



**Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership  
Cooperative Agreement No. 690-A-00-04-00319-00  
Quarterly Report for July 1 – September 30, 2007  
Submitted by Family Health International (FHI)  
October 31, 2007**

## 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 continued supporting implementation of HIV/AIDS services in 97 health facilities in 26 districts in the five target provinces. Last quarter, ZPCT initiated support to 10 health facilities in Nchelenge District, Luapula Province including one under the Churches Health Association of Zambia. These facilities began reporting data during this quarter. Key activities and achievements for this reporting period include:

- CT services are ongoing in 97 health facilities with 27,246 individuals receiving CT services in these facilities this quarter.
- PMTCT services were provided in 96 ZPCT-supported facilities. 16,799 women were provided with PMTCT services (including CT), and 2,015 were provided with a complete course of ARV prophylaxis.
- Ongoing technical assistance was provided to expand and improve clinical palliative care services in 97 health facilities. 57,442 individuals received palliative care in ZPCT-supported health facilities during this quarter.
- ART services were available in all 26 districts supported by ZPCT. A total of 4,786 new clients (including 331 children) were initiated on antiretroviral therapy through 62 ART centers (including 26 outreach sites) this quarter. Two of these sites (Solwezi Urban and Saint 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, 40,999 individuals were receiving antiretroviral therapy at ZPCT-supported sites; of these, 2,807 were children.
- The following technical training courses were conducted this quarter:
  - 39 HCWs were trained in two, two-week courses in basic CT.
  - 66 HCWs were trained in child counseling with funding from the Clinton Foundation HIV/AIDS Initiative (CHAI).
  - 21 HCWs were trained in a two-week course in provision of PMTCT services.
  - 32 HCWs were trained in ART and Management of Opportunistic Infections (OI) in Ndola District, Copperbelt Province and 75 were trained in adherence counseling in Central, Copperbelt and Luapula provinces.
  - 17 HCWs from 7 health facilities were trained in Management of Pediatric of ART/OIs in Luapula Province.
  - 24 community volunteers were trained in adherence support and 20 in counseling and testing. 88 trained adherence support workers (ASWs) received a two-day refresher training and 52 trained lay counselors were trained in HIV testing.
  - 21 pharmacy and laboratory staff from Central, Northern and Luapula provinces were trained in commodity management. Three HCWs were trained in HIV DNA PCR techniques at the University Teaching Hospital.

- 239 HCWs were trained in dry blood spot (DBS) collection, storage and transport, with funding from CHAI.
  - 116 HCWs and data entry clerks were trained in the use of SmartCare forms and 33 data entry clerks were trained in the use of the SmartCare software.
- 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 nine districts and have been initiated in ten additional districts.
  - ZPCT has identified and worked with 27 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 developed implementation plans for 119 health facilities to be supported by ZPCT beginning next quarter following provincial assessments. This includes seven additional districts throughout the five target provinces.
  - Seven recipient agreements and 30 amendments were executed this quarter, extending the period of performance through September 30, 2008, as well as outlining support for new health facilities as well as ongoing support for existing health facilities. This brings the total number of recipient agreements supported by ZPCT to 44.
  - Last quarter, ZPCT hired three consultants to conduct a mid-term evaluation of ZPCT. A final report from this evaluation was submitted to USAID during this reporting period.
  - 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.
  - ZPCT developed its COP07 annual work plan and submitted a draft to USAID for review.

Results for the quarter are summarized in the following table:

