NGO/follow up care from zero to 89% in project group.
- MTCT rate decreased from 19% (baseline group) to 7.6% in project group.

Clinical improvements demonstrated in the chart below:

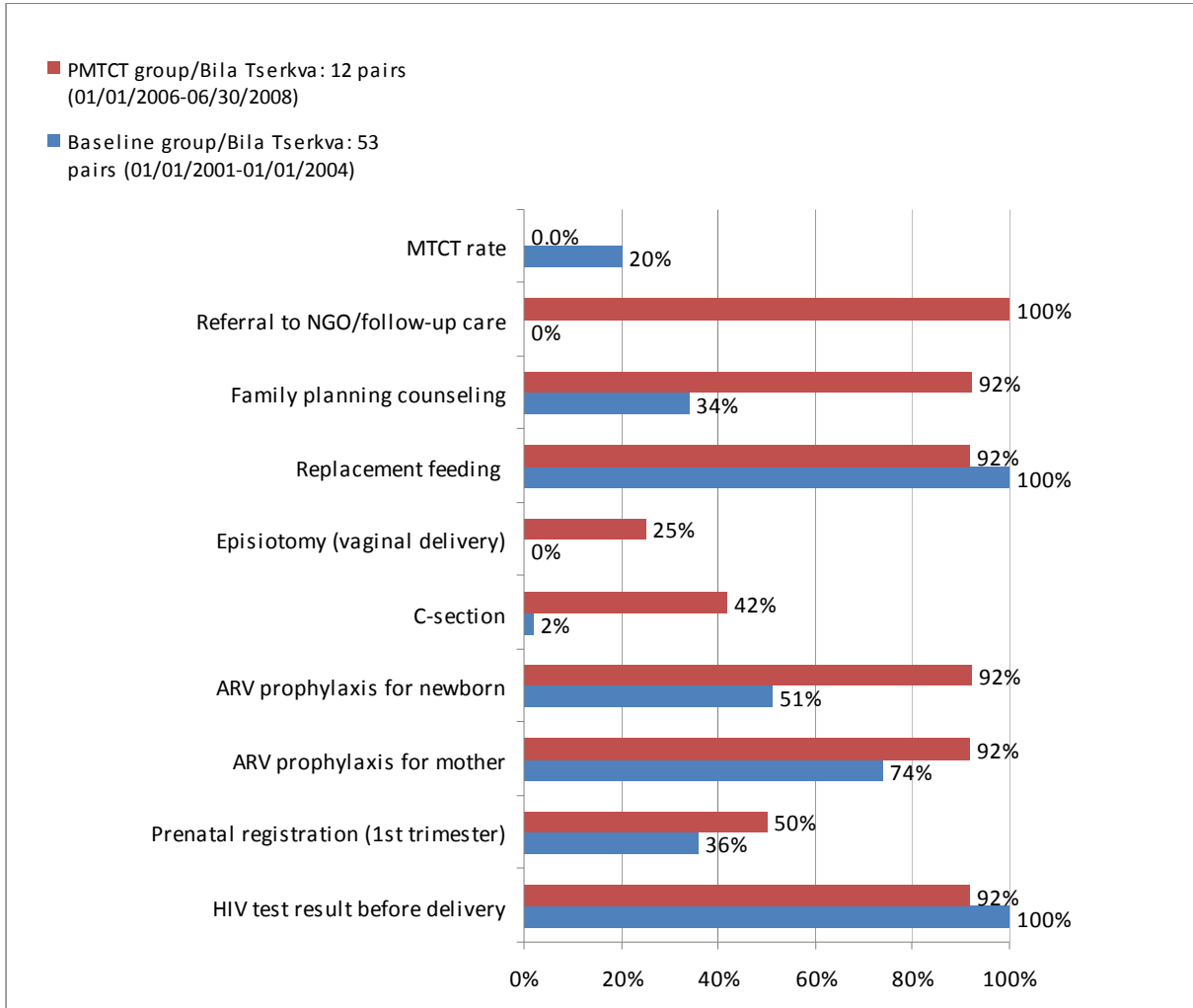


**Bila Tserkva:**

- Increase of early prenatal registration of HIV-infected pregnant women (from 36% in baseline group to 50% on project group);
- Increase of ARV prophylaxis for mothers (from 74% in baseline group to 92% in project group);
- ARV prophylaxis for newborns increased from 51% in baseline group to 92% in project group;
- Elective C-section increased from 2% to 42% in project group;
- Data demonstrated further increase in family planning counseling from 34% in baseline group to 92% in project group;

