



**Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership  
Cooperative Agreement No. 690-A-00-04-00319-00  
Quarterly Report for October 1 – December 31, 2007  
Submitted by Family Health International (FHI)  
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## **1. EXECUTIVE SUMMARY**

The Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership works with the Ministry of Health (MOH), the Provincial Health Offices (PHOs), and District Health Management Teams (DHMTs) to strengthen and expand HIV/AIDS related services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. ZPCT supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral therapy (ART) by implementing technical, program and management strategies to initiate, improve and scale-up prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART.

This quarter, ZPCT supported implementation of HIV/AIDS services in 216 health facilities in 33 districts in the five target provinces. Many of these facilities began reporting data during this quarter and the rest will start reporting in the next quarter. Key activities and achievements for this reporting period include:

- CT services are ongoing in 170 out of 216 planned health facilities, with 32,875 individuals receiving CT services in these facilities this quarter.
- PMTCT services were provided in 159 out of 199 planned ZPCT-supported facilities. 24,419 women were provided with PMTCT services (including CT), and 2,538 were provided with a complete course of ARV prophylaxis.
- Ongoing technical assistance was provided to expand and improve clinical palliative care services in 144 out of 216 planned health facilities. 64,852 individuals received palliative care in ZPCT-supported health facilities during this quarter.
- ART services were available in 30 districts supported by ZPCT. A total of 5,916 new clients (including 447 children) were initiated on antiretroviral therapy through 73 (including 31 outreach sites) out of 96 planned ART centers this quarter. Two of these sites (Solwezi Urban and St. Dorothy) report their results through Solwezi General Hospital and are not included as independent sites in the indicator reporting matrix. By the end of this reporting period, 47,251 individuals were receiving antiretroviral therapy at ZPCT-supported sites; of these, 3,192 were children.
- The following technical training courses were conducted this quarter:
  - 19 HCWs were trained in a two-week course in basic CT.
  - 30 HCWs were trained in child counseling with funding from the Clinton Foundation HIV/AIDS Initiative (CHAI).
  - 12 HCWs were trained in counseling supervision by Kara Counseling and Training Trust.
  - 70 HCWs were trained in three two-week courses in provision of PMTCT services.
  - 24 volunteers were trained in PMTCT for community counselors
  - 42 HCWs were trained in stigma reduction
  - 56 HCWs were trained in ART and Management of Opportunistic Infections (OI) through two in-house trainings and 25 HCWs received refresher training in this technical area, all in Copperbelt Province.
  - 30 HCWs from 22 health facilities were trained in Management of Pediatric of ART/OIs across the five target provinces.
  - 42 trained adherence support workers (ASWs) received a two-day refresher training and 5 trained lay counselors were trained in HIV testing.

- 28 pharmacy and laboratory staff from Central, Northern and Luapula provinces were trained in commodity management. Three HCWs and one ZPCT staff were trained in HIV DNA PCR techniques at the University Teaching Hospital.
- 302 HCWs were trained in dry blood spot (DBS) collection, storage and transport, with funding from CHAI.
- QA/QI tools have been adapted for use in ZPCT-supported sites and are administered on a quarterly basis to assess, monitor and improve the quality of HIV services. The tools are used to assess the extent to which services are consistent with public health policy and guidelines for the treatment and prevention of HIV disease and related opportunistic infections. Data from implementation of the tools are being entered and analyzed using the CSPro software package.
- District-wide referral networks are fully functional in 15 districts and have been initiated in six additional districts. Initiation of referral network activities is planned in all ZPCT-supported districts during this workplan period.
- ZPCT has identified and worked with 11 community groups to implement community purchase orders to enable the groups to conduct mobilization activities in communities surrounding ZPCT-supported facilities. Community mobilization activities are underway in all five ZPCT-supported provinces.
- ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the central level. ZPCT actively participates on eight national technical working groups, as well as several ad-hoc implementation groups.
- The COP 07 annual work plan was approved by USAID.

Results for the quarter are summarized in the following table:

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to December 31, 2007)						
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Oct 07 to 31 Dec 07)			Achievements (1 Oct 07 to 31 Dec 07)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 31 Dec 07)
	TARGET	FEMALE	MALE	TOTAL			
<b>CT</b>							
Service outlets providing CT	216						170
Persons trained in CT	680			61	61	9%	1,035
Persons receive CT services	54,000	17,303	15,572	32,875	32,875	61%	195,308
<b>PMTCT</b>							
Service outlets providing PMTCT	199						159
Persons trained in PMTCT	400			94	94	24%	554
Pregnant women provided with PMTCT services, including CT	84,000	24,419		24,419	24,419	29%	141,981
Pregnant women provided with a complete course of ART prophylaxis	15,750	2,538		2,538	2,538	16%	13,218
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services	216						144
Service outlets providing general HIV-related palliative care	216						144
Persons provided with OI management and/or prophylaxis	66,690	39,285	25,567	64,852	64,852	97%	71,917
Persons provided with general HIV-related palliative care	66,690	39,285	25,567	64,852	64,852	97%	71,917
Persons trained to provide general HIV- related care	200			81	81	41%	744
<b>Treatment</b>							
Service outlets providing ART services	96						71
Health workers trained in ART	200			81	81	41%	744
New clients receiving ART	15,600	3,488	2,428	5,916	5,916	38%	45,535
Total clients receiving ART	51,300	28,160	19,091	47,251	47,251	92%	47,251
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			30	30	20%	394
New pediatric clients receiving ART	1,560	215	232	447	447	29%	3,198
Total pediatric clients receiving ART	5,130	1,597	1,595	3,192	3,192	62%	3,192
<b>TB and Care</b>							
TB infected clients receiving CT services	7,000	417	508	925	925	13%	7,135
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	4,300	530	640	1,170	1,170	27%	4,685

## 2. INTRODUCTION

The Zambia Prevention, Care and Treatment (ZPCT) Partnership works with the Ministry of Health (MOH), the Provincial Health Offices (PHOs), and District Health Management Teams (DHMTs) to strengthen and expand HIV/AIDS related services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. ZPCT supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral treatment (ART), by implementing program and management strategies to initiate, improve and scale up prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART programs in all ZPCT-supported districts in these five provinces. ZPCT collaborates with the PHOs and DHMTs to strengthen service delivery at public sector facilities and to strengthen networks for referral between these and other public sector health services and communities. ZPCT also collaborates actively with other donor agencies and partner organizations to build on, rather than duplicate, ongoing HIV/AIDS projects.

ZPCT provides support at national, provincial, district and community levels utilizing health clinics, hospitals and community service delivery programs. At the national level, the program offers technical assistance and coordination to the MOH and the National AIDS Council (NAC), as requested. At the provincial level, the program supports the GRZ through technical assistance and coordination in five provinces, and at the district level ZPCT assists the DHMTs and selected health facilities to provide, improve, and expand HIV/AIDS services. At the community level activities include demand creation for services and strengthening linkages between facilities and communities.

ZPCT is flexible enough to respond to requests from the MOH as needs arise. Furthermore, all activities and related monitoring and evaluation processes and indicators are designed to meet USAID and the President's Emergency Plan for AIDS Relief requirements, and to be compatible with established government health management information systems (HMIS).

## 3. OBJECTIVES

The specific objectives of the ZPCT Partnership are to:

- Increase access to and use of HIV counseling and testing (CT)
- Increase access to and use of interventions for preventing mother-to-child transmission (PMTCT)
- Increase access to and strengthen delivery of clinical care for HIV/AIDS, including diagnosis, prevention and management of opportunistic infections (OIs), and other HIV related conditions and symptoms
- Increase access to and strengthen delivery of ART services at the provincial and district levels

These objectives will be met within the framework of the GRZ plan for scale up of ART programs and in full partnership with the MOH at all levels.

## 4. ACTIVITIES AND ACCOMPLISHMENTS FOR THE QUARTER

### 4.1. Program Management

#### 4.1.1. ZPCT Partners

Management Sciences for Health (MSH), the partner responsible for laboratory and pharmaceutical assistance, continues to provide technical leadership within ZPCT and nationally in these areas. This quarter, the partner agreement with MSH was amended through September 30, 2008 adding additional funds to continue providing technical support in laboratory and pharmacy services.

Churches Health Association of Zambia (CHAZ) continues to support seven mission health facilities: St. Kalemba Health Center in Kabompo District, Luwi Health Center in Mwinilunga District and Chitokoloki Mission Hospital in Zambezi District (North Western Province), Chilubula Mission Health Center in Kasama District (Northern Province), Mambilima Mission Health Center in Mwense District, Lubwe Mission Hospital in Samfya District and St. Paul's Mission Hospital in Nchelenge District (Luapula Province).

The CHAZ Program Officer visited three ZPCT- CHAZ supported facilities (Chilubula, Mambilima and Lubwe) to provide support and monitor implementation progress. Additional renovations identified in the

recent subagreement amendment were initiated at Mambilima and Lubwe. Equipment and furniture procured during the quarter were delivered to respective health facilities. Procurement of pending equipment and furniture will be completed in the next quarter. Renovations at Chilubula, St. Kalemba, Chitokoloki and St. Paul's will commence next quarter.

ZPCT conducted several meetings with CHAZ senior management to review activity progress and discuss issues. Key issues discussed include:

- Recruitment of health facility staff: CHAZ will develop a salary package to hire health care workers as CHAZ employees, as outlined in the subagreement.
- Recruitment of data entry clerks: Under the current subagreement, ZPCT is to support salaries for six data entry clerks (DECs). CHAZ has already recruited DECs for Chilubula, St. Paul's, and Chitokoloki, who are supporting ART data collection with other funds. These DECs will provide data to ZPCT. CHAZ will complete recruitment of DECs for Mambilima, St. Kalemba and Luwi in the next quarter.
- CHAZ Support to Ndola Catholic Diocese: CHAZ has plans to support ART services at the Ndola Catholic Diocese home-based care centers using Global Fund Round four funds. ZPCT will transition ongoing ART outreach activities at Ndola Catholic Diocese sites to CHAZ in the upcoming months.
- ZPCT support to Mungwi Baptist Rural Health Center: As part of ZPCT's expansion to 216 health facilities, ZPCT and the Mungwi District Health Services identified Mungwi Baptist Rural Health Center in Mungwi District, Northern Province for support. CHAZ also has plans to support ART services at this facility with other funds. ZPCT and CHAZ will conduct a joint trip next quarter to discuss the issue with Mungwi District Health Office and Mungwi RHC management.

Kara Counseling and Training Trust (KCTT) is responsible for training CT counselors and counselor supervisors at ZPCT-supported health facilities at district level. Under the current contract, KCTT will organize and facilitate counselor supervision trainings in Copperbelt and Luapula Provinces, and three basic CT trainings in Copperbelt province. This quarter, KCTT conducted one basic CT training in Ndola training 19 participants. The remaining trainings, as per the contract, will be conducted next quarter.

Expanded Church Response (ECR) was working through church communities to increase knowledge and demand for HIV/AIDS services. ECR provided technical support to the church coordinating committees around Makululu and Mahatma Gandhi Health Centers in Kabwe, and around Chibefwe and Chalata Health Centers in Mkushi (Central Province). In Chingola, ECR implemented activities for communities around Chiwempala, Chawama and Kabundi East Clinics.

During this reporting period ZPCT worked with ECR to close out the subagreement that ended on September 30, 2007. ECR submitted all quarterly reports, a final program report, and all financial reports. The financial reconciliation will be completed in the next quarter.

#### **4.1.2. Facility Support**

##### Recipient Agreements

At the end of this quarter, ZPCT was working with MOH staff to improve HIV/AIDS services in 216 facilities in 33 districts through 44 recipient agreements.

##### Renovations and Environmental Site Assessments

ZPCT is supporting renovations at 180 health facilities out of a total of 216 supported facilities. Currently, 157 health facilities have ongoing renovations - this includes 119 health facilities that ZPCT began to support this quarter, as well as newly identified renovations at health facilities that ZPCT has been supporting. Bills of quantities and tender documents have been developed for 129 health facilities, with the remaining BOQs to completed next quarter.

During this quarter, renovations were completed in 16 health facilities. Renovation contracts were signed for 17 health facilities. ZPCT provincial office staff continue to work closely with the DHMTs and facility management in the vendor selection process as well as ongoing monitoring of refurbishments. As renovations are completed, certification of quality and completeness of works is an ongoing follow-up activity by the newly hired ZPCT architect in collaboration with the relevant provincial Public Works and Supply Department.

ZPCT has continued to carry out Environmental Site Assessments (ESAs) in facilities undergoing renovations funded by ZPCT, as per USAID guidelines. 71 ESAs have been completed to date.

#### Rural Refurbishment

In addition to renovations at health facilities, ZPCT will identify and renovate staff housing to increase the quality of working and living conditions of health care workers. This activity will contribute to addressing the human resources crisis in Zambia by enhancing staff retention in the most remote, rural areas of Northern and North Western provinces. This quarter, ZPCT has begun discussions with the respective PHOs to plan this activity. An in-depth assessment in both target provinces is planned for next quarter.

#### Procurement

During this quarter, all procurement orders for newly identified equipment under recipient agreements and amendments were placed.

#### Training

As part of the site preparation that ZPCT conducted jointly with the PHOs, DHMTs and facilities, training needs were determined for each facility. Training for facilities is planned and participants are selected in consultation with the PHOs, DHMTs, and facility management. Maintaining an adequate number of trained staff in the face of frequent staff transfers is an ongoing challenge in all districts.

A recent communication from the U.S. Embassy outlined the training per diems we are allowed to pay for MOH staff. These per diems are in line with the usual FHI rates. The memo also stated that USG supported programs are not allowed to provide facilitation fees to MOH staff. This has decreased the rate of training since many of the MOH staff are not willing to conduct training without the facilitation allowance.

Funding for training is included in the recipient agreement budgets finalized this quarter, along with approximate numbers of staff to be trained. This is a step ZPCT is taking to decentralize trainings to the DHMTs and hospital management, allowing DHMTs to incorporate ZPCT-support for trainings within their larger district plans. The PHOs will play an active role in working with the districts in planning and implementation of trainings.

During this quarter staff from ZPCT-supported health facilities attended courses in CT (19 HCWs), counseling supervision (12 HCWs), PMTCT (70 HCWs), ART/OI (56 HCWs), pediatric ART/OI (30 HCWs), ART/OI refresher (25 HCWs), stigma reduction TOT (42 HCWs), ART commodity management (28 HCWs) and HIV DNA PCR techniques 4 HCWs). In addition, ZPCT trained 24 community volunteers in PMTCT counseling. Five trained lay counselors were trained in HIV testing and 42 trained adherence support workers (ASWs) received a two-day refresher training.

ZPCT also trained 30 HCWs in child counseling and 302 in DBS collection, storage and transport, with funding from CHAI.

Details of training for each program area are provided in Section 4.3 and in Attachment B, *ZPCT Training Courses*.

#### **4.1.3. Strategies to Supplement Human Resources at ZPCT-supported Facilities**

Limited staff at health centers continues to be an issue. ZPCT approaches, described below, are an attempt to mitigate the human resource constraints.

Health Care Workers in Facilities: ZPCT provincial offices have continued to work with DHMTs and facilities to implement a transport cost reimbursement plan, which follows the districts policies. HCWs who work approved extra shifts are eligible for this reimbursement. This initiative has been implemented at most health facilities and has helped to alleviate staff shortages. ZPCT provincial staff have continued to monitor this initiative closely to determine its effectiveness and feasibility and ensure that health facility staff adhere to the policy and procedures.

Lay Counselors and Adherence Support Workers: ZPCT continues to train and place lay counselors and ASWs in facilities to relieve some of the burden on HCWs in the facilities, and to improve services and the well-being of PLHA (in the case of ASWs).

Data Entry Clerks (DECs): This quarter, ZPCT began the transition of DECs as FHI employees placed at MOH health facilities through funding included in the recipient agreements. All DEC transition from

consultant agreements to contracts are completed. This quarter, the work of the 59 DECs trained and placed by ZPCT at ART facilities has resulted in improved timeliness and quality of HIV/AIDS data at these sites. To further improve data quality, these data entry clerks will assist in the compilation of data from non-ART sites supported by ZPCT once a month.

Outreach: Transport allowances for ART outreach have been included in all recipient agreements, as well as amendments/recipient agreements supported by ART Plus-Up funds. This includes support for staff from the DHMT or other facilities to provide services at selected health facilities that lack a medical doctor, laboratory staff and/or pharmacy staff to initiate and monitor clients on ART.