Services in 97 Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to September 30, 2007)						
	Workplan (1 Apr 06 to 30 Sep 07)	Quarterly Achievements (1 Apr 07 to 30 Sept 07)			Achievements (1 Apr 06 to 30 Sept 07)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 30 Sept 07)
		TARGET	FEMALE	MALE			
<b>CT</b>							
Service outlets providing CT							97
Persons trained in CT	402			125	594	148%	974
Persons receive CT services	52,512	13,945	13,301	27,246	129,050	246%	162,433
<b>PMTCT</b>							
Service outlets providing PMTCT							96
Persons trained in PMTCT	200			21	212	106%	460
Pregnant women provided with PMTCT services, including CT	35,851	16,799		16,799	90,758	253%	117,562
Pregnant women provided with a complete course of ART prophylaxis	8,963	2,015		2,015	8,817	98%	10,680
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services							97
Service outlets providing general HIV-related palliative care							97
Persons provided with OI management and/or prophylaxis		34,547	22,895	57,442			62,474
Persons provided with general HIV-related palliative care		34,547	22,895	57,442			62,474
Persons trained to provide general HIV-related care	100			32	280	280%	663
<b>Treatment</b>							
Service outlets providing ART services							60
Health workers trained in ART	100			32	280	280%	663
New clients receiving ART	16,300	2,769	2,017	4,786	28,804	177%	39,619
Total clients receiving ART	28,410	24,366	16,633	40,999	40,999	144%	40,999
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			17	364	243%	364
New pediatric clients receiving ART	660	156	175	331	2,027	307%	2,751
Total pediatric clients receiving ART	1,151	1,408	1,399	2,807	2,807	244%	2,807
<b>TB and Care</b>							
TB infected clients receiving CT services	5,000	440	499	939	6,210	124%	6,210
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	2,188	537	569	1,106	3,515	161%	3,515

## 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.

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

The CHAZ Program Officer conducted monitoring and support visits to all seven ZPCT-supported CHAZ facilities to monitor implementation progress at the existing facilities and initiate activities at the new facilities. Orientation meetings to discuss ZPCT/CHAZ support were conducted at Luwi,

Chitokoloki and St. Paul's health facilities. Identified renovations will be commenced at health facilities in the next quarter. Orders for new equipment/furniture were placed during this reporting period.

CHAZ, working with the Mwense DHMT and hospital management, has not been successful in placing a medical officer at Mambilima Mission Hospital. A medical licentiate has been hired and is providing the clinical care and ART services with support from ZPCT provincial staff. CHAZ will follow-up on hiring a medical officer in the next quarter.

Kara Counseling and Training Trust (KCTT) is responsible for training counselor supervisors at ZPCT-supported health facilities and at the district level. There were no trainings conducted this quarter since all trainings under the contract were completed by March 31, 2007. Participants were followed-up and certified and KCTT will follow-up on the participants that were not available during the previous visits. ZPCT has begun discussions with KCTT on training needs and will finalize a new contract next quarter.

Expanded Church Response (ECR) is working through church communities to increase knowledge and demand for HIV/AIDS services. ECR provides 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 is implementing activities for communities around Chiwempala, Chawama and Kabundi East Clinics.

This quarter, ECR focused activities in Kabwe District around Makululu and Mahatma Gandhi Health Centers, conducting focus group discussions and door-to-door mobilization activities on the benefits of CT services. A mobile CT event was held in the Makululu catchment area, providing 286 clients with CT services.

During this reporting period a no-cost extension was provided through September 30, 2007. This will allow ECR to close-out the current subagreement and complete all outstanding financial reconciliations. Both parties agreed that the current agreement would be closed due to the lack of progress on activities, targets, issues related to data collection, and financial reporting issues. ECR is now working on completion of both financial and programmatic reports. ZPCT and ECR will conduct a program review next quarter, re-define ECR's scope of work within the program and if possible, develop another agreement.

#### **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 97 facilities in 26 districts through 37 recipient agreements. Seven new recipient agreements and 30 amendments were executed during this period, extending the period of performance through September 30, 2008, as well as outlining support for new health facilities and ongoing support for existing health facilities. A total of 216 health facilities will be supported through 44 recipient agreements and amendments.

##### Renovations, Environmental Site Assessments and Procurement

Renovations to Phase 1 and 2 facilities are complete with the exception of facilities with additional renovations that have been added in recent amendments. For the newly added renovations, the development of Bill of Quantities (BOQs) was commenced in all the five provinces. BOQ development is expected to be completed by November and refurbishments will be initiated in the next quarter.

ART Plus-Up site renovations have been completed except for minor amended works. Identification and selection of contractors in rural provinces continues to be a challenge. ZPCT Lusaka Office has developed guidelines that will help streamline the process of tendering for minor works as opposed to major works.