- Increase of referral to NGO/follow up care from zero to 100% in project group.
- MTCT rate decreased from 20% (baseline group) to zero in project group

Clinical improvements demonstrated in the chart below:

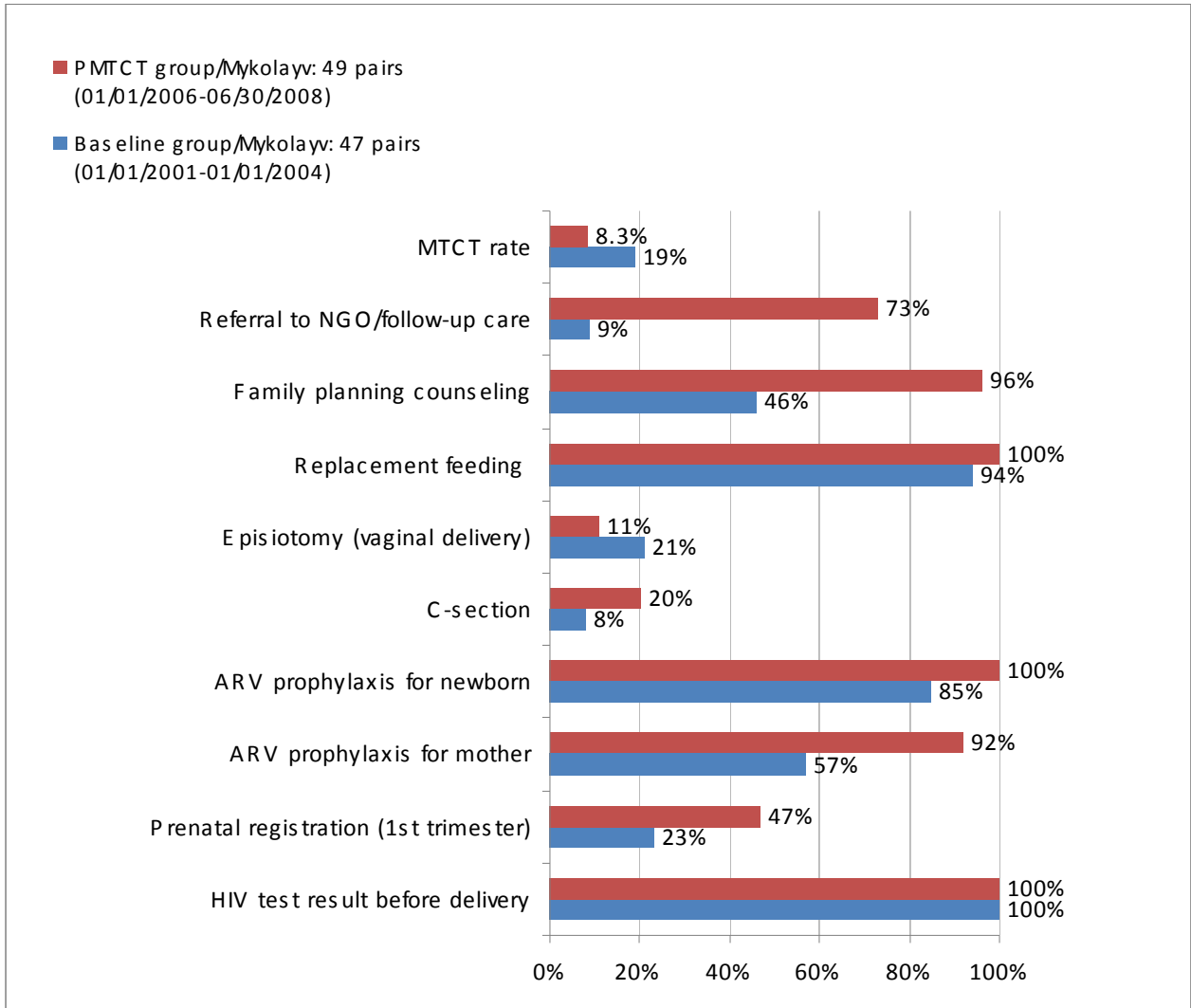


**Mykolayv:**

- Increase of early prenatal registration of HIV-infected pregnant women (from 23% in baseline group to 47% in project group);
- Increase of ARV prophylaxis for mothers (from 57% in baseline group to 92% in project group);