#### **4.1.4. Other Program Management Activities**

This quarter, the following additional program management activities took place:

- Human Resources: This quarter, ZPCT hired 28 additional staff in Lusaka and the provincial offices to support the rapid program expansion. Recruitment is pending for seven more positions, primarily technical. Two senior positions are currently vacant – the Senior Advisor for CT/PMTCT and Senior Advisor for Clinical Care. Recruitment efforts are underway for these positions.

In addition, ZPCT conducted a staff retreat in December 2007 this quarter to review ZPCT goals, objectives and accomplishments, discuss and review the expansion plan, strengthen working relationships through team building, create a sense of commitment and excellence amongst staff and enhance effective communication across the program.

- Program Unit Management Meeting (December 5 to 6, 2007): A two-day meeting was held with the Provincial Program Managers to discuss management issues, including community mobilization, supporting expansion to additional health facilities and districts, and finance and human resources. Quality assurance and quality improvement, planning for facility and district graduation was also a major topic of discussion and planning.
- World AIDS Day (December 1, 2007): ZPCT staff in Lusaka and the five provincial offices participated in activities to commemorate World AIDS Day. Mobile CT services were provided and community mobilization activities were conducted in the days prior to World AIDS Day. The ZPCT Chief-of-Party traveled to Mansa, Luapula Province and the Deputy Chief of Party traveled to Isoka, Northern Province to participate in local activities. The Provincial Minister and HIV/AIDS/TB/STI Council Board of Central Province gave the ZPCT Central Province team an award certificate in recognition of their contribution to the fight against HIV/AIDS.
- Commodity Management Audit: A team from the U.S. Government Inspector General's office visited Zambia in November 2007 to conduct an audit on commodities and equipment procured with USAID funding. The team visited six ZPCT-supported facilities – Ndola Central Hospital, Chipokota Mayamba Health Center, Kitwe Central Hospital, Chimwemwe Clinic, Mahatma Gandhi Health Center and Liteta District Hospital, as well as meeting with the respective District Health Management Teams and Provincial Health Offices. The audit team conducted physical counts of ARVs and test kits, reviewed supply chain system and commodity management practices, and reviewed source data collection tools and aggregate data submitted to USAID.
- Decentralization of Provincial Offices: ZPCT continues to monitor activities that will determine the decentralization of provincial offices in selected program, technical and financial areas. This quarter, the ZPCT Ndola and Mansa offices were decentralized for monthly reports.
- Information Technology (IT) Capacity Building and System Maintenance: IT staff continued to provide technical assistance to provincial offices on computer hardware, software, and use of applications through quarterly visits. The roll-out of the SmartCare database continued this quarter. The provinces performed data migration by transferring client information from manual cards to the SmartCare databases. The IT team has continued to assist with installation and networking of computers at health facilities for the implementation of SmartCare and the data migration exercise. In addition, the IT team is upgrading the EpiInfo software at provincial offices to Version 3.3, as required for input and analysis of the QA/QI data. The IT activities are funded by FHI general and administrative funds, rather than program funds. Next quarter five provincial IT staff will be recruited to assist in the provincial offices.

#### **4.2. National Level Activities**

ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the national level. ZPCT actively participates on eight national technical working groups, as well as several ad-hoc implementation groups. Participation in national meetings and workshops

ensures ZPCT input into national activities and enhances continued collaboration with the MOH and other partners. Meetings and workshops attended during this quarter are in the table below:

Date	Technical Area	Meeting/Workshop/Training
October 4, 2007	Laboratory	<u>Laboratory QA Technical Working Group Meeting</u> : A one day meeting of laboratory partners was held at ZPCT premises to discuss the way forward on QA for lab testing including HIV. It was decided that while SCMS would procure quality control material for hematology and chemistry, further discussions needed to be held with implementing partners to put together plans to facilitate the distribution of these materials to the respective facilities.
October 8, 2007	Laboratory	<u>Maintenance Contract Meeting</u> : ZPCT attended a meeting at which partners working with the MOH met at the Ndeke House with the Becton Dickinson regional representative to discuss maintenance and service contract based on reagent procurement. After discussions it was agreed by both parties that each FACSCount will be serviced twice per year and FACSCalibur three times per year. Maintenance will be twice per equipment and that spares will be provided by the supplier unless advised otherwise.
October 10, 2007	PMTCT, Laboratory	<u>Early Infant HIV Diagnosis Meeting</u> : ZPCT attended a meeting with MOH and CHAI to review the experiences that Botswana has had in the diagnosis of infant HIV. The logistics of numbering both the sites and the clients was discussed and agreed upon including transportation of specimens.
October 11, 2007	TB/HIV	<u>TB-HIV Subcommittee Meeting</u> : Participants from ZPCT, CIDRZ, CDC, Lusaka DHMT and TBCAP met to prepare the program and logistics for orientation of provincial focal point persons on revised TB/HIV guidelines, dissemination of terms of reference for provincial, district, facility and community levels coordinating bodies, and dissemination of the findings of the evaluation of the TB/HIV surveillance systems.
October 14 to 20, 2007	Laboratory	<u>Laboratory Design Workshop</u> : ZPCT participated in a meeting organized by MOH and SCMS to design and develop a commodity logistic system for ART laboratory reagents and consumables. The identified commodities will be on full supply and facilities will be required to order on a monthly basis with consumption data.
October 16, 2007	TB/HIV	<u>TB-HIV Subcommittee Meeting</u> : A follow-up planning meeting of the subcommittee was held to plan the dissemination meeting for revised TB-HIV guidelines, TB-HIV registers, treatment cards and documentation and reporting, dissemination of TORs, dissemination of the findings of the Evaluation on TB-HIV surveillance.
October 17, 2007	Palliative Care	<u>Palliative Care Forum Meeting</u> : ZPCT attended a monthly review meeting for PEPFAR partners. At this meeting, the following issues were discussed: <ul style="list-style-type: none"> <li>▪ Pain management booklet will soon be printed</li> <li>▪ A country situational analysis for palliative care is being planned by the Palliative Care Association of Zambia</li> <li>▪ FANTA and IYCN have funds to provide technical assistance on nutrition</li> </ul>
October 18, 2007	ART	<u>National ART Orientation Materials</u> : ZPCT participated at a meeting at CIDRZ to finalize the national ART orientation training materials, based on the revised national ART protocols and guidelines.
October 22, 2007	ART	<u>Pediatric HIV Symptoms Job Aid</u> : ZPCT participated at a meeting convened by the MOH to refine a job aid that has been developed to assist front line health care providers in identifying the signs and symptoms of HIV in infants and children.
October 25 to 26, 2007	PMTCT	<u>Annual Review and Planning of the MOH Technical Working Group on PMTCT and Pediatric Prevention, Care and Support for HIV/AIDS</u> : At this meeting, members of the TWG reviewed the program and progress to date, reviewed performance based on the 2007 workplan and began planning and drafting the 2008 workplan.
October 28 to November 2, 2007	PMTCT	<u>WHO/UNICEF Workshop on Acceleration of Scale-up of PMTCT and Pediatric HIV Care (Nairobi, Kenya)</u> : ZPCT staff participated in this meeting in Nairobi Kenya to review the 2006 WHO PMTCT guidelines with a focus on the evidence around ART for pregnant women and the need for more efficacious regimens, review the principles of comprehensive HIV care in PMTCT and pediatric and the progress made so far, discuss access to testing (CD4 & early infant diagnosis); access to treatment; tools to ensure linkages, discussed

Date	Technical Area	Meeting/Workshop/Training
		procurement and Supply Management in PMTCT programs, Infant and Young Child Feeding and M&E for comprehensive PMTCT and pediatric HIV care.
October 29 to November 1, 2007	Pharmacy, Laboratory	<u>HIV/AIDS Commodity Security Strategic Planning Workshop for Managers:</u> ZPCT staff attended this four-day meeting in Livingstone, convened by the MOH in collaboration with SCMS to develop a strategic plan for HIV/AIDS commodity security to create a supportive environment for a reliable supply of HIV/AIDS commodities. The outcome of this meeting was the development of a draft strategic plan for HIV/AIDS commodities security to be launched early 2008. This draft will be reviewed by the TWG formed at this meeting which has membership from all major implementing partners.
November 1 and 2, 2007	All	<u>Children and HIV/AIDS Communication Workshop:</u> ZPCT staff attended this two-day meeting organized by HCP to draft communication objectives to address HIV/AIDS in children, draft a communication strategy and discuss the process to obtain approval for national use.
November 7, 2007	ART	<u>ART SOPs Stakeholders Meeting:</u> The final ART SOP document was presented to the partners by consultants who adapted the FHI generic document to the Zambian national document. This has been adopted by the MOH as the national document. Once the document is printed and disseminated, it will provide much needed guidance on the standards associated with ART practice nationwide.
November 8, 2007	PMTCT, Laboratory	<u>Meeting with MSF-Spain:</u> ZPCT met with MSF-Spain to discuss collaboration between MSF and ZPCT on the roll-out and implementation of collection, storage and transportation from MSF-supported sites in Kapiri Mposhi for analysis at the DNA PCR laboratory at ADCH. It was agreed that ZPCT will facilitate a training of trainers in DBS collection, storage and transportation to MSF and DHMT staff who will then train MSF facility staff. In addition ZPCT will provide PCR requisition books and also help MSF access DBS bundles from MSL. ZPCT will also provide the facility ID stamp template for reproduction by MSF. DBS specimens will be packaged and taken to Mahatma Gandhi in Kabwe for inclusion in ZPCT's courier network agreement with EMS.
November 8, 2007	ART, Pharmacy	<u>Meeting of the NAC Care and Treatment Theme Group:</u> At this meeting, the following was discussed: <ul style="list-style-type: none"> <li>▪ Presentations by the Palliative Care Association of Zambia</li> <li>▪ Pediatric ART highlights</li> <li>▪ Alternative remedies introduction of Canova an immune booster that has been registered by the Pharmacy and Poisons Board</li> <li>▪ NZP has data base on all government health facilities in Zambia.</li> <li>▪ Standardizing and rolling out preceptorship program for pediatric ART</li> <li>▪ Involvement of NZP members in community mobilization.</li> </ul>
November 12 to 16, 2007	PMTCT	<u>RBM Malaria in Pregnancy Working Group Meeting:</u> Over 65 participants attended this meeting to discuss and review country interventions of the WHO three-pronged approach to preventing and managing malaria in pregnancy, including intermittent presumptive treatment with Fansidar during the antenatal period, distribution of insecticide treated nets and effective case management.
November 13, 2007	Pharmacy	<u>Cotrimoxazole Quantification Meeting:</u> ZPCT attended a one-day quantification meeting held at JSI Deliver/ SCMS offices in Lusaka. The meeting conducted a forecast quantification of cotrimoxazole needs for prophylaxis for the year 2008.
November 14, 2007	ART, PMTCT	<u>Meeting on Ready to Use Therapeutic Food (RUTF):</u> ZPCT participated at a meeting with CHAI, CIDRZ and Lusaka DHMT Team to discuss the development of national guidelines and job aids for use of RUTF for malnourished and HIV/AIDS children and adults on ART. ZPCT attended a follow-up meeting to review a proposed document for adoption as a national operational guideline for RUTF.
November 15 to 21, 2007	Pharmacy	<u>Pharmaceutical Management for Technical Assistance Training:</u> Two ZPCT staff attended a course on 'Pharmaceutical Management for Technical Assistance' held in Cape Town, South Africa facilitated by MSH. This course provided a pharmaceutical systems strengthening training for decision makers; to equip them to provide technical assistance in their areas of work. The course was attended by MSH representatives from Southern, Central and Eastern Africa.
November	ART,	<u>ARV Forecasting and Quantification:</u> ZPCT participated in a meeting convened

Date	Technical Area	Meeting/Workshop/Training
16, 2007	Pharmacy	by JSI to forecast and quantify ARVs for 2008.
November 20 to 21, 2007	ART, PMTCT	<u>RUTF Strategic Planning Workshop</u> : The meeting was a dissemination workshop on analysis of Ready to Use Therapeutic Food program.
November 21, 2007	Palliative Care	<u>Palliative Care Forum Meeting</u> : ZPCT attended a monthly review meeting for PEPFAR partners. HCP presented on communication related to pediatric care and treatment and palliative care nutrition and support.
November 25, 2007	General	<u>NAC Annual Workplan Development</u> : As a member of the NAC Treatment, Care and Support Group, ZPCT staff participated at a meeting to develop the annual workplan for 2008. This was a multi-sectoral workshop with different theme group tasked to draft their respective annual workplans, which were incorporated into the consolidated NAC workplan for 2008.
November 26, 2007	PMTCT	<u>Meeting with USAID on Infant and Young Child Feeding (IYCF)</u> : ZPCT staff met with USAID to discuss collaboration with a new project scheduled to begin activities in Zambia.
November 26 to 30, 2007	Laboratory	<u>Laboratory Commodity Quantification Workshop</u> : MOH in collaboration with SCMS held a five-day quantification workshop for laboratory commodities. The lists of laboratory commodities to be in full and non-full supply at facilities by level of care were agreed upon and a two year forecast of these needs prepared.
November 28, 2007	General	<u>Civil Society (CSOs) and NGOs Consultative Meeting</u> : The MOH convened a consultative meeting to examine how best CSOs and NGOs could complement government efforts to attain the Millennium Development Goals and comply with the Paris agreement. An overview of the Swap coordination process, Joint Country Assistance Strategy for Zambia (JASZ) and national aid harmonization process was provided. A consensus was reached that NGOs and CSOs should be formally incorporated into the above mentioned process and mature structures that traditional donors and MOH have used to strengthen coordination of agenda setting, aid effectiveness and action planning.
November 28, 2007	Laboratory	<u>DNA PCR Commodities Procurement Meeting</u> : All implementing partners were present and a list of DNA PCR commodity needs for each partner was submitted to CHAI for procurement.
November 30, 2007	PMTCT, ART	<u>PMTCT/PPCST TWG Meeting</u> : ZPCT participated in the TWG meeting to discuss forming subcommittees on early infant diagnosis, routine counseling and testing, M&E and family planning.
December 4 to 5, 2007	ART	<u>ART Program &amp; Clinical Update Seminar</u> : ZPCT staff participated in the second national ART update seminar hosted by CIDRZ in collaboration with MOH. The seminar drew participants from MOH (national, provincial, district and facility levels), private health care providers and partners implementing ART programs. All implementing partners shared experiences and relevant updates for the ART program.
December 6, 2007	All	<u>Annual MOH Review Meeting</u> : The Deputy Minister of Health chaired the meeting to: <ul style="list-style-type: none"> <li>▪ Review action plans, budgets for 2008 submitted by MOH including tentative commitments from cooperating partners</li> <li>▪ Review the MOH annual report from 2006 and assess overall performance</li> <li>▪ Review pledges from cooperating partners towards the MOH action plan</li> <li>▪ Consider emerging themes for incorporation into Multi-Year National Health Strategic Plan (2006 to 2010)</li> </ul>
December 10 to 11, 2007	ART	<u>Workshop on Nurses Prescribing for ART Program</u> : ZPCT participated in a workshop organized by the General Nursing Council and CIDRZ. It was discussed that only RN/RM will initiate ART to eligible HIV patients and enrolled nurses/midwives will only maintain or do the re-fill.
December 11, 2007	ART, Laboratory	<u>National Test Kits Forecasting and Quantification Quarterly Review Meeting</u> : ZPCT staff attended a one-day consultative meeting to review the forecasting and quantification results in relation to what is actually holding in practice. Since the forecasting and quantification exercise conducted in May 2007, there have been a number of challenges arising in the HIV test supply chain. Best estimates for 2008 and 2009 were made based on the consumption data and issues data available from MSL.
December	PMTCT,	<u>Dissemination of Research Papers in RH, PMTCT and TB/HIV</u> : UTH with

Date	Technical Area	Meeting/Workshop/Training
12, 2007	TB/HIV	CIDRZ and UTH presented on the collaborative research they have conducted in the use of single dose Truvada for PMTCT, use of intrauterine devices as a family planning method for HIV infective women, and integrating TB and HIV in Lusaka District.
December 13 & 17, 2007	CT	<u>International CT Workshop Preparatory Meeting</u> : ZPCT participated in preparations for international CT meeting being organized by FHI and PSI. The CT technical working group has not been active this quarter.
December 14, 2007	PMTCT	<u>PMTCT Technical Working Group Meeting</u> : The TWG meeting was focused on finalizing revisions to the Zambia PMTCT national protocol guidelines.
December 17, 2007	PMTCT	<u>Meeting with International HIV/AIDS Alliance</u> : ZPCT met with a representative from IHAA from UK to discuss gaps in PMTCT program implementation. IHAA is planning to write a proposal for PMTCT program implementation.
December 17, 2007	PMTCT	<u>PMTCT TWG Sub-committee Meeting on SOPs for ARVs for PMTCT</u> . This subcommittee was finalizing the SOPs for the use of ARVs to be added to the national protocol guidelines
December 19, 2007	PMTCT	<u>Meeting on Successes and Challenges in PMTCT – the Global Perspective</u> : CDC presented on this topic, following a general discussion.