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 a ZPCT-hired architect in collaboration with the relevant provincial Public Works and Supply Department. ZPCT has engaged a consulting firm to conduct Environmental Site Assessments (ESAs) in facilities under going major renovations funded by ZPCT, as per USAID guidelines.

ZPCT has compiled a list of procurement needs for the new health facilities as per the implementation plans included in the recipient agreements. All procurement for these facilities will be initiated in the next quarter.

### 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 selected with the PHOs and 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.

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 (39 HCWs), PMTCT (21 HCWs), ART/OI (32 HCWs), pediatric ART/OI (17 HCWs), adherence counseling (75 HCWs), commodity management (21 HCWs) and HIV DNA PCR techniques (3 HCWs). 116 HCWs and data entry clerks were trained in the use of SmartCare forms and 33 data entry clerks were trained in the use of the SmartCare software. In addition, ZPCT trained 24 community volunteers in adherence support and 20 in counseling and testing. 88 trained adherence support workers (ASWs) received a two-day refresher training and 52 trained lay counselors were trained in HIV testing.

ZPCT also trained 66 HCWs in child counseling and 239 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 supplement key human resources.

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. 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 adherence support workers 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 data entry clerks (DECs) as FHI employees placed at MOH health facilities through funding included in the recipient agreements. All DEC transition from consultant agreements to contracts will be completed in the next quarter. This quarter, the work of the 53 data entry clerks 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. Data entry clerks will work one day a month in these facilities.

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 has placed advertisements to recruit over 30 staff to support the program expansion. Candidates have been short-listed and interviews initiated for these positions. The recruitment process will be completed next quarter
- Mid-Term Evaluation: Last quarter, ZPCT hired three consultants to conduct a mid-term program evaluation in May 2007. A final report from this evaluation was submitted to USAID during this reporting period. The report indicates that ZPCT's accomplishments have been very impressive, including the high quality of technical support that ZPCT has been providing to the MOH, its approach of working within existing MOH structures, and activities at the facility level.
- Inaugural Ceremony at Arthur Davison Children's Hospital (August 2, 2007): ZPCT held an official opening of the PCR laboratory and family care center at ADCH. The event was officiated by the Honorable Deputy Minister of Health, Dr. Lwipa Puma, MP and U.S. Ambassador Carmen Martinez. The ceremony included ribbon-cuttings and tours of the PCR laboratory and family care center, speeches by the two guests of honor as well as the ADCH Executive Director, the Provincial Health Director and a beneficiary of the ADCH family care center. Over 100 guests attended the event including the media.
- Program Unit Management Workshop (July 23 to 26, 2007): A four-day workshop was held with the Provincial Program Managers and Program Officers to discuss various programmatic issues and challenges. Topics that were discussed include commodity management, QA/QI, facility graduation plans, key issues from the mid-term evaluation report and human resource issues including staff development, staff recruitment in relation to site expansion, and data entry clerks.
- Site Identification and Development Initiative (SIDI): Four staff from FHI/NC visited Zambia the week of September 17 to conduct a systematic assessment of health facilities in Ndola and Kitwe for their potential for future clinical trials of microbicides and other HIV prevention studies. The team met with staff at ZPCT, USAID, CDC, University Teaching Hospital, Ministry of Health, National AIDS Council and Zambia Emory Research Project in Lusaka and visited nine ZPCT-supported health facilities in Ndola and Kitwe to assess their potential as future research sites. The team also met with community groups and possible research partners in Copperbelt.
- COP07 Workplan: ZPCT developed and submitted an annual workplan for the October 1, 2007 to September 30, 2008 period to USAID. Activities and funding levels are based on the COP07 submission, and include Play Pumps and refurbishment of staff housing in rural areas.
- Decentralization of Provincial Offices: ZPCT has continued to monitor activities that will determine the decentralization of provincial offices in selected program, technical and financial areas. Three provinces will be decentralized for monthly reports by the end of next quarter.
- 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. In addition, the IT team is assisting with networking of computers at health facilities in preparation for the implementation of SmartCare. This process is an ongoing task. The IT activities are funded by FHI general and administrative funds, rather than program funds.
- The two interns attached to the IT unit continued to assist with IT operations. In addition, they completed a draft report based on the findings from questionnaires administered last quarter to identify how best to support the MOH and donated computers.