- ARV prophylaxis for newborns increased from 85% in baseline group to 100% in project group;
- Elective C-section further increased from 8% to 20%;
- Data shows increase in family planning counseling from 46% in baseline group to 96% in project group;

- Continuous increase of referrals to NGO/follow up care from 9% to 73% in project group.
- MTCT rate decreased from 19% (baseline group) to 8.3% in project group.

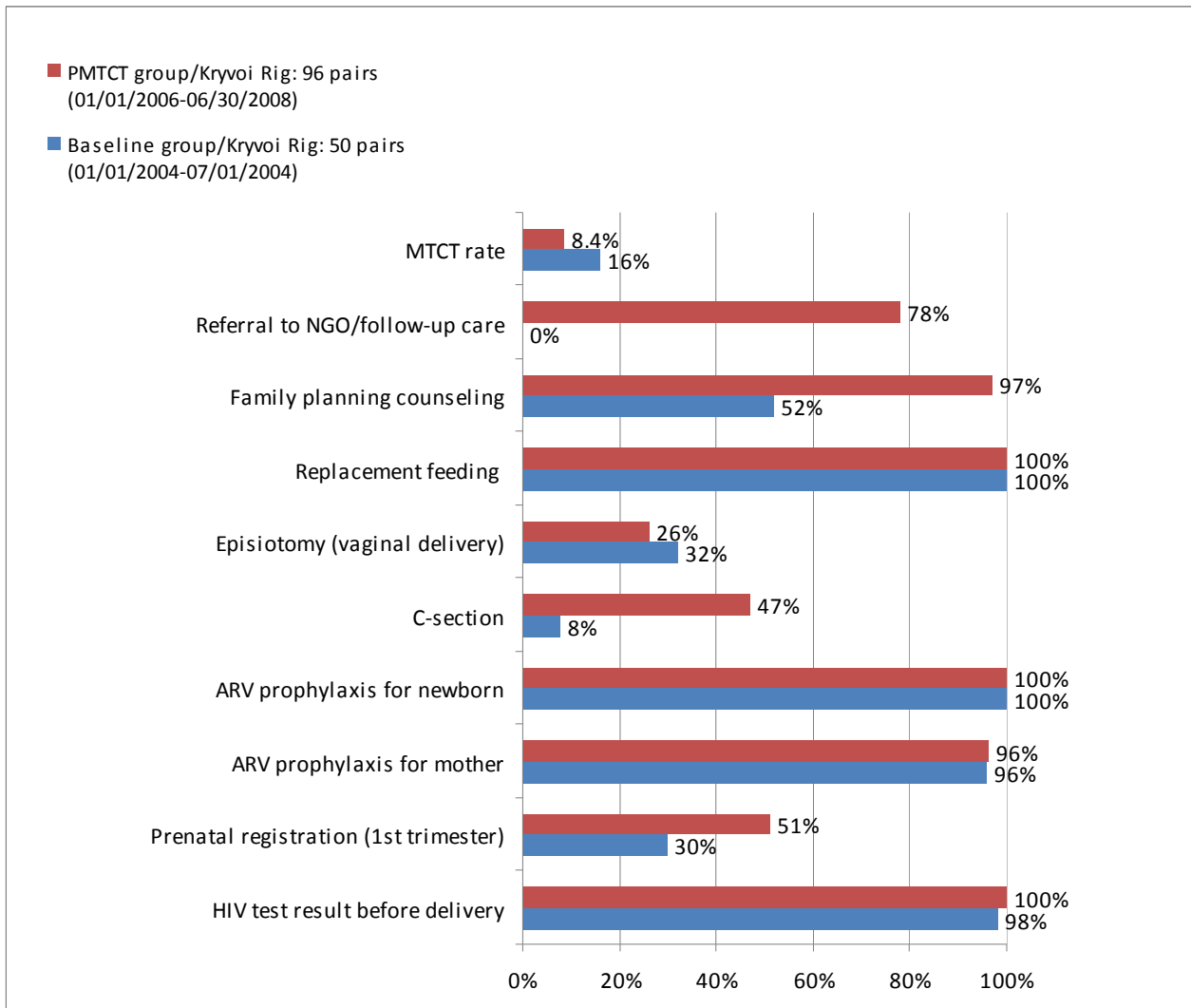
Clinical improvements demonstrated in the chart below:



**Kryvoi Rig:**

- Increase of early prenatal registration of HIV-infected pregnant women (from 30% in baseline group to 51% on project group);
- Stable (100%) provision of ARV prophylaxis for newborns;
- ARV prophylaxis for mothers in baseline group and project group is the same (96%);
- Increase of elective C-section from 8% to 47% in project group;
- Increase of family planning counseling from 52% in baseline group to 97% in project group;
- Continuous increase of referrals to NGO/follow up care from zero to 78% in project group.
- MTCT rate decreased from 16% (baseline group) to 8.4% in project group.

Clinical improvements demonstrated in the chart below:



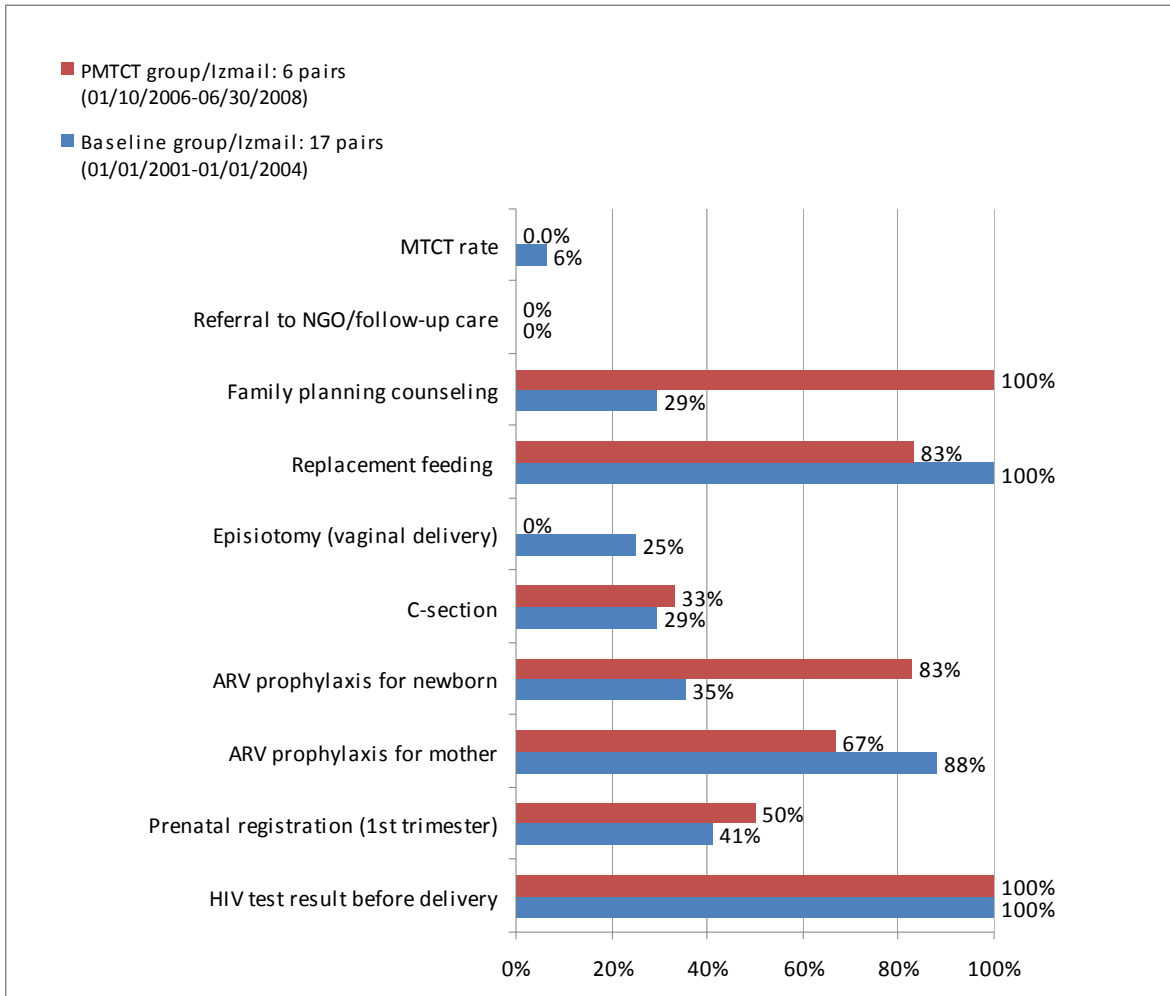
## PHASE 2 PROJECT SITES

### Izmail:

- Increase in early prenatal registration of HIV+ pregnant women (from 41% in baseline group to 50% in project group);