### 4.3. Technical Program Areas

The major activities undertaken during this quarter in each of the technical components of the ZPCT Partnership are described below.

#### 4.3.1 Counseling and Testing (CT)

Counseling and testing services were available at 170 out of 216 ZPCT-supported health facilities during this quarter.

##### 4.3.1.1 CT Training

During this quarter, ZPCT supported the following training courses for health care workers and 'lay' counselors:

- One HIV testing training course for five trained 'lay' counselors for Kalulushi district in the Copperbelt.
- 19 HCWs were trained by Kara counseling in the last quarter in CT from three districts in Copperbelt province.
- One counseling supervision course was conducted for 12 experienced counselors in three districts in Luapula province.
- Two child counseling courses were conducted with a total of 30 HCWs trained. In Luapula, the 16 participants came from 16 facilities in four districts and in Copperbelt, the 14 participants were from eight facilities in two districts. Cumulatively, a total of 126 counselors have now been trained in child counseling. These trainings have been supported with funding from the Clinton HIV/AIDS Initiative (CHAI), leveraged with ZPCT program funding.

##### 4.3.1.2 CT Services

ZPCT provided technical assistance to HCWs and lay counselors in ZPCT-supported facilities. This has helped to strengthen CT and to maintain a very high uptake of testing and collection of results. For the general CT services, this uptake has been almost 100% consistently in facilities across all the provinces with good linkages to care. With the training of more lay counselors in HIV testing, this has further contributed to reducing the waiting time for collection of results and greater satisfaction for the clients.

During this period, the technical assistance focused on:

- Strengthening pediatric CT services for children admitted in care as well as in the under five clinics: Routine CT for children in care has continued to be strengthened in the initial ten selected hospitals and has now been expanded to five more hospitals making a total of 15 hospitals providing routine CT services. In addition, with support from CHAI, ZPCT continued to

strengthen CT services in the initial five pilot under-five clinics in three provinces and four more were added on, making a total of nine facilities providing CT services in under-five clinics. ZPCT has continued to support transport reimbursements for HCWs to work extra shifts in these facilities to provide routine CT for children in care and at under-five clinics. ZPCT is currently working and planning with University Teaching Hospital (UTH) to mentor a lay counselor cadre to provide CT services in pediatric wards and under five clinics (lessons learned from UTH) to address the challenge of human resource limitations. In the next quarter, with support from CHAI, ZPCT will further strengthen these services through the placement of such mentored 'lay' counselors specifically for pediatrics HIV counseling and testing in the wards.

This quarter, a total of 3,549 pediatric patients and their parents/guardians were pre-test counseled and tested for HIV, compared to 2,776 in the previous quarter.

- CT services in TB, FP and STI clinics: ZPCT staff has continued to provide technical support to HCWs working in the TB, STI and family planning services on the importance of ensuring that all clients and patients have access to CT, preferably within the unit or referred to a CT room. To enhance documentation of CT services provided to TB patients, Integrated VCT and PMTCT (IVP) registers are being placed in the TB wards or TB corners to avoid documentation only in the TB registers. Family planning integration with CT is working well especially in Luapula and Central provinces. Clients coming in to access FP services are routinely being counseled and tested within the FP rooms. Some of the FP providers have been trained in CT and PMTCT to support this integration.
- Mobile CT services: ZPCT have continued to bring CT services closer to the people by providing mobile CT services in different locations of the facility catchments areas. This has helped increase access to CT services for more people, particularly males. Children were also among those clients that received mobile CT services this quarter. This quarter 32,875 people were provided with CT services through the mobile activities. Additional information and data on these activities is included in the community mobilization section of the report (Section 4.4.4).
- Quality Assurance system: ZPCT staff have continued strengthening the QA system in the facilities through the use of QA/QI tools. During this quarter, QA tools were administered in 73 facilities to monitor quality of services. In addition, counselors' support meetings are ongoing, providing a forum for counselors to share experiences, discuss ways of managing stress, burn-out, difficult situations, and addressing other issues as a group. More details are to be found in the QA/QI section
- Linkages of all HIV positive clients: To facilitate initiation of ART for those that are eligible and general care for the rest of the HIV infected patients, ZPCT has continued to improve linkages to ART services in all ZPCT-supported facilities.

#### **4.3.1.3 Key Issues/Constraints in CT**

- Human resource shortages continue to be a challenge, especially with the expansion of entry points for CT to TB, STI, FP and children's services. However, ZPCT continues to address this issue by training additional staff in the facilities to provide CT services, as well as task shifting and training lay counselors to supplement HCWs. In addition, ZPCT provides limited support for transportation to HCWs working extra shifts for CT.
- Inadequate space for CT has continued to be an issue especially with the integration of CT into other service areas like children's wards. ZPCT is addressing this issue with limited infrastructural refurbishments. However, the issue of space must continue to be addressed with the facility and district health management.
- Documentation of CT services in TB corners/wards: In some facilities, this has been a challenge because those counseled and tested TB patients were recorded only in the TB register and not in the integrated VCT and PMTCT register (IVP) where the monthly data is extracted from. Staff are being oriented on proper documentation as well as placing IVPs in the TB corners/wards.

#### **4.3.2 Prevention of Mother-to-Child Transmission (PMTCT) of HIV**

During this quarter, 159 of the 199 health facilities targeted for ZPCT assistance in this area provided PMTCT services.

##### **4.3.2.1 PMTCT Training**

During this reporting period, the following trainings were conducted:

- Three trainings reaching 70 HCWs from 13 districts in Central, Northern and Copperbelt provinces were conducted.
- Using the newly introduced MOH/JHPEIGO training package for community cadres in PMTCT, 24 community cadres were trained in PMTCT from 18 facilities across the Northern Province. These community counselors will be placed in the health facilities to supplement the efforts of the HCWs in providing PMTCT services.
- An additional 302 HCWs from health facilities across the five provinces were trained in collection, handling and storage of DBS samples for early infant diagnosis of HIV in children less than 18 months. These trainings were funded through an agreement with CHAI. Cumulatively to date, 541 HCWs have now been trained in DBS collection, handling and transportation and are using these skills to strengthen early infant diagnosis of HIV in their facilities.

#### 4.3.2.2 PMTCT Services

With routine counseling and testing in the antenatal care (ANC) settings on-going and well established, over 92% of pregnant women accepted HIV testing and received results using the 'opt out' strategy this quarter. ZPCT strengthened the provision of more efficacious ARVs for PMTCT as per the revised Zambian national PMTCT protocol guidelines and the WHO recommendation. ZPCT is working to expand dual therapy to all health facilities in the next quarters, especially once the capacity to do hemoglobin estimation is made available in all centers.

The areas of focus in PMTCT technical assistance during this reporting period were:

- Strengthening mother-baby follow-ups, as part of pediatric HIV efforts: Follow-up of HIV infected mother-baby pairs through MCH services are on-going in most of the facilities, with HIV exposed babies being identified at six weeks. Recognizing the high morbidity and mortality from pneumocystis carinii pneumonia (PCP) in HIV infected children, especially for those between three to six months, cotrimoxazole prophylaxis for PCP is being provided as part of under-five clinics at the ZPCT-supported sites. During this period, 370 HIV exposed children were provided with cotrimoxazole prophylaxis.

With the establishment of the PCR laboratory at Arthur Davison Children's Hospital (ADCH) in Ndola, training of HCWs in DBS sample collection, handling, storage and transportation and establishment of the DBS sample transportation system in some of the districts, access to early infant HIV diagnosis in all health facilities across the five target provinces is being strengthened further.

- Provision of more efficacious ARVs for HIV positive pregnant women: Triaging of all pregnant women testing HIV positive is in place and is supported with the sample referral system that is on-going in ZPCT-supported facilities. Depending on the CD4 count, the HIV positive women are triaged to either receive full ART or AZT and NVP as per the WHO three-tiered approach. During this quarter, however, more emphasis was placed on proper documentation to reflect what regimen each HIV positive woman received.
- Integration of family planning in PMTCT: ZPCT has been providing technical assistance on linkages to family planning services through family planning counseling in the ANC period as well as provision of the dual protection method (condoms plus a hormonal contraceptive) of FP at the appropriate time after delivery. All women are being linked to family planning services within PMTCT, as well as women who are not pregnant attending CT services. In addition, clients accessing FP services are offered CT services and informed of MTCT and PMTCT services.
- PMTCT/pediatric HIV services: During this quarter ZPCT worked hard to provide technical assistance and mentorship to HCWs to ensure collection of valid DBS samples.

#### 4.3.2.3 Key Issues/Constraints in PMTCT

- Human resource shortages have persisted. However, ZPCT is working with DHMTs/PHOs to continue providing limited support for transport reimbursements for off-duty facility staff who work extra shifts to provide services as well as shifting certain specific tasks to other cadres where this is allowed and possible.
- Lack of hemoglobin estimation capabilities at facilities. Without the capacity to determine hemoglobin levels, HIV positive pregnant women cannot be provided with AZT. In the next

quarter, ZPCT will provide simple, battery-operated hemoglobinometers (Hemocue 201+) to enable HCWs to estimate hemoglobin levels.

- Lack of PMTCT trainers: With the USG elimination of facilitation allowances for MOH employees, ZPCT has found it difficult to conduct PMTCT trainings. Many of the experienced trainers previously used are declining to train without a facilitation payment. However, ZPCT is using more of its own staff that are trained in PMTCT and there are plans to train more technical staff as trainers to address this problem.

### **4.3.3 Antiretroviral Therapy (ART)**

ZPCT continued providing technical assistance and mentoring at all health facilities targeted for ART. There was an increased focus on quality assurance and quality improvement of services especially including the development of Smart Care QA/QI output indicators. Focus was also placed on improving and expanding other important aspects of ART services including pediatric ART services (conducting of DBS trainings and DNA PCR HIV testing for infants, availability of pediatric SmartCare forms) in ART sites.

#### **4.3.3.1 ART Training**

ZPCT conducted the following trainings this quarter:

- 30 HCWs were trained in pediatric ART through six trainings conducted in Lusaka, funded by UNICEF and the MOH. ZPCT supported the participation of HCWs for ZPCT-supported health facilities.
- A total of 42 ASWs from Northern and North Western Provinces attended two-day refresher courses in ART adherence counseling.
- 56 HCWs received a six-day in-house training course in ART in Copperbelt Province through two separate trainings Arthur Davison Children's Hospital and Kitwe Central Hospital.
- 25 HCWs attended a six-day refresher training course in ART management on the Copperbelt.

#### **4.3.3.2 ART Services**

At the end of this quarter, 73 (including 31 outreach sites) out of the 96 targeted health facilities were providing ART services in 30 districts. Two of these sites (Solwezi Urban and Saint Dorothy) continued to report their results through Solwezi General Hospital since they are not yet included as independent sites in the indicator reporting matrix. Solwezi Urban Clinic still awaits confirmation from MOH headquarters to grant it the status as a stand-alone or static ART site. This is expected to happen sometime in the next quarter. A total of 5,916 new clients (including 447 children) were initiated on antiretroviral therapy and a total of 47,251 individuals were receiving antiretroviral therapy at ZPCT-supported sites; of these, 3,192 were children.

ZPCT continues to focus on the issues outlined below:

- Orientation and mentorship in the new ART protocols and SmartCare training: ZPCT continued to roll-out orientation and mentorship in the new ART protocols and SmartCare in ZPCT-supported facilities in Copperbelt and North Western provinces this quarter. ZPCT staff, through scheduled TA visits, followed-up the implementation of SmartCare forms to ensure smooth implementation of the program in the ART sites.
- Collaboration with home-based care programs: ZPCT continues to support ART outreach to three home-based care centers operated by the Ndola Catholic Diocese: Chishilano in Ndola, Twatasha Trakk in Kitwe, and Iseni in Chingola. Discussions are on-going to transition stable patients that have been on treatment for more than six months to nearby health centers providing ART. Through this collaboration, 166 clients were initiated on ART and 584 clients were monitored this quarter.

In addition, ZPCT is supporting ART outreach to the Mpatamatu Home-Based Care Program in Luanshya District. Through this collaboration, six new clients were initiated on ART and 115 clients were monitored this quarter.

- Progress on pediatric HIV/AIDS care and treatment: ZPCT continues to provide technical assistance and mentoring to scale-up pediatric AIDS treatment, with attention to routine or provider-initiated CT, timely initiation of ART, and cotrimoxazole prophylaxis. During the quarter, linkages with PMTCT services continued to be strengthened with emphasis on improved and effective intra - and inter-facility referral of children under 14 to ART services and

expanding the routine CT for all children who come to the facility for health services. ZPCT technical staff continued improving staff skills in the early identification of OIs.

ZPCT finalized the operational guidelines for the ready-to-use therapeutic food supplements (RUTFs), also known as Plumpy Nuts, an activity supported by CHAI. ZPCT will coordinate the distribution of RUTF for malnourished and those children on ART at ten health facilities providing pediatric ART services, in the coming quarter.

- Pediatric preceptor program: With funding from CHAI, ZPCT implemented and completed the first phase of the preceptorship program in comprehensive pediatric HIV care (including ART) as part of the strategy to scale up access to pediatric ART by building capacity in the HCWs to confidently manage pediatric HIV. The program aimed at providing on-the-job, practical intensive hands-on mentorship to HCWs by experienced, practicing pediatricians/medical doctors. FHI engaged consultants with experience in pediatric HIV care and ART in public health institutions to mentor HCWs at seven health facilities this quarter: Over 60 HCWs benefited from this exercise. A consolidated report was compiled and will be disseminated to the partners and other stakeholders in the next quarter.
- Quality assurance/quality improvement: ZPCT continued focus on quality assurance and quality improvement issues during the technical assistance visits to health facilities. ZPCT ensures the use of QA/QI tools, in collaboration with PHO, DHMT, and facility partners. ZPCT also drafted SmartCare QA/QI output indicators to facilitate collection of information on the quality of care clients are receiving both at baseline and during follow-up monitoring in the ART sites. These tools will be operational in this coming quarter.
- SOPs for ART, adherence counseling and post exposure prophylaxis (PEP): The FHI generic SOPs were finalized and adapted as (Zambia) national documents. ZPCT will, in the next quarter, plan with the MOH on the printing and dissemination of these documents, including orientation of HCWs on the use and application of these documents.
- Continued support to clinical seminars: ZPCT continues to promote and conduct clinical seminars for HCWs to discuss case studies and any new developments in HIV care including any critical clinical or programmatic issues related to the implementation of the HIV/ART program.
- Provision of reference materials: ZPCT revised the *Pediatric Dosing Guide* and *Recommended ARV Regimens for Children in Zambia* job aids. This follows the adjustments in weight bands in relation to dosing in children, and also the launch and implementation of the *National Guidelines for Comprehensive Management of Pediatric HIV Care in Zambia*. These materials will be finalized, printed and distributed this quarter.