#### 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 during this quarter are included in the table below:

Date	Technical Area	Meeting/Workshop/Training
July 5, 2007	ART	<u>Operational Research Meeting</u> : ZPCT staff attended a meeting on the dissemination of research findings by the International HIV/AIDS Alliance in collaboration with the Institute of Economic and Social Research and Population Council/Horizons. The study, ARV Community Education and Referral Project, will be used as baseline information to build and expand community awareness on availability and benefits of HIV drugs and enhance a sense of need and

Date	Technical Area	Meeting/Workshop/Training
		urgency for referral and linkage of people in need of HIV care, treatment and support, to organizations and facilities offering these services.
July 9, 2007	ART, Pharmacy	<u>HIV Drug Resistance Meeting:</u> ZPCT staff attended a meeting at NAC to meet Dr. Dianne Bennett from WHO. Dr Bennett provided overview of the HIV drug resistance, WHO and CDC's perspective on resources availability and capacity building needs at country level. The area of HIV drug resistance is rapidly gaining wider, global attention and so this meeting was held to review progress made thus far and strategies on building national capacity to established HIV drug resistance testing. Other presentations were from UTH, MOH/PRA, SMARTCARE, and TDRC/UTH/CDC.
July 10, 2007	CT	<u>Finalization of Standardized Training Package for Non-laboratory personnel:</u> The meeting was held at JHPIEGO with the objective of having a standardized package by MOH was to ensure all trainings in HIV testing were standardized as is the case with all other existing training packages in different health technical areas in the country.
July 10, 2007	Palliative Care, CT, Laboratory	<u>TB/HIV Coordinating Meeting:</u> ZPCT participated in a meeting organized by MOH on TB/HIV collaboration at Zambart offices. The meeting was attended by other stakeholders like; CDC, CHAZ, UTH, CIDRZ, ZAMBART.
July 16 – 20, 2007	PMTCT, Pharmacy	<u>PMTCT Logistics System Training of Trainers:</u> This training was convened by MOH in partnership with the USAID/DELIVER project. The goal of the training was to prepare participants to be trainers in the new PMTCT drug logistics system roll out trainings. One ZPCT staff was trained as a trainer.
July 27, 2007	Palliative Care, CT, Laboratory	<u>TB/HIV Evaluation Debrief Meeting:</u> This was a debrief to MOH on TB/HIV evaluation conducted in Copperbelt and Southern provinces by a CDC/MOH team.
July 30, 2007	ART	ZPCT attended a meeting convened by the World Food Program, attended by the Centre for Infectious Diseases Research in Zambia (CIDRZ), Project Concern International and Catholic Home Based Care. The outcome of this meeting was the adaptation of a food supplement eligibility screening tool for clients on ART. The tools will be piloted in the sites supported by CIDRZ.
July 31 to August 4, 2007	PMTCT, Pharmacy	<u>National Training in Management of the new National PMTCT Drug Logistics Systems:</u> USAID/Deliver Project and the MOH organized a training for district PMTCT coordinators, pharmacy staff, and partners supporting PMTCT activities. The training was focused on the PMTCT drug logistics systems, part of the national ARV supply chain system.
August 1-3, 2007	PMTCT	<u>Implementing Best Practices (IBP) Partners' Meeting: Scaling-up the Pilots to Regional Programs (PRP):</u> This meeting was organized by MOH in collaboration with WHO, UNFPA and Population Council. The first day was a workshop with the purpose of sharing results of the PRP initiative conducted in Copperbelt province. This family planning initiative looked at expanding the contraceptive mix as well as using the self-directed learning method in capacity building of HCWs in FP without disruption to their regular work. This workshop was followed by a field visit to provide insight into the specific elements of the model to participants. The CT/PMTCT Officer from the ZPCT/Ndola office participated in this activity.
August 7, 2007  August 16, 2007	Palliative Care, ART	ZPCT management met with the International Development Enterprises (IDE) to explore potential linkages on small farming support to HIV positive groups and their support communities. IDE works with vulnerable households such as those affected by HIV and AIDS to promote food security, improve nutrition and increase incomes. Following this meeting, ZPCT staff and the IDE Country Director traveled to Kabwe to meet with members of the Kabwe District HIV/AIDS Referral Network to explore possible linkages on the ground. As the next steps, ZPCT would send a list of all referral network partners to the IDE office in Kabwe. IDE would then send extension officers to provide technical assistance in vegetable gardening.
August 9, 2007	Pharmacy	<u>Pipeline Software Partner Orientation Meeting:</u> JSI convened the meeting to reorient partners on the use of the system used to track procurements, shipments, expected delivery dates and inventory control of ARVs. This information assists in quantification, forecasting and planning for the procurement of ARVs.
August 9,	ARV,	<u>Emerging Trends in ARV market presentation:</u> Dai Ellis, Director of Drug Access