- Case management analysis, using the installed PMTCT database tool, helped to analyze the decrease in ARV prophylaxis for mothers (67% in project group compare to 88% in baseline group), which was due to the fact that two women were diagnosed with HIV too late in their pregnancy to receive ARV drugs.
- Increase to 83% of ARV prophylaxis for newborns (compared to 35% in baseline group);
- Increase in elective C-sections from 29% to 33% in project group;
- Increase in family planning counseling from 29% in baseline group to 100% in project group.

- MTCT rate decreased from 6% (baseline group) to zero in project group.

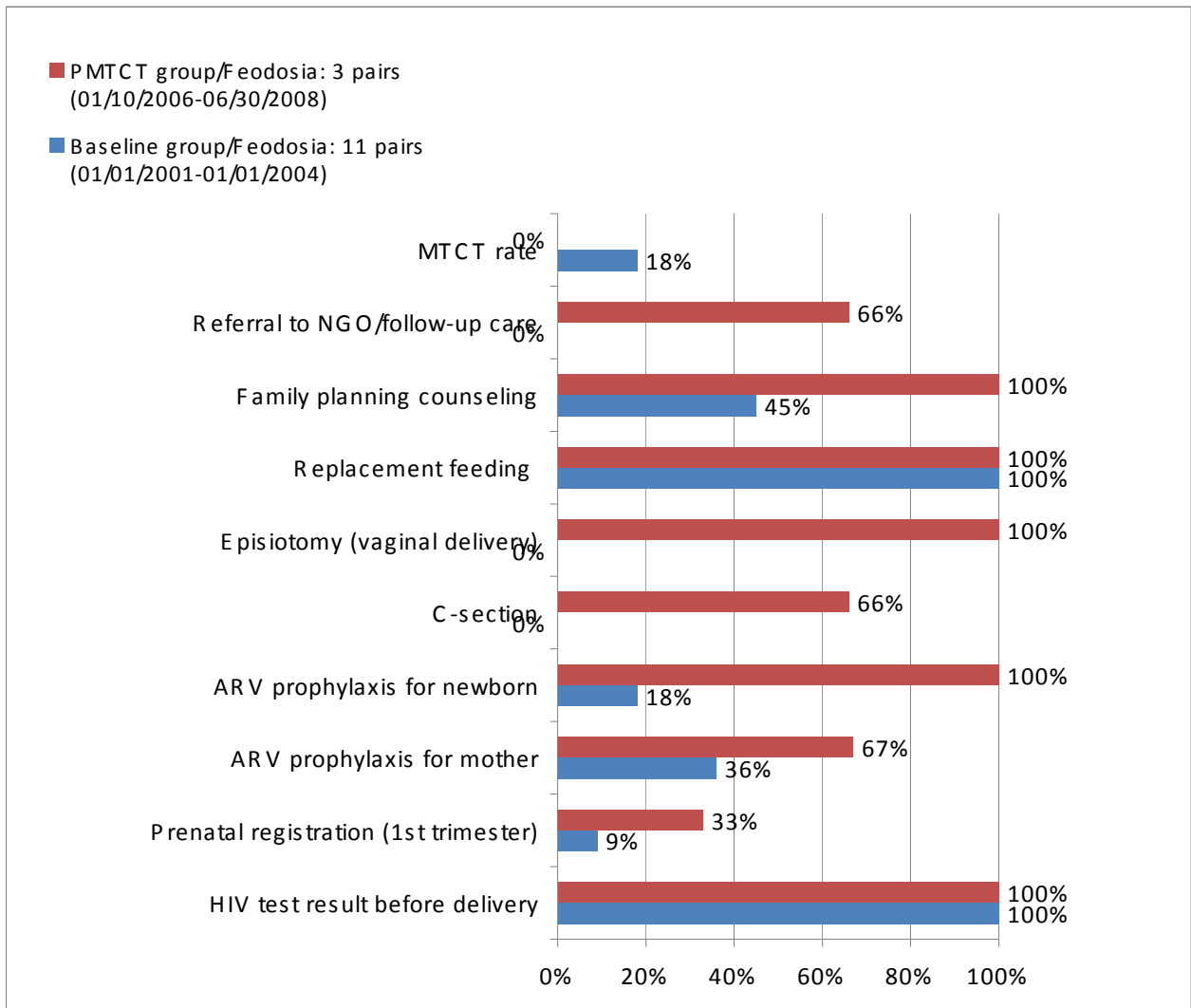
Clinical improvements demonstrated in the chart below:



**Feodosia:**

- Increase in early prenatal registration of HIV-infected pregnant women (from 9% in baseline group to 33% in project group);
- Increase in ARV prophylaxis for mothers (from 36% in baseline group to 67% in project group);
- ARV prophylaxis for newborns increased from 18% in baseline group to 100% in the project group.
- Elective C-sections further increased from zero to 66%.
- Increase in family planning counseling from 45% in baseline group to 100% in project group;
- Increase in referrals to NGO/follow up care from zero to 66% in the project group.
- MTCT rate decreased from 18% (baseline group) to zero in project group.

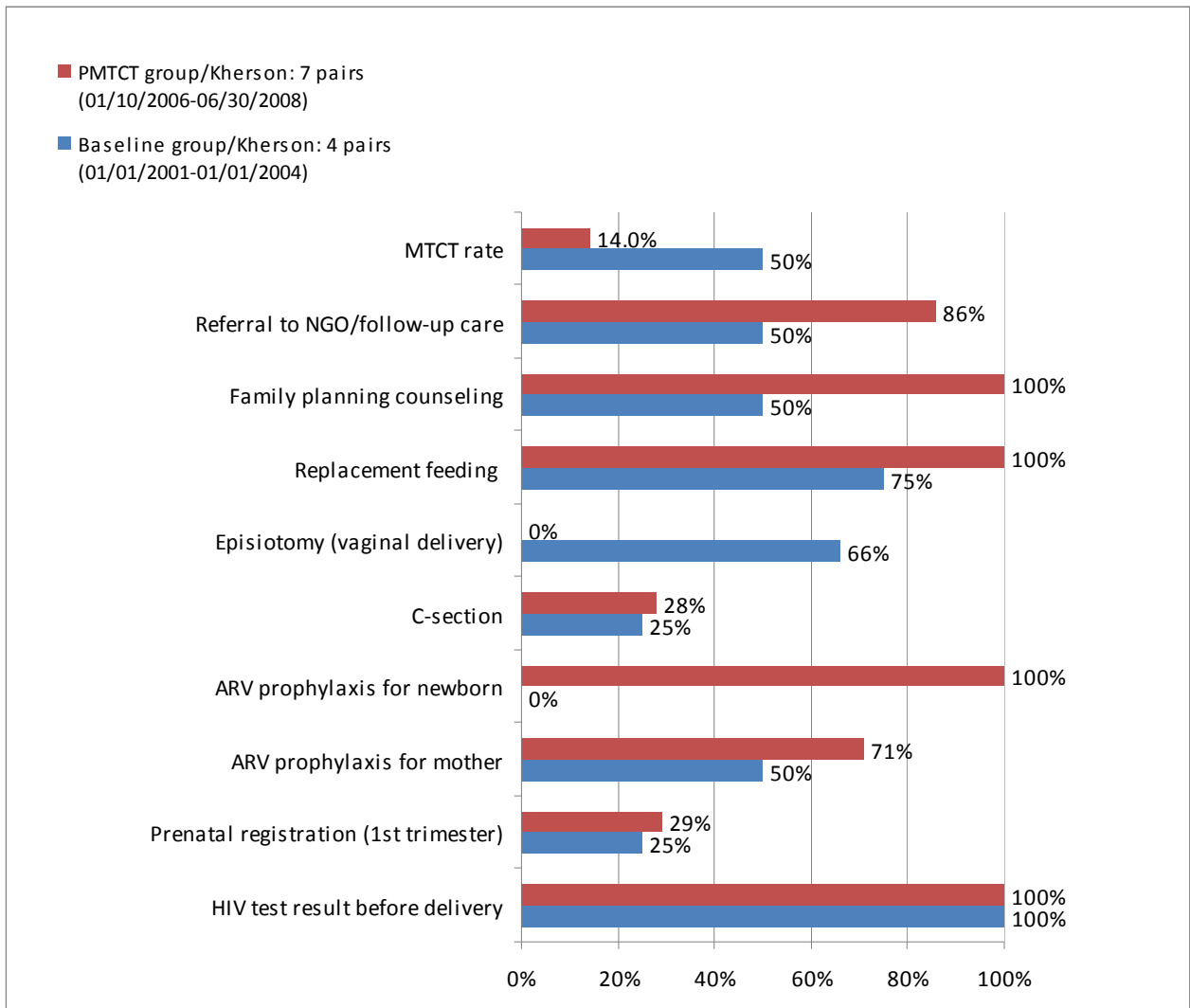
Clinical improvements demonstrated in the chart below:



**Kherson:**

- Increase in early prenatal registration of HIV-infected pregnant women (from 25% in baseline group to 29% on project group);
- Increase in provision of ARV prophylaxis for newborns from zero to 100%;
- ARV prophylaxis for mother in project group increased to 71% compared to 50% in baseline group;
- Increase of elective C-sections from 25% to 28% in project group;
- Increase in family planning counseling from 50% in baseline group to 100% in project group;
- Increase of referrals to NGO/follow up care from 50% to 86% in project group.
- MTCT rate decreased from 50% (baseline group) to 14% in project group.

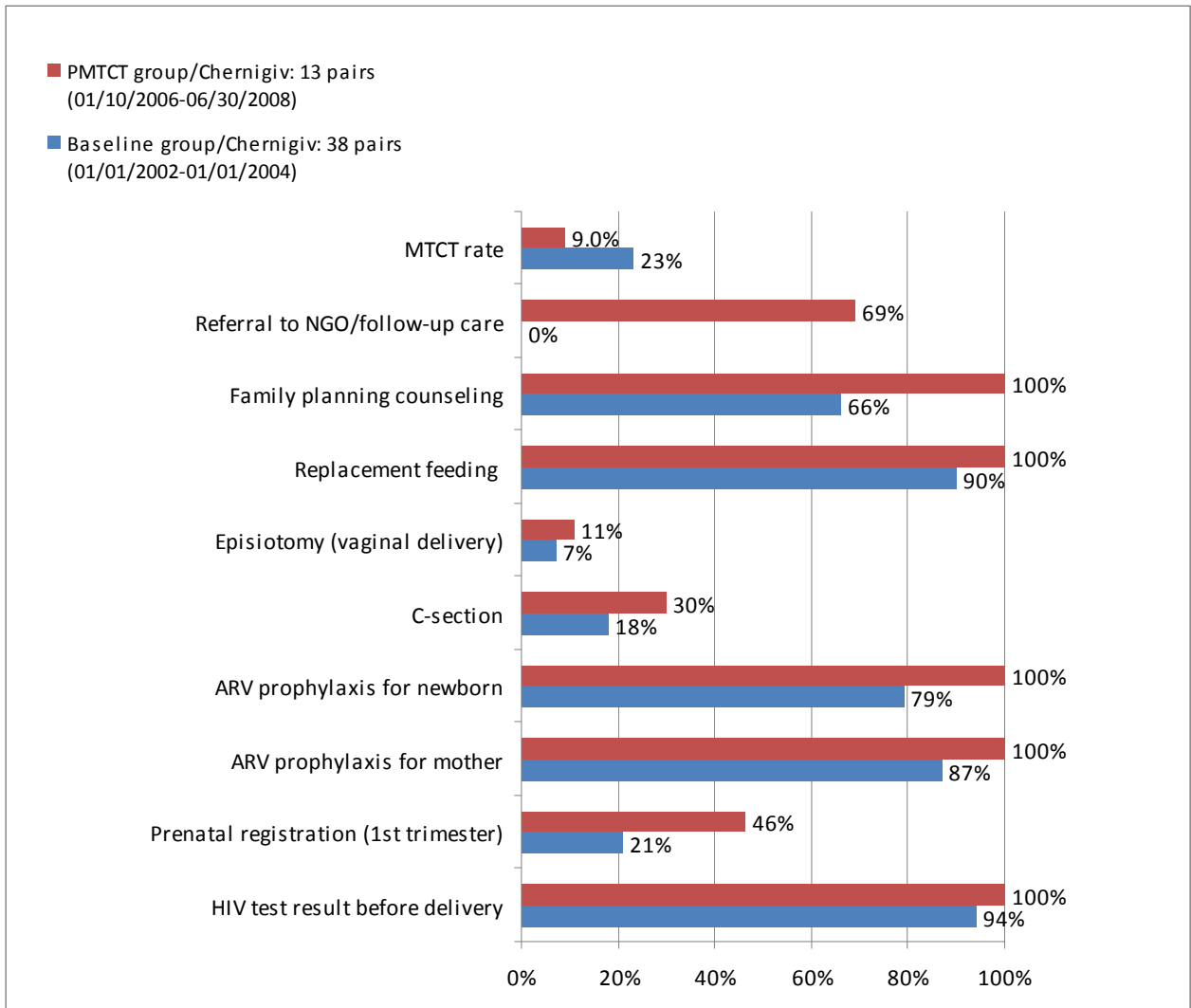
Clinical improvements demonstrated in the chart below:



**Chernigiv:**

- Increase in early prenatal registration of HIV-infected pregnant women (from 21% in baseline group to 46% in project group);
- Increase in ARV prophylaxis for mothers (100% in project group compared to 87% in baseline group);
- 100% of ARV prophylaxis for newborns (compared to 79% in baseline group);
- Increase in elective C-sections from 18% to 30% in project group;
- Increase in family planning counseling from 66% in baseline group to 100% in project group;
- Referrals to NGO/follow up care increased from zero to 69%.
- MTCT rate decreased from 23% (baseline group) to 9% in project group.

Clinical improvements demonstrated in the chart below:



## **Conclusion**

While many challenges and health care system obstacles remain in Ukraine to implement a comprehensive PMTCT program across the country, the USAID-funded AIHA project developed capacities in eight key Ukrainian regions to address human and organizational needs related to providing high-quality PMTCT services to women with HIV and babies exposed to HIV. As a result, Ukrainian caregivers in these oblasts are well positioned to sustain their capacities and seek out new opportunities to improve care to women with HIV and their children in the coming years. The eight oblasts are also well positioned to serve as both models and resources for the rest of Ukraine. Their success in a relatively short period of time across a significant number and diversity of sites sets an important benchmark for the country as a whole. By working closely with the Ukrainian MOH and the National AIDS Center, the project has both demonstrated the ability and developed the capacity for Ukraine to significantly reduce MTCT rates. Whether the tested approaches, organizational systems and training programs developed under the project are fully disseminated and scaled up nationally is dependent upon the commitment of the Ukrainian government and the donor community. The project also has important implications for other

countries in the NIS region which face similar HIV/AIDS related challenges and have common health system structures. We urge Ministries of Health in those countries and the international community to carefully consider the results of this project and seek the adoption and replication of the methods employed as expeditiously as possible.

The final performance report and this update are a comprehensive overview of the AIHA PMTCT project in Ukraine between 2005 and 2008. Additional details and information can be found at [www.aiha.com](http://www.aiha.com).