#### 4.3.3.3 Key Issues/Constraints in ART

The following constraints were faced in ART service provision:

- Patient monitoring: ZPCT continues to assist HCWs with the improvement of clinical and laboratory monitoring of patients on ART through technical visits, mentorship and provision of reference materials. In the next quarter, ZPCT will operationalize the SmartCare QA/QI tools developed this quarter.
- Pediatric ART challenges: The human resource crisis is complicated by attrition of HCWs that have been trained in pediatric ART and the relatively low levels of knowledge, skill and confidence among HCWs in the management of pediatric ART, especially among the newly deployed staff. In the continued effort to overcome these constraints, ZPCT provides technical assistance and training in pediatric ART, including the preceptorship program piloted and completed this quarter, with funding from CHAI. The pilot program is expected to compliment the other strategies in consolidating HCWs knowledge, skill and confidence in managing pediatric ART comprehensively; the ultimate goal being increasing uptake in CT and enrollment into the ART program.
- Inadequate child counselors: There is inadequate health staff to provide *routine CT* especially in the wards, therefore limiting the number of HIV positive children who are eligible entering care to receive ART. ZPCT is implementing the training of child counselors who will be placed in the wards.
- Inadequate supervision by medical doctors in facilities: In some sites medical officers who are supposed to supervise and mentor other clinical staff like clinical officers and nurses, are busy with administrative duties. ZPCT will work with the facilities to see how the medical officers could allocate adequate time to work with and mentor their colleagues.

- Initiation of ART in children in the in patient wards: In some facilities, children who are discharged from wards and referred to the ART clinics for ART initiation do not reach these clinics. In the next quarter, ZPCT will address this situation by mentoring HCWs on the wards to confidently initiate ART. In addition, ZPCT will explore strategies to strengthen internal referral system to initiate eligible children on ART.
- Lack of harmonization of the sample collection day, the booking day and the appointment day to see the clinician is causing a challenge in some facilities. ZPCT is working with these facilities to ensure that the client can get their lab results on the same day as their clinic appointment booking.
- Increased client load: Due to the increase in the number of people accessing ART, some sites are seeing too many patients in a day. As a remedial measure, some of these sites, which were previously seeing patients only on certain days of the week, are now operating their ART clinics daily.

#### **4.3.4 Clinical Palliative Care**

ZPCT is working with staff in health facilities to strengthen and improve palliative care for PLHA.

##### **4.3.4.1 Clinical Palliative Care Training**

The national training curriculum for ART and OI management is combined. As described in Section 4.2.3.1, three trainings were conducted this quarter in the areas of ART/OI reaching a total of 81 HCWs.

##### **4.3.4.2 Clinical Palliative Care Services**

ZPCT staff provided technical assistance in clinical care to ZPCT-supported sites in the five provinces. During the quarter under review, technical assistance focused on the following issues:

- Continued strengthening of knowledge and skill for HCWs through mentoring and supervision in appropriate diagnosis and management of opportunistic infections including pediatric HIV/AIDS cases, emphasis on routine or provider-initiated and diagnostic counseling and testing, identification, management and documentation of adverse drug reactions. The strategy to scale-up cotrimoxazole prophylaxis in both adults and children continues to be promoted in all ZPCT-supported sites.
- The half-day orientation package for nurses in the early identification of OIs in children in order to enhance their skills has proven to be a useful strategy in improving the identification and referral of HIV positive children for clinical care. This orientation will be repeated in all sites as part of the routine clinical seminars that are supported by ZPCT.
- ZPCT continues to strengthen routine HIV testing for all pediatric admissions and those in out-patient care. This quarter, a total of 3,549 pediatric patients were pre-test counseled and tested for HIV, compared with 2,776 for the previous quarter.
- ZPCT continues to strengthen routine CD4 testing of all HIV positive TB patients to facilitate clinical care and ART as required. The IVP register will need to be revised to record CD4 count data for TB clients who have undergone CT, alongside the HIV testing results.

##### **4.3.4.3 Key Issues/Constraints in Clinical Palliative Care**

- Referral linkages: ZPCT has continued to address the challenge of referrals to community programs during TAs to the sites and other organizations offering health related services. Both the technical staff and the community mobilization and referral officers are working closely with HCWs and other cadres involved in the care of HIV clients to improve and strengthen referral systems and mechanisms by ensuring availability of referral documents, appropriate filling in of forms and registers and tracking of the referral forms and clients referred for various HIV/ART related service. District-wide referral networks are fully functional in 15 districts and have been initiated in six additional districts. These networks will be expanded to all ZPCT-supported districts by September 2008.
- Erratic supply of drugs for OIs: Cotrimoxazole for both prophylaxis and full treatment of OIs as well as drugs for treatment of tuberculosis are readily available in most sites. However, the MOH, through JSI will expand the use of the newly developed drug logistic system continue to

ensure that there is an adequate supply of the available essential drugs in all the public health facilities.

#### **4.3.5 Pharmacy Services**

During this quarter, ZPCT continued to provide support for pharmacy services at all 216 ZPCT-supported health facilities. Ongoing activities include the provision of basic pharmacy equipment, furniture, and renovations to enhance pharmaceutical service delivery, training and technical assistance.

##### **4.3.5.1 Pharmacy Training**

This quarter, ZPCT trained 16 laboratory and 12 pharmacy health facility staff from 18 districts across the five target provinces in ART commodity management.

##### **4.3.5.2 Technical Assistance in Pharmacy**

ZPCT continues to provide technical support on the use of the updated ARTServ Dispensing Tool, a tool used by pharmacy staff to record data on clients on ART, including drug regimen, side effects, and drug dispensing dates at 47 sites. This will be expanded to all ART sites to be supported by ZPCT. Ongoing training of pharmacy staff in the use of ARTServ is planned to allow for staff rotation and workload reduction.

Technical assistance visits were conducted to strengthen commodity management information systems in facilities offering ART services. ZPCT staff provided guidance on improving stores management including stock status update, storage space and conditions, timely ordering and collection, aggregation and proper use of consumption data of commodities. The commodity inventory tracking tool, developed by ZPCT to assist in inventory control and tracking of commodities, is functioning well. In addition, technical assistance was provided to ensure that all facilities adhere to the ordering procedures as defined by the new ARV logistics management system.

Technical assistance visits were also focused on mentoring facility staff to facilitate good pharmacy practice including good dispensing practices, medication use, and enforcing adherence counseling to ensure better patient outcomes.

ZPCT continues to provide technical assistance to address non-submission of returns and data, which contribute to shortages of critical supplies and stock-outs.

During this quarter ZPCT also provided technical assistance to sites in preparation for a PEPFAR commodities audit, focusing on the ARTServ dispensing tool, strengthening stock and inventory control parameters and promoting good storage conditions.

##### **4.3.5.3 Guidelines and SOPs**

ZPCT continues to distribute and promote the use of the Zambia ART Pharmacy SOPs to the facilities, and focuses on providing technical assistance to sites to ensure that work is being done according to the guidelines and SOPs. ZPCT facilitates the site-specific adaptation of these SOPs in line with GRZ policy. However, in line with the launch and dissemination of the new ART guidelines and the need for the inclusion of the new ARV logistics system procedures and forms, the Zambia ART Pharmacy SOPs need to be updated. Discussions with the MOH are underway to conduct this activity during the next quarter. Once the review process is complete, the new SOPs will be distributed to all ZPCT static ART sites, and selected outreach ART sites.

The revised pharmacy services QA/QI tools continue to be administered at ZPCT-supported sites. Implementation of the tools plays a key role in continually monitoring the quality and sustainability of services, as well as building capacity within health facilities and DHMTs.

##### **4.3.5.4 Key Issues/Constraints in Pharmacy Services**

ZPCT is committed to working with partners in the provinces, districts, and facilities to ensure an adequate supply of HIV-related commodities for provision of services. The following are challenges faced in meeting this goal.

- Medical Stores Limited logistics constraints: Occasional lapses in the transport system at MSL combined with some order delays from the districts continued in this quarter and led to requests for ZPCT assistance to transport critical supplies to support sites. However, this is only possible when there is pre-arranged travel to these destination sites. ZPCT is constantly working with facility staff to ensure that orders are submitted according to the delivery schedule requirements that MSL has issued.
- Lack of qualified staff in the facilities: Shortages of trained staff greatly compromise the quality of service delivery in the facilities. Working with DHMTs and facilities to implement the transport reimbursement system for staff working extra shifts has greatly improved this situation.
- Inadequate supply of commodities: An uninterrupted supply of commodities ensures continued service delivery across all elements of care. During this quarter there has been great improvement in the national level supply chain for ARVs and selected OI drugs which is assisted by ZPCT's training, and technical assistance at the facility level. ZPCT also actively participates in national level forecasting and quantification activities to ensure that the facilities' needs are taken into account.
- Storage space: As ART services expand, there is an increased need for space in pharmacies to store ARVs and other commodities under proper storage conditions. ZPCT continues to assist through the provision of minor refurbishments to facilities, such as adding shelves and air conditioners.
- Equipment maintenance: The availability of fully functional equipment, such as computers and air conditioners, is an important aspect to achieving our objectives. Breakdown of this critical equipment often leads to a disruption of service and affects the quality of service delivery. ZPCT either repairs or replaces this equipment and is working on instituting equipment maintenance contracts with the vendors of this equipment.

#### **4.3.6 Laboratory Services**

ZPCT is strengthening laboratory services at 108 facilities by providing technical assistance, supporting renovations and procurement of equipment. Technical assistance is routinely provided to support laboratory needs including additional ART sites (both static and outreach) with ART Plus-Up funds.

PCR Laboratory: ZPCT has developed a PCR laboratory at ADCH in Ndola to increase access to early infant diagnosis of HIV. The laboratory serves as a referral center for the five ZPCT-supported provinces. The laboratory was officially opened in August 2007 and began receiving and processing specimens from the surrounding health centers in September. By the end of the reporting quarter, four of the five target provinces (all but Northern) began sending dry blood spot (DBS) specimens. These specimens are transported from health facilities to a central location in the district. At this point, they are inspected and batch packaged by focal people before being sent to the PCR laboratory using the Zambia Postal Services' Express Mail Service (EMS). ZPCT is providing technical assistance to these focal persons to ensure proper DBS collection, packaging and transportation of the specimens.

ZPCT has hired a full-time laboratory manager to oversee the operation of the PCR laboratory. In addition, ADCH has assigned a biomedical scientist to work in the laboratory full-time to process and analyze the DBS specimens received from all referring facilities. These staff are assisted by nine MOH laboratory staff who have been trained by ZPCT in PCR laboratory techniques. These staff will work in rotating shifts to assist with the processing and analysis of DBS specimens.

ZPCT and ADCH have developed guidelines to support transport reimbursements for the rotational staff, and extra shifts for full-time staff. Payments are made based on the monthly schedule developed by the PCR laboratory manager.

ZPCT has also hired and placed two full-time DECAs to support data management at the PCR laboratory. In addition, ADCH has placed an office assistant at the laboratory to ensure that a clean and safe environment is maintained in the laboratory. ZPCT has recruited a laboratory technician and will be reporting for work next quarter.

##### **4.3.6.1 Laboratory Services Training**

This quarter, ZPCT trained 16 laboratory and 12 pharmacy health facility staff from 18 districts across the five target provinces in ART commodity management.

PCR Laboratory: This quarter, ZPCT supported the training of four laboratory technologists from ADCH, Lubuto Health Center, Ndola Central Hospital and the Ndola College of Biomedical Sciences in HIV DNA PCR laboratory techniques. The four trainees participated in a two-week hands-on training at the University Teaching Hospital laboratory. Feedback received from the participants was all positive.

A total of ten laboratory technologists and scientists have been trained to date. Nine of the trained staff are now supporting the ADCH PCR laboratory on a rotational basis and one is working full-time at the laboratory.

In addition, as reported in the PMTCT section, trainings were conducted in DBS preparation, packaging and transportation for referral to ADCH for the DNA PCR test. ZPCT staff provided technical assistance to train 11 MSF-Spain and Kapiri Mposhi DHMT staff as trainers in DBS preparation, packaging and transportation through a one-day training on December 11, 2007.

#### **4.3.6.2 Technical Assistance in Laboratory Services**

ZPCT staff provided technical assistance in laboratory services to health facilities throughout the five target provinces. The specimen referral system is operating well in all sites for both CT and PMTCT resulting in an increase in the number of ART clients. The use of equipment has greatly improved in all facilities with few centers experiencing breakdowns. These breakdowns were attended to by the equipment vendors. Special attention is being paid to performing internal quality control when the materials are available and where materials are not available, some facilities prepare their own quality control materials.

ZPCT continues to provide technical support to improve commodity management systems for laboratory services at all ZPCT-supported health facilities. Technical assistance in this area focused on storage, stock status and consumption of commodities.

ZPCT continued to provide technical support on the use of the Laboratory Management Information Systems (LMIS), a tool used to record test data on clients on ART and adopted by the MOH, at seven health facilities. The tool is working well and is being regularly modified with feedback from users. Shortage of laboratory staff poses a challenge in the use of this tool – data is not entered and updated as required. Discussions within the unit looked at the probable engagement of data clerks or the provision of computers to all the three sections of the laboratory (hematology, biochemistry and immunocytology) to alleviate this problem. In addition, ZPCT has recruited more provincial technical officers to support laboratory services at the target facilities. One of their roles is to pay extra attention to the provision of technical assistance in the benefits of the use of this tool.

The QA/QI tool for laboratory continues to be implemented at all ZPCT-supported hospital sites. A recurrent issue confirmed by the QA/QI tool is the critical shortage of trained laboratory technologists in nearly all health facility laboratories. These results are shared with the DHMTs and hospital management. ZPCT will continue to provide transport reimbursements to partially alleviate this problem.

PCR Laboratory: ZPCT staff provided technical assistance in quality DBS collection, packaging and transportation to health facilities in the supported districts. All the ZPCT-supported sites are submitting good quality specimens and there has been a gradual increase in the number of specimens received at the laboratory since its inception.

#### **4.3.6.3 Guidelines/SOPs**

ZPCT continues to promote and monitor the use of the Zambia ART laboratory SOPs to facilities with laboratories, providing CT, PMTCT and/or ART services. However, in line with the launch and dissemination of the new ART guidelines, there is need to update the Zambia ART laboratory SOPs. Discussions with the MOH were held and review of the SOPs will be done in the second quarter of 2008.

The Internal Quality Control (IQC) guidelines document was submitted and is awaiting submission to MOH, dissemination to stakeholders and roll out.

PCR Laboratory: ZPCT has developed SOPs outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a biosafety manual, proper use of PCR equipment and criteria for

rejection of specimens. These are draft documents currently in use in the laboratory, awaiting review and feedback from the DNA PCR consultant.

Internal Quality Control (IQC) monitoring is critical to monitor the quality of results produced in the laboratory. IQC is monitored using the results of the negative and positive controls which are included in the Roche reagent kit used for testing. The controls are included in every run and are expected to pass for results to be approved. In addition, the PCR laboratory has enrolled in the CDC Proficiency Testing External Quality Assurance Program. Under this program, the CDC supplies participating laboratories with external control low positive, high positive and negative DBS specimens which are also included in every run with the Roche controls. Ten DBS specimens with unknown HIV status are also sent with every batch and when tested, the results are submitted back to CDC for evaluation. These batches of both controls and samples are sent out thrice yearly to participating PCR laboratories.

#### **4.3.6.4 Specimen Referral System**

ZPCT has developed and implemented a specimen referral system to provide off-site support to facilities with limited or no laboratory capacity. The specimen referral system, with an initial focus on CD4 count testing for PMTCT and ART outreach clients, is functional with 86 health facilities referring specimens to 26 facilities with CD4 equipment. ZPCT staff continue to monitor and strengthen the specimen referral systems. ART sites without CD4 equipment, as well as the outreach sites, also refer specimens to the nearest facility with CD4 equipment.

PCR Laboratory: The specimen referral system has been expanded to transport dry blood spot samples from health facilities offering MCH services in the five target provinces to Arthur Davison Children's Hospital for HIV diagnosis of children less than 18 months old. Samples are being batched at the district level hub and transported by Express Mail Service (EMS) operated by the Zambia Postal Service to ADCH PCR Laboratory in Ndola. 32 facilities in 8 districts in 4 provinces sent samples to the laboratory this quarter.

A total of 558 DBS specimens were received from 32 facilities in eight districts in four provinces in the laboratory this quarter. Of those specimens, a total of 524 were tested. The remainder of the specimens were tested in the following reporting period.

#### **4.3.6.5 Equipment and Reagents**

During the quarter under review, following is the status of laboratory equipment:

- CD4 count equipment (FACSCCount): FACSCCount equipment is functional in all facilities except Solwezi General Hospital which experienced a blockage the last week of December. Becton Dickinson is awaiting the arrival of the spare parts from South Africa early next quarter.