Date	Technical Area	Meeting/Workshop/Training
2007	Pharmacy	at Clinton Foundation, presented on CHAI's negotiations with pharmaceutical companies and other donor and stakeholder organizations to reduce, as much as possible, the cost of ARVs and make them easily accessible especially in resource poor settings. This is one of the strategies towards scale up of the HIV care/ART and universal access to HIV care and treatment. Other partners in attendance included MOH, CHAZ, AIDS Relief, NAC, and JSI.
August 13, 14 and 16 -17, 2007	All	<u>Meeting for reviewing and costing the National HIV/AIDS Strategic Plan 2006-2010</u> : organized by National AIDS Council. The budget will be presented and availed to the government and the cooperating partners funding the HIV/AIDS programs in Zambia.
August 17, 2007):	PMTCT	<u>Meeting to Update the Under-Five Register</u> : The MOH convened a meeting to update the under-five register to facilitate integration of HIV activities. With the MOH plans to scale-up pediatric HIV activities in under-five clinics, data collection tools needed to be updated to capture relevant information required for pediatric ART. The tools were revised to include information on HIV testing at six weeks, initiation of cotrimoxazole preventive therapy, infant feeding choices etc.
August 20 - 30 2007	ART	<u>Revision of National ART/OI training materials</u> : Participated during the revision of the national ART training resource materials in line with the newly approved ART protocols. These materials will be ready for use this quarter. MOH in collaboration with partners will orient national and provincial trainers in the new training package and this will be followed up by continued training of health care workers.
August 24 and September 13, 2007	CT	<u>International CT Workshop Preparatory Meetings</u> These meetings were held at SFH to prepare for the upcoming CT workshop to be held in January 2008. The first meeting looked at defining the roles and responsibilities for both FHI and SFH as well as how to handle the logistics, including hiring of a consultant. The second meeting was discussing among other issues the overview/purpose of the workshop, overview of participant selection process, identification of motivation for CT in Zambia.
August 30 to 31, 2007	PMTCT	<u>Revision of the National PMTCT Training Package</u> : JHPIEGO hosted a two-day meeting to review and update the PMTCT training package according to the revised national PMTCT guidelines. The meeting also resolved to reduce the training to six days, instead of 12 days. The revisions are completed and MOH will finalize for printing
September 5, 2007	Palliative Care, ART, PMTCT	<u>Meeting with representatives from the Food and Nutrition Technical Advisors (FANTA) project</u> (The meeting was held at ZPCT and the purpose was to discuss issues of Nutrition and HIV and also to learn what activities were being implemented in the facilities regarding nutritional support, training needs and in-country coordination of nutritional activities. The team was informed that ZPCT does not directly support nutrition except through Clinton (Plumpy nut). Suggestions were made on what can be done to support nutrition for HIV infected people if funds were available.
September 6 and 7, 2007	Referral	<p><u>Meeting to Develop National HIV/AIDS Referral Guidelines</u>: The MOH, with support from HSSP, held a workshop to develop initial guidelines for the national HIV/AIDS referral guidelines aimed at the development of a standardized national referral system. The agenda of the meeting was to address the following:</p> <ul style="list-style-type: none"> <li>▪ Justification for the need of a referral system</li> <li>▪ Elements of a good referral system</li> <li>▪ The referral process including how to establish a functional referral system</li> <li>▪ A referral coordination system</li> <li>▪ General guidelines of the referral system</li> <li>▪ National HIV/AIDS referral form</li> </ul> <p>During the meeting, participants recommended that all stakeholders including MOH should facilitate the mobilization of logistics and resources to support the referral system. MOH through its structures at national, provincial and district level is mandated to coordinate the referral system. The next steps of the meeting were that HSSP will organize a follow up meeting to consolidate the guidelines and develop a zero draft of national referral network guidelines.</p>