14 FACSCCount instruments were received during the quarter for new sites in all the five provinces. Installation and commissioning of the equipment will be done immediately after a training of users is conducted in January 2008. Priority will be given to the installation and commissioning of the FACSCCount at Solwezi Urban Clinic to alleviate the problem caused by the equipment breakdown at Solwezi General Hospital mentioned above.

- Chemistry analyzer: 12 Humalyzer 2000 were received during the quarter of which six will be distributed to CHAZ sites. The installation and commissioning of these instruments will be conducted during the second month of next quarter. Installation is still pending at Masansa Health Center as the renovations are not yet completed.

The Cobas Integra that were procured by ZANARA were installed and training of users conducted at Mansa and Kasama General Hospitals as well as Mpika District Hospital.

- Hematology analyzer: All Sysmex poch-100i and the ABX Micros are working well. The sample holder for the Nakonde equipment will be procured next quarter.

ZPCT-supported sites access reagents procured by GRZ and stored at MSL. All reagents are available in sufficient quantities except for the Hematology and Biochemistry controls which are in short supply. The Sysmex Poch-100i controls have continued to be supplied through CDC. A challenge is faced in the distribution of these controls to the respective facilities as they often arrive with only a few days / weeks before their expiry date. ZPCT facilitates the prompt delivery of these commodities using either courier services or scheduled ZPCT visits to the provinces.

PCR equipment and reagents: All the equipment procured for the PCR laboratory at ADCH was successfully installed and is working well. The Micro Plate Reader cables will need to be modified in order to successfully use the required software. A second thermocycler was procured which will act as a backup.

Minor renovations were carried out on the laboratory windows to prevent any potential contaminants and inhibitors entering the laboratory and also any HIV DNA aerosols from escaping out of the laboratory.

Certification of the two biosafety cabinets was carried out successfully in December and will be performed biannually. Both cabinets were decontaminated and validated at the same time.

All DNA PCR laboratory consumables for use in the laboratory at ADCH are being purchased by ZPCT. The reagent kits (Roche Amplicor version 1.5) are procured through the agreement with CHAI and distributed to the PCR laboratory by ZPCT. ZPCT also accesses DBS consumable bundles from MSL, procured by CHAI, for redistribution to all facilities for use in DBS collection and packaging.

#### **4.3.6.6 Key Issues/Constraints in Laboratory Services**

ZPCT is committed to working with our partners in the provinces, districts, and facilities to ensure an adequate supply of HIV and ART-related commodities for provision of services. There are many challenges in meeting this goal.

- Late submission of aggregated data: Submission of aggregated data on HIV-related commodities (e.g. HIV rapid test kits) from DHMTs to central level has improved and only a few DHMTs continue to be a challenge. Stock outs have reduced but are still experienced at a few facilities. ZPCT is continuing to work with DHMTs to build capacity at the district level to eliminate the delays.
- Lack of qualified staff in the facilities: Shortages of trained staff have compromised the quality of service delivery in the facilities. The MOH has posted laboratory graduates to a few centers. ZPCT is still working with DHMTs and facilities to improve this situation by providing transport reimbursements to staff who work extra shifts.
- Inadequate supply of commodities: There has been a great improvement in the availability of reagents and most facilities are accessing supplies. While there are occasional stock-outs of selected commodities (specifically, specimen containers), service delivery has not been adversely affected. Some facilities are able to procure using their own funds to fill the gap.

For the PCR laboratory, molecular biology consumables are not available locally. ZPCT is procuring these commodities from suppliers and manufacturers and is working with CHAI to ensure there is an uninterrupted supply of these commodities.

- Maintenance of diagnostic equipment: Routine preventive maintenance of diagnostic equipment is an issue in assuring uninterrupted laboratory testing in the facilities. ZPCT is collaborating with the MOH and CDC to address this problem. The MOH signed a maintenance and service contract based on reagent procurement with Becton Dickinson who will continue to service the equipments and retrain the users. ZPCT is working to replicate the same conditions with Biogroup and Scientific Group for the chemistry and hematology analyzers serviced by them.
- Specimen referral systems: Overall, the specimen referral is working well, but has occasionally been affected by breakdown of motorbikes and/or CD4, hematology or biochemistry equipment. ZPCT continues to find innovative ways of addressing these gaps, including using DHMT vehicles to transport specimens and refer samples to where CD4 equipment is functional.
- DBS specimens: The PCR laboratory has started receiving specimens from non-ZPCT supported facilities. Some of these specimens are sent without accompanying requisition forms and delivery checklists making it impossible to know the clinical details of patients, their age and if any specimens are missing. Samples without requisition forms also cannot be logged into the PCR laboratory database because of the missing patient information. ZPCT is working with the DHMTs concerned to provide training and mentoring to these facilities.

### **4.3.7 Monitoring and Evaluation (M&E)**

#### **4.3.7.1 M&E Training**

A one-day module on M&E topics was included as part of the CT and PMTCT and trainings conducted this quarter. Details of these trainings are as follows:

- The M&E module was presented as part of the CT training for 19 staff from 17 ZPCT-supported sites.
- 70 staff from 41 ZPCT-supported facilities were trained in PMTCT reporting as part of the PMTCT trainings in Central, Copperbelt and Northern provinces. This training involved the use of the Integrated VCT/PMTCT Register and associated monthly reporting forms.

#### **4.3.7.2 Technical Assistance in M&E**

The SmartCare system was deployed in Copperbelt Province at ADCH, Chipokota Mayamba and Chipulukusu Clinics. Preparations for the SmartCare roll-out in the new facilities are underway. ZPCT staff continued to provide technical assistance to DHMTs and health facilities in the area of data management through mentorship, in collaboration with the respective PHO/DHMT staff. The focus of the site visits included conducting SmartCare quality assurance and quality control checks, reviewing and correcting data entry problems and updating the ARV dispensing tool in the pharmacies. The SmartCare software data quality control in collaboration with CDC (as the software developers) has continued to ensure that quality reports are generated from the software once it is fully operational.

#### **4.3.7.3 Key Issues/Constraints in M&E**

One constraint in the deployment of the SmartCare system has been the software's failure to continuously function at optimum level in a networked environment. The development team at CDC has been notified but the turn around time is slow owing to the tedious process of software development. This causes a delay in the data migration process as stand-alone computers have to be used which requires merging the databases at the end of each day to ensure that no duplicates records are entered on a subsequent day on any of the computers. Some aspects of the reports generated have also taken time to be fixed thereby delaying the time it takes for a facility to transition fully from the ARTIS paper system.

#### **4.3.7.4 ZPCT Indicators/Results**

The following table shows service statistics and related data through December 31, 2007 from ZPCT-supported sites. It is a summary of key indicators for all ZPCT activities from all facilities. The training statistics for health care workers and lay counselors who directly provide services in all the program areas are also presented.

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to December 31, 2007)						
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Oct 07 to 31 Dec 07)			Achievements (1 Oct 07 to 31 Dec 07)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 31 Dec 07)
	TARGET	FEMALE	MALE	TOTAL			
<b>CT</b>							
Service outlets providing CT	216						170
Persons trained in CT	680			61	61	9%	1,035
Persons receive CT services	54,000	17,303	15,572	32,875	32,875	61%	195,308
<b>PMTCT</b>							
Service outlets providing PMTCT	199						159
Persons trained in PMTCT	400			94	94	24%	554
Pregnant women provided with PMTCT services, including CT	84,000	24,419		24,419	24,419	29%	141,981
Pregnant women provided with a complete course of ART prophylaxis	15,750	2,538		2,538	2,538	16%	13,218
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services	216						144
Service outlets providing general HIV-related palliative care	216						144
Persons provided with OI management and/or prophylaxis	66,690	39,285	25,567	64,852	64,852	97%	71,917
Persons provided with general HIV-related palliative care	66,690	39,285	25,567	64,852	64,852	97%	71,917
Persons trained to provide general HIV-related care	200			81	81	41%	744
<b>Treatment</b>							
Service outlets providing ART services	96						71
Health workers trained in ART	200			81	81	41%	744
New clients receiving ART	15,600	3,488	2,428	5,916	5,916	38%	45,535
Total clients receiving ART	51,300	28,160	19,091	47,251	47,251	92%	47,251
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			30	30	20%	394
New pediatric clients receiving ART	1,560	215	232	447	447	29%	3,198
Total pediatric clients receiving ART	5,130	1,597	1,595	3,192	3,192	62%	3,192
<b>TB and Care</b>							
TB infected clients receiving CT services	7,000	417	508	925	925	13%	7,135
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	4,300	530	640	1,170	1,170	27%	4,685

#### **4.4. Community Mobilization and Developing Referral Networks**

During this reporting period, ZPCT provincial staff participated in meetings at the district level to prepare for World AIDS Day (WAD) activities. On WAD, ZPCT staff participated in marches held in Lusaka, Kabwe, Kasama, Ndola, Mansa and Solwezi. ZPCT supported mobile CT services prior to and during the WAD celebrations in the following districts: Kabwe, Chibombo, Isoka, Nchelenge, Mufumbwe, Ndola and Kitwe. In Kabwe, ZPCT staff participated in a candlelight memorial service organized by Student Partnership Worldwide held on November 30. During the main WAD celebrations, the ZPCT Central Office was given an award by the Central Province Minister for their contribution to the fight against HIV/AIDS.

Also during this reporting period, a capacity building meeting was held for all ZPCT community mobilization and referral network staff from November 5-9 in Ndola. The purpose of this workshop was to equip the staff with information and knowledge in PMTCT, pediatric clinical care and ART and to discuss the gender and sexuality dimensions to HIV/AIDS as they impact on demand creation for HIV/AIDS related services. This information and knowledge will be used in the training of community partners to ensure accurate and adequate information is disseminated in the communities in ZPCT catchment areas.

The following key activities were identified for implementation during this workplan period:

- Conduct formative research to establish barriers to male involvement
- Expand couple counseling activities at ZPCT sites
- Train peer educators who have accessed CT/PMTCT services with their partners
- Support the formation of male/female support groups and empower them with skills to support community members with disclosure of HIV positive status
- Pilot a "buddy" system for HIV positive women Mkushi and Mushili catchment areas

During the program management meeting held in Lusaka on December 5 and 6, 2007, the integration of community mobilization and referral network activities into the duties of program staff was discussed. Provincial program managers will review the community mobilization related tasks with program staff to operationalize this integration. The Lusaka office staff will provide a field-based orientation for all program staff to support these activities.

##### **4.4.1 Community Mobilization Program**

During the reporting period, provincial offices placed emphasis on the mobilization for male involvement, pediatric clinical care and pediatric ART services. Provincial staff met with health facility staff to identify community groups that had received information and knowledge in PMTCT and HIV/AIDS clinical care and management through training with district partners such as the DHMT, the Health Communication Partnership and , CARE International. In the next quarter, referral of children requiring CT services and couples needing CT/PMTCT services will be integrated into the routine activities of these community groups.

In some of the hard-to-reach areas such as Mutanda in Solwezi district, it is challenging to mobilize the community for HIV/AIDS related services due to the lack of community groups working within the catchment area that have strong links with the health facilities.

Door-to-door mobilization is the activity that most community groups implemented across the five provinces. Community partners choose door-to-door mobilization because it allowed them to give clients information in the comfortable setting of their homes. Community groups have also reported that door-to-door information sessions allow clients to ask questions and seek clarification prior to accepting the referral form.

During the Referral Officers' meeting held in Ndola, it was agreed that as ZPCT expanded its support to the new districts, community based structures and organizations will receive orientation in the use of referral tools. The strengthening of the referral network will precede the development and execution of the community purchase orders to support community mobilization activities.

##### **4.4.1.1 Associate Partners - Community Mobilization**

Expanded Church Response: A meeting was held with the Executive Director and National Coordinator of the Expanded Church Response on October 9, 2007 to review program implementation by ECR under the sub agreement that expired in September 2007. The meeting reviewed the support given by ZPCT and charted the way forward. Following this meeting, ECR submitted a new project proposal to ZPCT in November 2007 which was not approved for funding. ECR also submitted outstanding quarterly reports, financial reports and a final project report.

Churches Health Association of Zambia: A community purchase order was developed with a group comprising of community based PMTCT counselors and safe motherhood group members at St. Kalemba. The group was selected in order to increase male involvement in PMTCT. Data on this activity will be reported in the next reporting period.

#### 4.4.1.2 Working with Local Community Groups

During the reporting period, 11 community purchase orders (CPOs) were developed and executed. There were fewer CPOs signed during this reporting period because those developed in September were implemented in October 2007. Emphasis on pediatric clinical care and PMTCT services made it necessary to select partners strategically placed in the community to conduct mobilization for clinical care and PMTCT services. Home-based care groups were one of the most prominent partners during the past reporting period as they have the comparative advantage of direct access to the client in their home.

In September 2007, a CPO was signed with Mahatma Gandhi HBC, in Kabwe district. In the implementation of this CPO, HBC caregivers identified children who would benefit from an HIV test from the community growth monitoring points, during visits to clients' homes. These children were referred to Mahatma Gandhi Clinic. During the implementation of the CPO, 93 children were referred to Mahatma Gandhi and received CT services. In Kabwe, Pollen HBC recommended that Kabwe DHMT hold a district wide campaign to promote male involvement. The group recommended that public address be used to inform all men that they were expected to accompany their partners to the clinic.

In Copperbelt Province, youth groups exhibited good communication skills, necessary for effective information dissemination. Most of the youth friendly groups are trained in theater for development. Drama has proved to be effective for gathering large numbers in one place, after which information on HIV/AIDS related services can be disseminated. In Kitwe, the youth running the youth-friendly services in ZPCT-supported facilities have established linkages with other services at the health facilities. In Kansuswa Clinic catchment area, Mufulira district, a CPO was signed with Kansuswa youth who run the youth friendly services at the clinic. 17 couples were referred from drama performances and were counseled and tested together at Kansuswa Clinic.

In Solwezi, a CPO was developed with a group of community volunteers trained by Solwezi DHMT in PMTCT with support from UNICEF. The group was selected to mobilize the community in Solwezi district for PMTCT services being offered by Solwezi Urban Clinic during their outreach.

In Kabwe, Ndola and Mansa districts, Neighborhood Health Committees (NHCs) have taken on ownership of the community mobilization and awareness creation activities. In these districts it has also been noted that health facility staff are more willing to support the mobilization activities of the NHCs and community health workers as opposed to the work of CBOs. Health facility staff participate actively in the monitoring of information dissemination as part of their outreach activities.

At Chembe Rural Health Center, male involvement in PMTCT has been strengthened by outreach activities of safe motherhood groups trained by Health Communication Partnership. Safe motherhood group members have proactively followed up men who resist escorting their pregnant partners to the clinic for ANC services. The group members have held community meetings to continue to advocate for safe motherhood practices including CT for couples.

The following are the groups that implemented CPOs during this reporting period.

Province	District	Facility	Group
Copperbelt	Ndola	Lubuto	Twatasha Support Group
	Kitwe	Ipusukilo	Ipusukilo Youth Friendly
Central	Chibombo	Shimibilo RHC	Shimibilo Home Based Care
	Kabwe	Mahatma Gandhi	Tasiana Community Arts
	Kabwe	Makululu Health Center	Positive Women Network
	Kabwe	Pollen	Pollen HBC
Luapula	Nchelenge	Kashikishi RHC	Bumi Bwesu Youth Centre
North	Solwezi	Solwezi Urban Clinic	Moment of Hope
Western	Solwezi	Solwezi Urban Clinic	NZP+
	Mufumbwe	Mufumbwe District Hospital	Mufumbwe Mobilization group

Province	District	Facility	Group
Copperbelt	Ndola	Lubuto	Twatasha Support Group
	Kitwe	Ipusukilo	Ipusukilo Youth Friendly
	Mwinilunga	Mwinilunga District Hospital	Mangoma Theatre Group

#### 4.4.2 Lay Counselors

During the period under review, lay counselors continued to support HIV CT services in the ZPCT-supported facilities in the five provinces. Training for lay counselors in HIV testing has been completed. This has had a positive impact on both static and mobile CT services as lay counselors complete the whole CT process with the client (pre, post test and HIV testing). Lay counselors do not receive the regular counseling supervision required because most counseling supervisors are overburdened with other clinical duties. During technical assistance visits, ZPCT staff are providing some of this supervision, as well as encouraging counseling supervisors to include lay counselors in the routine supervision and counselor support meeting.

Following meetings between ZPCT and Luapula Foundation, the two organizations have shared work schedules of the lay counselors offering services at Senama and Central Clinics as well as the Luapula Foundation mobile sites. One lay counselor in Mansa has left the DHMT placement at Central Clinic to work with Luapula Foundation due to higher monetary incentives offered. Two lay counselors are no longer able to offer services at ZPCT-supported sites as they have moved residence.

Data collection for the lay counselor study, approved by the Research Ethics Committee of the University of Zambia, was completed during the period under review. Focus group discussions were held with health care workers at Central, Chembe and Senama Clinics in Mansa district. A focus group discussion was held with PLHA to obtain information on their counseling experience at pre and post test. In Ndola client exit interviews were held at Mushili, Ndeke, Ndola Central Hospital, Chipokota Mayamba, Lubuto and Kawama. Ten clients who had recently accessed CT were interviewed. Focus groups discussions were held with health care workers. Following the completion of the data collection process, a meeting was held with the Senior Advisor for M & E and the M & E Officer at the Lusaka office to discuss data editing, cleaning, input and analysis. This process will be completed in the next reporting period.

#### 4.4.3 Stigma Reduction

During the period under review, stigma reduction workshops were held in Ndola, Kabwe and Mpika, Solwezi for participants selected from the ZPCT-supported districts in the province. Participants were selected by the respective DHMTs to be trained as trainers. 32 DHMT staff were trained as trainers from three districts. The training was based on the regional anti-stigma tool kit. The purpose of the training was to help HCWs from ZPCT-supported sites:

- Understand and experience how the stigma trainer of trainers works and how it could be used throughout MOH facilities to scale up quality comprehensive HIV/AIDS care
- Familiarize with the main issues around HIV related stigma and discrimination and develop an in depth understanding of stigma, how it affects individuals, families and communities
- Use the anti-stigma toolkit
- Understand the contents, methods and processes which create effective ways of challenging stigma
- Utilize new training techniques including songs, drama, working with feelings, brainstorming and managing space and energy levels
- Plan and adapt stigma training exercises to fit their own context
- Plan, strategize and implement roll-out stigma programs in their own context and working environment. The trainers will train other facility staff from their districts. Stigma reduction exercises will be integrated into facility workplans and implemented by the trainers.

Participants reported having appreciated the silent nature of stigma and developed action plans to challenge stigma in their workplace.

The following is the breakdown of the number of participants trained during the workshops:

District	Number of participants
Kabwe	10
Mpika	12
Ndola	10
<b>Total</b>	<b>32</b>

#### 4.4.4 Mobile Counseling and Testing

ZPCT staff met in December to discuss the strengthening of QA/QI during mobile CT. It was resolved that a counseling supervisor had to be a part of the service providers for mobile CT services. The counseling supervisor should then observe and assess the time spent during pre and post test counseling. The counseling supervisor will be responsible for the administration of the CT provider tool. It was recommended that ZPCT Lusaka staff will attend mobile CT to support the implementation process and ensure QA/QI measures are put in place. To facilitate this, ZPCT provincial teams will be required to submit planned dates for mobile CT activities at the beginning of every workplan period.

Mobile CT activities were supported by ZPCT provincial teams as contribution to the World AIDS Day activities. ZPCT supported DHMT in planning for logistics, engaged community groups for mobilization prior to WAD and ensured counselors were available to provide HIV CT and referral services.

District	Males Counseled and Tested			Females Counseled and Tested			Children Counseled and Tested		
	Total	# positive	% positive	Total	# positive	% positive	Total	# positive	% positive
Kabwe	465	73	15.7%	323	36	11.1%	21	4	19.0%
Chibombo	45	5	11.1%	81	8	9.9%	38	1	2.6%
Isoka	158	8	5.1%	33	5	15.2%	1	0	0.0%
Ndola	30	6	20.0%	69	12	17.4%	4	0	0.0%
Kitwe	206	30	14.6%	164	14	8.5%	0	0	0.0%
Mufumbwe	222	3	1.4%	118	4	3.4%	0	0	0.0%
Nchelenge	146	4	2.7%	81	4	4.9%	4	0	0.0%
<b>Total</b>	<b>1272</b>	<b>129</b>	<b>10.1%</b>	<b>869</b>	<b>83</b>	<b>9.6%</b>	<b>68</b>	<b>5</b>	<b>7.4%</b>

#### 4.4.5 Referral Network Development

District-wide referral networks are fully functional in 15 districts and have been initiated in six additional districts. During the Referral Officer's meeting in Ndola, strategies to address inactive referral networks were addressed. In Kasama and Nakonde districts referral network meetings have been erratic and the referral coordinating units have not taken on the coordination and leadership role. It was agreed that in these districts, ZPCT would support a review meeting for all referral network partners during which the functioning of the referral network would be addressed. It was also resolved that in some districts, it was imperative to explore the possibility of another organization assuming the role of referral coordinating unit. Referral networks will be initiated in the remaining ZPCT-supported districts by September 2008.

In Chinsali district, Maluba Home-Based Care and Association of Lay Missionaries have been identified as strategic partners for referral to Clinical care services and ART. The two organizations have established CT services and attend to a large number of HBC clients at their CT services. During the reporting period CMRO Northern Province worked to strengthen referral documentation for HIV positive clients from Maluba HBC and Association of Lay Missionaries for ART and Clinical Care.

During the referral network meeting in Kabwe, network members conducted audits of each other's referral forms and registers. A significant improvement in the documentation was noted. This method of "peer auditing of registers has increased ownership of the network by its members and provides support to the DHMT in the monitoring of the quality of referral documentation.

ZPCT community and referral staff have continued to emphasize the need for health care workers to document feedback, particularly for clients being commenced on ART. This feedback to the community groups is necessary for the community groups to monitor what care has been availed to the client and establish what other services are needed.

A facility based referral network has been established at Chembe. Chembe is situated 90km away from the central part of Mansa. It is therefore not possible to include the HIV/AIDS service providers. The network is comprised of facility staff, CARITAS, malaria agency, HBC, TB Dots, TBAs, NHCs, women's nutrition groups and community health workers. This network of HIV/AIDS service providers will meet monthly. The meetings will be coordinated by the health care workers at Chembe RHC. This is a new model of referral network (facility as opposed to district wide) may be replicated around other rural ZPCT sites.

#### 4.4.6 Key Issues/Constraints for Community Mobilization and Referral Networks

HIV CT for children: During the mobilization activities in Kabwe, Pollen HBC group members noted that children were often left at home with a care giver who was not ready to accept a referral form. This highlights the need to increase information on the availability of HIV testing services for children. Community groups in Kabwe were not aware that children below the age of 18 months could access CT services. It is therefore important to ensure that community groups are informed on new developments in HIV/AIDS related service provision.

Drama script: The development of drama scripts, which are often a deliverable for community purchase order, posed a challenge for most theater groups. Most theater groups conduct drama performances in local languages, basing the scripts on the community job aid messages. The groups find it challenging to accurately document the same scripts in English. ZPCT has identified two good scripts developed by community partners which will be shared with all provincial offices to alleviate this problem.

Mobile CT: For increased sustainability of mobile CT activities, DHMTs are requested to provide transportation for the counselors to and from the mobile CT sites. This has often led to the mobile CT events being postponed. Sometimes this creates distrust in the community, especially when community groups have conducted community mobilization activities informing the public of mobile CT services coming to their area.

### 4.5. Quality Assurance and Quality Improvement (QA/QI)

#### 4.5.1 Administration of QA/QI Tools

ZPCT is currently in the process of streamlining and refining a QA/QI system that is intended to encourage provincial technical officers to work as a team, draw on their collective experience and skills and to analyze the extent to which ZPCT-supported sites are compliant with national HIV prevention, care and treatment strategies. This information is used to identify priority areas for improvement and to design and implement activities to improve the services provided. ZPCT has adapted a set of QA/QI tools from Family Health International (FHI) and Management for Health Sciences (MSH) in each of the following technical areas: CT/PMTCT, ART and clinical care, pharmacy, laboratory and M&E. These tools are administered on a quarterly basis in supported sites to identify gaps in service delivery and potential areas for improvement. QA/QI tools will be administered at the newly supported sites only once services are functional for at least three months. The QA/QI system runs through a cyclical process of identifying priority problems, establishing the desired outcomes and requirements to achieve them, taking corrective action(s) and evaluating whether the corrective actions delivered the desired outcome. This cycle is continuous and runs every quarter to identify and address new areas for improvement.

- CT/PMTCT Tools: During this quarter, the CT/PMTCT facility checklist, CT provider, PMTCT provider and counselor reflection QA/QI tools were administered in 73 of the 97 ZPCT-supported health facilities established with COP06 funds providing PMTCT services. The CT/PMTCT facility tool was used to assess general aspects of site operations, staffing levels, adherence to standards in both CT and PMTCT, and availability of registers and test kits. The CT and PMTCT provider tools were used by supervisors to assess the quality of the provider-client interaction as clients actually receive services, while the counselor reflection tool was administered as a self-reflection tool to identify areas of weakness.

The continued inconsistent use of CT and PMTCT QA/QI tools in all 97 ZPCT-supported facilities was mainly attributed to the shortage of counselor supervisors in some facilities. The key areas that were identified for improvement in this quarter included conducting external QA for HIV testing, supervision provided by trained CT counselor supervisors, routine CT and strengthening internal and external linkages between CT services and under five clinics, family planning services and male involvement.

- ART/CC Tools: During this quarter, the ART/CC tools comprising of the ART/CC essential elements checklist, ART facility checklist and ART provider questionnaire was administered in 42 of the 62 ZPCT-supported ART sites established with COP06 funding. The tools have been instrumental in assessing standards in initiating and prescribing ART, monitoring clients and referral practices. Key issues noted from the administration of the ART/CC tools included the lack of a functional pharmacovigilance program for reporting adverse drug reactions, breakdown of equipment to conduct liver function tests and biochemistry investigations, lack of updated standard operating procedures on ART, adherence counseling and post exposure prophylaxis (PEP) program.

Provincial staff have committed themselves to ensuring that affected facilities are well stocked with adverse reporting forms and will endeavor to orient facility staff through mentorship and clinical meetings on the procedures for reporting adverse reactions to the Pharmacy Regulatory Authority. Service agreements with suppliers for lab equipment have been finalized and lab staff will also be provided refresher training in laboratory maintenance skills. ZPCT, working in collaboration with the MOH, has finalized the first ever ART standard operating procedures manual and is currently awaiting approval from the MOH to commence printing. Once this is completed, the manuals will be distributed to all ART sites. To address the issue of PEP, technical officers, apart from providing supervision, will promote establishing a coordinating PEP team in affected facilities to reduce the impact of attrition of focal persons on PEP in supported facilities.

- **Pharmacy Tools:** The pharmacy tools used by ZPCT are based on the standard operating procedures used at the national level, developed by MSH under RPM Plus. In this quarter, the pharmacy ARV bulk store tool, dispensing and medication counseling process tool and ART pharmacy records tool were administered in 47 of the 62 ZPCT-supported ART pharmacies established with COP06 funding. This set of tools form a cardinal component of assessing and monitoring the quality of ART commodity management. More specifically, the tools were used to assess the general appearance and organization of the ARV bulk store and dispensing areas. In addition, the tools assess the adherence to the national standard operating procedures for pharmacy.

Although the majority of facilities had well organized ARV store rooms and dispensing areas a few weaknesses were identified. These included the lack of adverse drug reaction reporting, temperature monitoring charts, thermometers and tracking charts for drug expiry dates. None of the provinces reported any stock outs of ARV and OI drugs. Sites will be supported with the provision of missing charts and thermometers.

- **Laboratory Tools:** The laboratory QA/QI tool used by ZPCT is based on the standard operating procedures used at the national level, developed by MSH under RPM Plus. The health center and hospital laboratories QA/QI tool was administered in 59 of the 65 ZPCT-supported laboratories established with COP06 funding. Some of the key areas assessed were health and safety, equipment and reagents management and use of internal and external quality assurance procedures.

Some of the issues identified as areas of weakness included broken down laboratory equipment, lack of regular servicing of lab equipment, laboratories not performing internal quality control runs with each test batch and also lack an external quality assurance system, shortages of trained staff, erratic supply of FACSCount and serum creatine reagents and EDTA containers by MSL. ZPCT provincial teams will continue to work with the Lusaka office to purchase and supply commodities and reagents in short supply. ZPCT provincial staff will liaise with DHMTs and PHO to set up an external QA system by using provincial labs as reference labs for district hospitals and health laboratories. Service agreements with suppliers of the lab equipment have been reached and facilities will be linked with the supplier for prompt repair of any broken down equipment.

- **M&E Tool:** The M&E facility checklist was administered in 92 ZPCT-supported sites during this quarter. The tool was used to check for the availability of ART/CC, CT and PMTCT registers and the consistency of data collected.

In general, all data capturing tools were found to be correctly updated and well kept. This was mainly attributed to regular data audits that ensure that ZPCT summation form entries are matching with data from MOH monthly forms. However, there was a shortage of M&E job aids in the facilities to guide facility staff on the data management in all technical areas. The M&E unit will ensure that M&E job aids are reproduced and supplied in affected facilities. ZPCT working in collaboration with CDC has outlined specifications of key QA/QI indicators, for use with SmartCare to track the quality of services ART clients are receiving from baseline and during follow up monitoring. These will be implemented when the updated version of SmartCare is released by CDC, before the end of the coming quarter.

#### **4.5.2 Facility Graduation Sustainability Plan**

As part of its sustainability plans, ZPCT developed a graduation policy for ZPCT-supported districts to continue to provide good quality services in the absence of intensive external support. The graduation policy aims to transition supervision and technical assistance of districts implementing high-quality HIV/AIDS services from ZPCT to GRZ support without compromising service delivery or quality. ZPCT's technical strategies and QA/QI tools will be used as the basis for assessing service quality in the targeted facilities. Graduation tools have been developed and are being used to establish comprehensive graduation plans by the provinces. However, since facilities eligible for graduation must maintain and sustain an acceptable standard in CT, PMTCT, clinical care, ART, pharmacy and

laboratory services for a period not less than three to six months before graduation, and with the expansion to additional health facilities in the districts planned for graduation, the process has slowed down.

Taking these developments into consideration, each province aims to graduate at least one district by September 30, 2008. Additional districts will be graduated in the next workplan period. ZPCT will continue to provide financial assistance to graduated facilities to enable the provision of CT, PMTCT, clinical care and ART services with minimal supervision and technical assistance from ZPCT provincial and Lusaka offices.

#### **4.5.3 Key Issues/ Constraints in QA/QI**

Shortages of trained staff in all technical areas and the issues of scaling up pediatric ART have been discussed in all of the other sections. Below are some additional constraints:

- Sustaining QA/QI gains: The QA/QI tools are part of a package of approaches including supervision, mentorship, joint problem solving, and two-way communication between supervisors and those being supervised. ZPCT will also continue to conduct training which evolves to meet national standards and training needs. Technical strategies will be implemented to deliberately increase integration of services, reduce missed opportunities to serve clients, improving linkages and referrals between community services and health facilities and encouraging skills transfer to other facility staff from trained and experienced peers. These measures must be systematically maintained by the MOH once facilities and districts are graduated from intense ZPCT technical supervision.
- Lack of clear guidelines and regulations: There are currently no clear national regulations that require medical staff in the facilities to form quality assurance committees making the intensity of their involvement in quality improvement efforts variable. Even when actively involved, facility staff lack training in quality improvement processes. Historically, quality improvement has not been part of medical schools' curricula. Following the engagement of a QA/QI focal person at the MOH, there will ongoing discussions on how to institutionalize this process. ZPCT, working with other partners, will look for several strategies to increase involvement of the HCWs in the QA/QI process.
- Lack of time: One barrier that ZPCT technical staff face in quality improvement is lack of time for planning, analyzing, implementation and evaluation of the QA/QI program. QA/QI updates will be included in workshops and quarterly meetings to identify key challenges and possible changes they could be made in the delivery of care. At subsequent workshops/meetings, technical staff will facilitate productive discussions with peers to help them analyze of the results of the data collected.

## 5. ONGOING CHALLENGES

### ➤ **Human resources**

Staff capacity and availability at all levels within the provinces are below what is required, especially at the health center level. The addition or expansion of HIV-related services further strains the situation. In response, ZPCT has developed and implemented a transport reimbursement schedule to support HCWs who work extra shifts, as well as training and placing lay counselors and adherence support workers to relieve HCWs counseling duties.

### ➤ **Training and support for HCWs**

Several challenges are inherent in training in Zambia. Training for PMTCT and ART/OIs must follow the Zambia national training curricula. These are both two-week courses which take staff from already short-staffed facilities for a long period. In addition to the service-related issues, this is also a considerable burden on the ZPCT budget. ZPCT has conducted in-house training courses and continues to work with MOH and other partners on alternative strategies and models for training, as well as cost-savings for current trainings.

### ➤ **Inconsistent supply of HIV commodities and drugs**

Although there have been improvements in supplies of HIV test kits, reagents, ARVs and other commodities, there are occasional interruptions to service provision due to erratic supplies. This situation is particularly challenging because there are so many points in the supply chain where a breakdown can occur. ZPCT works with staff in the facilities, and with the MOH, USAID/DELIVER and Supply Chain Management System (SCMS) at a national level, on quantification, record keeping, ordering, and commodity management. ZPCT continues to procure a stop-gap interim supply of reagents until the systems are fully stocked. ZPCT has included reagents in the next annual budget.

### ➤ **National guidelines, protocols, and SOPs**

ZPCT is disseminating key CT and PMTCT guidelines to facilities. Technical staff are working with the MOH and other partners on development of national SOPs for key procedures and has provided MOH approved job aids in CT, PMTCT, and ART/OI to ZPCT-supported facilities to enhance quality assurance and improvement.

### ➤ **Implementing M&E systems in government facilities**

The MOH, both at the national and provincial level, is unwilling for projects to introduce additional reporting requirements in government health facilities. While most indicators required for ZPCT reports under PEPFAR are collected through the existing HMIS, there are a few missing indicators which require additional efforts. Data entry clerks were hired, oriented, and placed in ZPCT-supported ART centers and they have improved the quality of data and increased the sustainability of improved data collection methods being introduced. Additional data entry clerks are being recruited to provide support to the new ART sites. In the next quarter, data entry clerks will be hired through the recipient agreements under one-year contracts based on MOH salaries and benefits. The long term status of the data entry clerk positions is being discussed with the MOH.

### ➤ **Sustainability and quality of services**

As ZPCT expands into more districts and facilities quality assurance and sustainability become increasingly important and more challenging. ZPCT staff will continue to provide technical assistance and mentor staff to ensure quality. ZPCT piloted QA/QI tools for all technical areas in each of the provinces and are working with facility staff and the DHMTs to establish routine QA/QI.

Strategies to respond to these challenges have been incorporated into the ZPCT work plan and are being addressed as implementation progresses.

## 6. PLANS FOR THE NEXT QUARTER

Highlights from the plans for the next quarter are described below. In addition to the specific activities listed, ZPCT will continue to build a strong partnership with the MOH and other partner organizations at the provincial and district levels and with staff and management in facilities.

Technical Area	Planned Activity
General	➤ Complete recruitment and orientation of additional staff to support the program expansion activities and initiate recruitment process. Provide HR management support to all provincial offices.
	➤ Facilitate staff development activities across ZPCT aimed at middle management and supervisors.
	➤ Support participation of program and finance staff in the regional USAID finance training.
	➤ Continue procurement for all new equipment and continue to carry out renovations under the new and amended recipient agreements.
	➤ Conduct site assessment to expand ZPCT support to three health centers in Lufwanyama District, Copperbelt Province.
	➤ Conduct assessments to identify staff housing at health facilities requiring refurbishments to increase the quality of working and living conditions of health care workers. Develop two recipient agreements for Northern and North Western Provinces to support the renovations identified.
	➤ Discuss transition of activities in Mungwi District, Northern Province with the DHMT and transition to CHAZ.
	➤ Implement stigma reduction activities, including training of facility staff to support implementation of stigma reduction exercises at ZPCT-supported health facilities.
	➤ Continue to collaborate with associate partner organizations on management of agreements and implementation and reporting of project activities; provide support and monitoring to assure quality.
	➤ Close-out the subagreement with ECR. Develop and post a call for proposals to identify a new FBO partner to support community mobilization activities.
	➤ Continue to monitor and assist ZPCT provincial offices to be decentralized in selected program, technical and financial areas.
	➤ Conduct orientation meetings with the DHMTs in all five provinces to plan for trainings in the districts and to discuss decentralization of trainings.
	➤ Continue to strengthen the referral system including integrating the review of referral data during PHO and DHMT supervisory visits.
	CT
➤ Implement strategy to monitor and assure quality of mobile CT services.	
CT, PMTCT	➤ Conduct CT/ PMTCT capacity building meeting with provincial staff and visit UTH to learn more about routine CT for children in care.
	➤ Continue providing mentorship in facilities that provide CT/ PMTCT services, paying special attention to facilities with weak performing indicators.
	➤ Develop targeted community mobilization activities to increase the numbers of children referred for HIV CT and male involvement in PMTCT.
PMTCT	➤ Expand provision of more efficacious ARVs for PMTCT, including full ART for women who are eligible and dual therapy for those receiving prophylaxis only.
	➤ Print and distribute new under five cards with the HIV stamp, new PMTCT protocol guidelines and revised job aids.
	➤ Ensure that children exposed to HIV infection are provided with cotrimoxazole prophylaxis.
PMTCT, Laboratory	➤ Support the PCR laboratory at ADCH and implement the courier system to transport dry blood spot samples to the laboratory.
	➤ Continue training of HCWs in dry blood spot collection, storage and transport and operationalize implementation of early infant diagnosis using PCR technology at health facilities.
	➤ Continue strengthening mother-baby follow-ups in ZPCT-supported PMTCT sites and link to HIV testing through PCR at six weeks.
Laboratory	➤ Roll out the recently developed Laboratory Internal Quality Control guidelines for CD4 and HIV testing.
	➤ Update the laboratory equipment database to serve as a reference point in assessing equipment availability, functionality and service and maintenance needs.

Technical Area	Planned Activity
	<ul style="list-style-type: none"> <li>➤ Conduct trainings in equipment use and maintenance for users at ZPCT-supported facilities.</li> </ul>
ART	<ul style="list-style-type: none"> <li>➤ Provide technical assistance and mentoring in pediatric HIV/AIDS management and implementation of the transition to the new ART national treatment protocol.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Print and distribute the revised SOPs for ART, post-exposure prophylaxis and adherence.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Participate in the ART Training of Trainers to be facilitated by the MOH.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Finalize guidelines for the distribution of Plumpy nut, a ready-to-use food supplement for malnourished infants and children and HIV positive children on ART, in ten high-density ART sites.</li> </ul>
ART, Pharmacy	<ul style="list-style-type: none"> <li>➤ Continue updating the ARV dispensing tool at ART sites where it is already installed, and install in all new ZPCT-supported ART sites once computer sets are delivered.</li> </ul>
ART, PMTCT	<ul style="list-style-type: none"> <li>➤ Finalize the research report for the ASW study and research proposal for PMTCT effectiveness study.</li> </ul>
TB/HIV	<ul style="list-style-type: none"> <li>➤ Integrate and strengthen the TB/HIV links through opt-out provider-initiated HIV testing and CD4 testing for all HIV positive TB patients to ensure effective management of co-infections through early and appropriate referral to ART.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Plan and participate in World TB Day activities in Lusaka and across the five target provinces.</li> </ul>
M&E	<ul style="list-style-type: none"> <li>➤ Design facility profile data collection template and collect facility profile data from the ZPCT-supported sites.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Deploy updated or integrated CT/PMTCT/HMIS software at DHMTs after consultation with partners (HSSP, CDC, EU, and MOH).</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Work with GRZ and partners to implement SmartCare in ZPCT-supported ART sites and procure SmartCare forms for these health facilities.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Identify and assess ZPCT-supported health facilities which will need additional computers and/or DECAs as patient load increases.</li> </ul>
QA/QI	<ul style="list-style-type: none"> <li>➤ Strengthen system and procedures for routine QA/QI in all technical areas, including technical assistance to provincial office on data collection and analysis, updating QA/QI tools to reflect changing strategies and standards in HIV care and services, and developing and disseminating guidelines for the administration of client exit interviews.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Collaborate with technical staff to review, revise and disseminate QA/QI tools, job aids, standard reference materials and related materials.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Develop and implement a district graduation plan for each of the provinces.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Strengthen procedures to ensure that collected QA/QI data is analyzed, documented and disseminated on a quarterly basis to determine progress towards achieving set benchmarks.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Strengthen feedback mechanisms between provincial offices and supported facilities with the aim of fostering team work and partnerships in implementing a systematic QA/QI system</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Continue to work closely with MOH focal person to institutionalize and develop a National QA/QI system for HIV/AIDS services</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Pilot client exit interviews in selected sites for ART, CT, PMTCT and pharmacy services</li> </ul>

**Attachment A: Status of ZPCT-Supported Services and Facilities  
as of December 31, 2007**

**Central Province**

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Kabwe	1. Kabwe General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	2. Mahatma Gandhi HC		◆ <sup>1</sup>	◆		◆		◆	◆ <sup>3</sup>	
	3. Kabwe Mine Hospital		◆		◆	◆		◆	◆	◆
	4. Bwacha HC				◆	◆		◆	◆	◆
	5. Makululu HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	6. Pollen HC		◆ <sup>1</sup>	◆		◆		◆		◆
	7. Kasanda Urban Health Clinic		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	8. Chowa HC			◆		◆		◆	◆	◆
	9. Railway Surgery HC			◆		◆		◆	◆	◆
	10. Katondo HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	11. Ngunu HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	12. Nakoli HC			◆		◆		◆		◆
	13. Natuseko HC			◆		◆		◆		◆
	14. Mukobeko Township HC				◆	◆		◆		◆
	15. Kawama HC			◆		◆		◆		◆
	16. Kasavasa HC				◆	◆		◆		◆
Mkushi	17. Mkushi District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	18. Chibefwe HC				◆		◆	◆		◆
	19. Chalata HC		◆ <sup>1</sup>		◆		◆	◆	◆ <sup>2</sup>	◆
	20. Masansa HC		◆ <sup>1</sup>		◆		◆	◆	◆ <sup>2</sup>	◆
	21. Nshinso HC			◆		◆		◆		◆
	22. Chikupili HC					◆		◆		◆
Serenje	23. Serenje District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	24. Chitambo Hospital		◆	◆		◆		◆	◆	◆
	25. Chibale RHC				◆	◆		◆		◆
	26. Muchinka RHC				◆		◆	◆		◆
	27. Kabundi RHC				◆		◆	◆		◆
Chibombo	28. Liteta District Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	29. Chikobo RHC				◆	◆		◆		◆
	30. Mwachisompola Health Demonstration Zone				◆	◆		◆	◆	◆
	31. Chibombo RHC				◆	◆		◆		◆
	32. Chisamba RHC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	33. Mungule RHC				◆	◆		◆		◆
	34. Muswishi RHC				◆	◆		◆		◆
	35. Chitanda RHC				◆	◆		◆		◆

ART – Antiretroviral Therapy; CC – Clinical Care; CT – Counseling and Testing; PMTCT – Prevention of Mother to Child Transmission

◆ Services have started	1 = Outreach ART Site
◆ Services are planned, but not yet started	2 = Facility has a laboratory but not yet functional
*New facilities are indicated in red.	3 = Referral laboratory for CD4

### Copperbelt Province: ZPCT-Supported Services

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Ndola	1. Ndola Central Hospital	◆		◆			◆	◆	◆ <sup>3</sup>	
	2. Arthur Davison Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	3. Lubuto HC	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	4. Chipulukusu HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	5. Chipokota Mayamba HC	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	6. Mushili Clinic			◆		◆		◆		◆
	7. Nkwazi Clinic			◆		◆		◆		◆
	8. Kawama HC			◆		◆		◆	◆	◆
	9. Ndeke HC			◆		◆		◆		◆
	10. Dola Hill Urban Clinic			◆		◆		◆		◆
	11. Kabushi Clinic			◆		◆		◆	◆ <sup>2</sup>	◆
	12. Kansenshi Prison Clinic		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	13. Kaloko Clinic			◆		◆		◆		◆
	14. Kaniki Clinic			◆		◆		◆		◆
	15. Kavu Clinic	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	16. New Masala Clinic		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	17. Pamodzi-Sathiya Sai Clinic			◆		◆		◆		◆
	18. Railway Surgery Clinic			◆		◆		◆		◆
	19. Twapia Clinic	◆ <sup>1</sup>		◆		◆		◆	◆	◆
Chingola	20. Nchanga N. General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	21. Chiwempala HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	22. Kabundi East Clinic	◆ <sup>1</sup>			◆	◆		◆	◆	◆
	23. Chawama HC				◆	◆		◆	◆	◆
	24. Clinic 1 HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	25. Muchinshi Clinic		◆ <sup>1</sup>		◆	◆		◆	◆ <sup>2</sup>	◆
	26. Kasompe Clinic				◆	◆		◆		◆
Kitwe	27. Kitwe Central Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	28. Ndeke HC	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	29. Chimwemwe Clinic	◆ <sup>1</sup>		◆		◆		◆	◆ <sup>3</sup>	
	30. Buchi HC			◆		◆		◆	◆	◆
	31. Luangwa HC		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	32. Ipusukilo HC	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	33. Bulangililo Clinic		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	34. Twatasha Clinic				◆		◆	◆		◆
	35. Gamatone Clinic						◆	◆		◆
	36. Itimpi Clinic			◆		◆		◆		◆
	37. Kamitondo Clinic				◆	◆		◆		◆
	38. Kawama Clinic		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	39. Kwacha Clinic				◆	◆		◆		◆
	40. Mindolo 1 Clinic				◆	◆		◆	◆	◆
	41. Mulenga Clinic			◆		◆		◆		◆
	42. Mwaiseni Clinic				◆		◆	◆		◆
	43. Wusakile Government Clinic				◆	◆		◆		◆
	44. ZAMTAN Clinic	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	45. Chavuma Clinic	◆ <sup>1</sup>		◆		◆		◆		◆
46. Kamfinsa Prison Camp Clinic		◆ <sup>1</sup>	◆		◆		◆		◆	
47. Mwekera Clinic			◆		◆		◆		◆	
48. ZNS Clinic	◆ <sup>1</sup>		◆		◆		◆		◆	

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Luanshya	49. Thompson District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	50. Roan General Hospital		◆		◆	◆		◆	◆	◆
	51. Mikomfwa HC				◆		◆	◆		◆
	52. Mpatamatu Sec 26 Urban Clinic		❖ <sup>1</sup>		◆		◆	◆	◆	◆
Mufulira	53. Kamuchanga District Hospital	◆		◆		◆		◆	◆	◆
	54. Ronald Ross General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	55. Clinic 3 Mine Clinic			◆			◆	◆		◆
	56. Kansunswa HC			◆			◆	◆		◆
	57. Clinic 5 Clinic			◆		◆		◆		◆
	58. Mokambo Clinic			◆		◆		◆		❖
Kalulushi	59. Kalulushi Government Clinic	◆			◆	◆		◆	◆	◆
	60. Chambishi HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	61. Chibuluma Clinic				◆	◆		◆		❖
Chililabombwe	62. Kakoso District HC	◆		◆		◆		◆	◆	
	63. Lubengele Urban Clinic		◆ <sup>1</sup>	◆		◆		◆	❖	❖

ART – Antiretroviral Therapy; CC – Clinical Care; CT – Counseling and Testing; PMTCT – Prevention of Mother to Child Transmission

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❖ Services are planned, but not yet started	2 = Facility has a laboratory but not yet functional
*New facilities are indicated in red.	3 = Referral laboratory for CD4

### Luapula Province: ZPCT-Supported Services

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4	
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate				
<i>Chiengi</i>	1. Puta RHC	◆			◆	◆		◆	◆		
	2. Kabole RHC		◆		◆		◆	◆	◆	◆	
<i>Kawambwa</i>	3. Kawambwa District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>		
	4. Mbereshi Hospital		◆	◆		◆		◆	◆ <sup>3</sup>		
	5. Kawambwa HC			◆		◆		◆		◆	
	6. Mushota RHC				◆		◆	◆	◆	◆	
<i>Mansa</i>	7. Mansa General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>		
	8. Senama HC		◆ <sup>1</sup>		◆		◆	◆	◆	◆	
	9. Central Clinic				◆	◆		◆	◆	◆	
	10. Matanda RHC				◆		◆	◆		◆	
	11. Chembe RHC		◆		◆		◆	◆	◆	◆	
	12. Buntungwa RHC				◆		◆	◆		◆	
	13. Chipete RHC				◆		◆	◆		◆	
	14. Chisembe RHC						◆	◆		◆	
	15. Chisunka RHC				◆		◆	◆		◆	
	16. Fimpulu RHC				◆		◆	◆		◆	
	17. Kabunda RHC				◆		◆	◆		◆	
	18. Kalaba RHC				◆		◆	◆		◆	
	19. Kalyongo RHC				◆		◆	◆		◆	
	20. Kasoma Lwela RHC						◆	◆		◆	
	21. Katangwe RHC				◆		◆	◆		◆	
	22. Kunda Mfumu RHC				◆	◆		◆		◆	
	23. Luamfumu RHC				◆	◆		◆	◆	◆	
	24. Mabumba RHC				◆		◆	◆		◆	
	25. Mano RHC				◆		◆	◆		◆	
	26. Mantumbusa RHC				◆	◆		◆		◆	
	27. Mibenge RHC				◆		◆	◆		◆	
	28. Moloshi RHC						◆	◆		◆	
	29. Mutiti RHC				◆	◆		◆		◆	
	30. Muwang'uni RHC				◆	◆		◆		◆	
	31. Ndoba RHC				◆		◆	◆		◆	
	32. Nsonga RHC				◆		◆	◆		◆	
	33. Paul Mambilima RHC				◆		◆	◆		◆	
	<i>Mwense</i>	34. Mambilima HC (CHAZ)		◆ <sup>1</sup>		◆	◆		◆	◆	◆
		35. Mwense HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
		36. Chibondo RHC						◆	◆		◆
		37. Chipili RHC				◆		◆	◆		◆
		38. Chisheta RHC						◆	◆		◆
		39. Kalundu RHC						◆	◆		◆
40. Kaoma Makasa RHC							◆	◆		◆	
41. Kapamba RHC					◆		◆	◆		◆	
42. Kashiba RHC					◆	◆		◆		◆	
43. Katuta kampemba RHC					◆		◆	◆		◆	
44. Kawama RHC					◆		◆	◆		◆	
45. Lubunda RHC					◆		◆	◆		◆	
46. Lukwesa RHC					◆		◆	◆		◆	
47. Luminu RHC							◆	◆		◆	
48. Lupososhi RHC							◆	◆		◆	

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
	49. Mubende RHC						❖	❖		❖
	50. Mukonshi RHC						❖	❖		❖
	51. Mununshi RHC						❖	❖		❖
	52. Mupeta RHC						❖	❖		❖
	53. Musangu RHC				❖	◆		◆	❖ <sup>2</sup>	❖
	54. Mutipula RHC						❖	❖		❖
	55. Mwenda RHC		❖		◆	◆		◆	◆	❖
Nchelenge	56. Nchelenge RHC	◆		◆		◆		◆		◆
	57. Kashikishi RHC	◆		◆		◆		◆	❖	◆
	58. Chabilikila RHC	◆		◆		◆		◆		◆
	59. Kabuta RHC	◆		◆		◆		◆	❖	◆
	60. Kafutuma RHC	◆		◆		◆		◆		◆
	61. Kambwali RHC	◆		◆		◆		◆	❖	◆
	62. Kanyembo RHC	◆		◆		◆		◆	❖	◆
	63. Chisenga RHC		◆ <sup>1</sup>	◆		◆		◆		◆
	64. Kilwa RHC		◆ <sup>1</sup>	◆		◆		◆		◆
65. St. Paul's Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>		
Samfya	66. Lubwe Mission Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>	
	67. Samfya Stage 2 Clinic		◆ <sup>1</sup>		◆	◆		◆	◆	◆

ART – Antiretroviral Therapy; CC – Clinical Care; CT – Counseling and Testing; PMTCT – Prevention of Mother to Child Transmission

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❖ Services are planned, but not yet started	2 = Facility has a laboratory but not yet functional
*New facilities are indicated in red.	3 = Referral laboratory for CD4

## North Western Province: ZPCT-Supported Services

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Solwezi	1. Solwezi General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	2. Solwezi UHC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	3. Mapunga RHC				◆		◆	◆	◆	◆
	4. St. Dorothy RHC		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	5. Mutanda HC			◆		◆		◆		◆
	6. Meheba D RHC				◆	◆		◆	◆	◆
	7. Mumena RHC				◆	◆		◆		◆
Kabompo	8. Kabompo District Hospital		◆	◆		◆		◆	◆ <sup>3</sup>	
	9. St. Kalembe RHC (CHAZ)		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	10. Mumbeji RHC				◆	◆		◆		◆
	11. Kasamba RHC				◆		◆	◆		◆
Zambezi	12. Zambezi District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	13. Zambezi UHC						◆	◆		◆
	14. Mize HC				◆	◆		◆		◆
	15. Chitokoloki Mission Hospital (CHAZ)		◆	◆		◆		◆	◆	
Mwinilunga	16. Mwinilunga District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	17. Kanyihampa HC			◆			◆	◆		◆
	18. Luwi Mission Hospital (CHAZ)		◆	◆		◆		◆	◆	◆
	19. Ikelenge RHC				◆		◆	◆		◆
	20. Lwawu RHC				◆	◆		◆		◆
Mufumbwe	21. Mufumbwe District Hospital		◆ <sup>1</sup>	◆		◆		◆	◆	
	22. Matushi RHC				◆		◆	◆		◆
Chavuma	23. Chiyeke RHC		◆		◆	◆		◆	◆	◆
Kasempa	24. Kasempa Urban Clinic		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	25. Nselauke RHC				◆	◆		◆		◆

ART – Antiretroviral Therapy; CC – Clinical Care;

CT – Counseling and Testing; PMTCT – Prevention of Mother to Child Transmission

◆ Services have started

◆ Services are planned, but not yet started

\*New facilities are indicated in red.

1 = Outreach ART Site

2 = Facility has a laboratory but not yet functional

3 = Referral laboratory for CD4

## Northern Province: ZPCT-Supported Services

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Kasama	1. Kasama General Hospital	◆			◆		◆	◆ <sup>3</sup>		
	2. Kasama UHC				◆	◆	◆	◆	◆	◆
	3. Location UHC		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	4. Chilubula Mission RHC (CHAZ)		◆	◆		◆		◆	◆ <sup>3</sup>	
	5. Lukupa RHC				◆		◆	◆	◆	◆
	6. Tazara UHC				◆	◆		◆		◆
Nakonde	7. Nakonde RHC		◆		◆	◆	◆	◆ <sup>3</sup>		
	8. Chilolwa RHC				◆		◆	◆		◆
	9. Waitwika RHC				◆		◆	◆		◆
	10. Mwenzo RHC				◆		◆	◆	❖ <sup>2</sup>	◆
Mpika	11. Mpika District Hospital	◆		◆		◆		◆	◆	◆
	12. Mpika HC			◆			◆	◆	◆	◆
	13. Tazara Railway Clinic			◆			◆	◆		◆
	14. Mpepo RHC				◆	◆		◆	❖ <sup>2</sup>	❖
Chinsali	15. Chinsali District Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	16. Chinsali HC				◆		◆	◆		◆
Mbala	17. Mbala General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	18. Mbala UHC				◆		◆	◆		◆
	19. Tulemane UHC				◆	◆		◆	◆	◆
	20. Senga Hills RHC	❖ <sup>1</sup>		◆		◆		◆		❖
Mpulungu	21. Mpulungu HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
Isoka	22. Isoka District Hospital	◆		◆		◆		◆	◆	
	23. Isoka UHC			◆		◆		◆	❖	❖
Mungwi	24. Mungwi RHC	❖		❖		❖		❖	❖	❖
Mporokoso	25. Mporokoso District Hospital	◆		◆		◆		◆	◆	
	26. Mporokoso UHC	❖ <sup>1</sup>		◆		◆		◆	❖	❖

ART – Antiretroviral Therapy; CC – Clinical Care; CT – Counseling and Testing; PMTCT – Prevention of Mother to Child Transmission

◆ Services have started	1 = Outreach ART Site
❖ Services are planned, but not yet started	2 = Facility has a laboratory but not yet functional
*New facilities are indicated in red.	3 = Referral laboratory for CD4

**Attachment B: ZPCT Training Courses  
October 1 to December 31, 2007**

**Table 1: Counseling and Testing (CT)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT*	19/11/07 to 30/11/07	Copperbelt	Kitwe	4	4
			Ndola	9	10
			Luanshya	4	5
			<b>Total</b>	<b>17</b>	<b>19</b>

\*The training included one-day on monitoring and evaluation.

**Table 2: Basic Child Counseling**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling**	12/11/07 to 17/11/2007	Copperbelt	Kitwe	6	12
			Kalulushi	2	2
Basic Child Counseling**	26/11/07 to 1/12/07	Luapula	Mansa	7	7
			Mwense	6	6
			Nchelenge	2	2
			Chiengi	1	1
			<b>Total</b>	<b>24</b>	<b>30</b>

\*\*These trainings were supported with funding from the Clinton Foundation HIV/AIDS Initiative.

**Table 3: Counseling Supervision**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Counseling Supervision	10/12/07 to 22/12/07	Luapula	Mansa	8	8
			Mwense	1	1
			Nchelenge	3	3
			<b>Total</b>	<b>12</b>	<b>12</b>

**Table 4: HIV Testing for Lay Counselors (Community Volunteers)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
HIV Testing for Lay Counselors	18/12/07 to 20/12/07	Copperbelt	Kalulushi	2	5
			<b>Total</b>	<b>2</b>	<b>5</b>

**Table 5: Prevention of Mother-to-Child Transmission (PMTCT)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT*	3/12/07 to 15/12/07	Copperbelt	Ndola	11	20
			Luanshya	3	4
PMTCT*	3/12/07 to 15/12/07	Central	Kabwe	9	14
			Chibombo	2	3
			Serenje	3	1
			Mkushi	1	3
PMTCT*	10/12/07 to 22/12/07	Northern	Isoka	2	5
			Mporokoso	1	5
			Mungwi	1	3
			Kasama	3	4
			Mpika	2	4
			Mbala	2	3
Nakonde	1	1			
			<b>Total</b>	<b>41</b>	<b>70</b>

\*The training included one-day on monitoring and evaluation.

**Table 6: Prevention of Mother-to-Child Transmission (PMTCT) for Community Counselors**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT for Community Counselors	17/12/07 to 23/12/07	Northern	Mbala	3	3
			Chinsali	1	2
			Nakonde	4	6
			Kasama	2	5
			Mpika	3	4
			Mungwi	1	1
			Mporokoso	1	1
			Mpulungu	1	1
			Isoka	1	1
			<b>Total</b>	<b>17</b>	<b>24</b>

**Table 7: Stigma Reduction Training of Trainers (TOT) for HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Stigma Reduction TOT	16/10/07 to 19/10/07	Central	Kabwe	4	4
			Chibombo	1	1
			Serenje	2	3
			Mkushi	1	2
Stigma Reduction TOT	13/11/07 to 16/11/07	Copperbelt	Kitwe	3	3
			Ndola	4	4
			Chingola	2	3
Stigma Reduction TOT	10/12/07 to 13/12/07	North Western	Mwinilunga	1	3
			Solwezi	1	3
			Kabompo	2	3
			Mufumbwe	1	1
Stigma Reduction TOT	17/12/07 to 22/12/07	Northern	Chinsali	1	2
			Nakonde	1	2
			Kasama	1	1
			Mpika	2	2
			Mbala	2	2
			Mpulungu	1	1
			Mporokoso	1	1
			Isoka	1	1
			<b>Total</b>	<b>32</b>	<b>42</b>

**Table 8: ART/OIs In-House Training**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs In-house	08/10/07 to 13/10/07	Copperbelt	Ndola	2	31
ART/OIs In-house	29/10/07 to 03/11/07	Copperbelt	Kitwe	1	25
			<b>Total</b>	<b>3</b>	<b>56</b>

**Table 9: ART/OIs Refresher**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs Refresher	15/10/07 to 20/10/07	Copperbelt	Ndola	4	4
			Luanshya	2	3
			Kitwe	4	7
			Kalulushi	2	2
			Chingola	2	4
			Mufulira	2	5

**Table 10: Pediatric ART/OIs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Pediatric ART /OIs	29/10/07 to 3/11/07	Northern	Mpika Chinsali	1 1	3 2
Pediatric ART /OIs	4/11/07 to 10/11/07	Luapula	Mansa Samfya Chienge	2 1 1	3 1 1
Pediatric ART /OIs	15/11/07 to 20/11/07	Central	Kabwe	4	5
Pediatric ART /OIs	19/11/07 to 23/11/07	North Western	Solwezi Kabompo Zambezi Mwinilunga	1 1 1 1	2 1 1 1
Pediatric ART /OIs	25/11/07 to 2/12/07	Copperbelt	Ndola	4	5
Pediatric ART /OIs	3/12/07 to 9/12/07	Copperbelt	Luanshya Ndola Kalulushi	2 1 1	3 1 1
			<b>Total</b>	<b>22</b>	<b>30</b>

**Table 11: Adherence Support Workers Refresher**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ASW Refresher	1/10/07 to 2/10/07	North Western	Mwinilunga Solwezi Kabompo Zambezi Mufumbwe	1 3 1 1 1	4 7 1 5 2
ASW Refresher	4/10/07 to 5/10/07	Northern	Mbala Chinsali Nakonde Kasama Mpika Mpulungu	1 1 1 2 1 1	4 4 3 4 3 5
			<b>Total</b>	<b>14</b>	<b>42</b>

**Table 12: DNA PCR Laboratory Techniques**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
HIV DNA PCR Techniques	1/10/07 to 19/10/07	Copperbelt	Ndola	3	4
			<b>Total</b>	<b>3</b>	<b>4</b>

The trainings took place in Lusaka and participants were drawn from Ndola district.

**Table 13: Laboratory/Pharmacy**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART Commodity Management B	29/10/07 to 2/11/07	Copperbelt North Western Northern Central Luapula	Ndola	1	2
			Luanshya	1	1
			Kitwe	1	2
			Kalulushi	1	1
			Chingola	1	2
			Mufulira	2	4
			Solwezi	2	3
			Kasama	1	1
			Kawambwa	1	1
			Chiengi	1	1
			Kabwe	1	2
			Nakonde	1	1
			Chinsali	1	1
			Mbala	1	1
			Serenje	1	2
			Chibombo	1	1
			Samfya	1	1
Mkushi	1	1			
		<b>Total</b>	<b>20</b>	<b>28</b>	

**Table 14: Dry Blood Spot Collection**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
DBS Training**	9/10/07	Copperbelt	Ndola	6	14
DBS Training**	10/10/07	Copperbelt	Luanshya	4	25
DBS Training**	10/10/07	Luapula	Mansa	5	25
DBS Training**	10/10/07	Northern	Kasama	5	20
DBS Training**	11/10/07	Northern	Kasama	5	23
DBS Training**	11/10/07	Copperbelt	Kalulushi	4	9
DBS Training**	22/10/07	Luapula	Nchelenge	6	15
DBS Training**	06/11/07	Central	Chibombo	3	10
DBS Training**	08/11/07	Central	Serenje	2	14
DBS Training**	13/11/07	Luapula	Kawambwa	3	10
DBS Training**	15/11/07	Luapula	Samfya	2	10
DBS Training**	17/11/07	Luapula	Mwense	2	10
DBS Training**	19/11/07	North Western	Mwinilunga	2	10
DBS Training**	20.11.07	Central	Kabwe	7	17
DBS Training**	21/11/07	North Western	Mufumbwe	1	9
DBS Training**	26/11/07	Northern	Mpika	2	10
DBS Training**	27/11/07	Central	Mkushi	4	14
DBS Training**	27/11/07	North Western	Zambezi	2	8
DBS Training**	27/11/07	Northern	Chinsali	2	10
DBS Training**	28/11/07	North Western	Kabompo	2	10
DBS Training**	28/11/07	Northern	Nakonde	4	9
DBS Training**	29/11/07	Northern	Nakonde	3	6
DBS Training**	21/12/07	Northern	Mbala	4	14
		<b>Total</b>		<b>80</b>	<b>302</b>

\*\*These trainings were supported with funding from the Clinton Foundation HIV/AIDS Initiative.