Date	Technical Area	Meeting/Workshop/Training
September 12, 2007	Palliative Care, ART	<u>Palliative Care Forum on Nutrition and HIV/AIDS</u> : At this special session of the palliative care forum, a visiting team from the Food and Nutrition Technical Assistance (FANTA) Project from Kenya reported that their main focus of their visit was to assess or explore capacity to coordinate the food between MOH and partners.
September 18, 2007	PMTCT, Laboratory, ART	<u>DNA PCR Stakeholders Meeting</u> : This MOH meeting was held at ZPCT offices to review the national workplan to scale-up early infant diagnosis. Partners discussed the coordination of trainings, establishment of sample referral systems and reviewed progress in training HCWs in DBS and implementing early infant diagnosis in the facilities.
September 19, 2007	PMTCT, ART	<u>Pediatric ART Guidelines Dissemination</u> : ZPCT participated in the pediatric ART guidelines dissemination at Mulungushi Conference Centre and displayed various job aids on pediatric HIV care. ZPCT will source the guidelines from MOH and distribute in the supported sites during technical visits and trainings.
September 24, 2007	ART	<u>National Level Stakeholders' Meeting on Health Communication</u> : The Health Communication Partnership (HCP) convened a meeting to discuss HIV in children and communication around it. Organizations in attendance at this meeting were NAC, CIDRZ, CDC, Elizabeth Glazier Pediatric Foundation, CHAMP and Afya Mzuri. It was agreed that the NAC, HCP and ZPCT will host a meeting to bring together key partners in the area of health communication, pediatric clinical care and treatment. The intended outcome of the meeting is to come up with some guidelines and a framework for communication around issues of pediatric HIV that stakeholders can use to guide their communication messages and interventions.
September 24 – 28, 2007	ART	<u>ART Sites and Statistics</u> : Attended a meeting arranged by MOH to update national ART quarterly statistics and sites listing: This will be an on-going process to ensure that all sites providing ART services and the numbers of clients on ART are up to date.
September 27, 2007	PMTCT, Laboratory, ART	<u>DNA PCR summit at MOH</u> : There were presentations on early infant diagnosis, including planning, training and referral networks by international visitors from the Clinton Foundation.

### 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)

ZPCT provided support for counseling and testing services at 97 health facilities in the 26 ZPCT-supported districts 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:

- Nine HIV testing training courses for trained lay counselors were held in 4 provinces, training 52 lay counselors from 30 facilities in ten districts. These 'lay' counselors are now able to perform the full process of pre-test counseling, HIV testing and post-test counseling with giving of results.
- Two basic CT courses for HCWs were conducted for 39 participants from 20 facilities in 12 districts.
- One joint basic CT course for 20 lay counselors was held in Kabwe, Central Province with participants drawn from 16 districts from three provinces.
- Five child counseling courses were conducted, one per province. A total of 66 HCWs were trained in child counseling this quarter. These trainings have been supported with funding from the Clinton Foundation HIV/AIDS Initiative, leveraged with ZPCT program funding.

#### 4.3.1.2 CT Services

ZPCT continued to provide technical assistance to HCWs and lay counselors in all the 97 facilities. This has helped to strengthen CT in the 26 ZPCT-supported districts and maintaining a very high uptake of testing and collection of results. For the general CT services, this uptake has been almost 100% consistently across all the provinces with good linkages to care. Training of lay counselors in HIV testing has also contributed to further reduction of waiting time for collection of results.

During this period, the technical assistance focused on:

- 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 ten selected hospitals and will be expanded to eight additional hospitals in the next quarter. With support from the Clinton foundation, CT services were strengthened in the five pilot under-five clinics in the four districts in three provinces.
- 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.
- Mobile CT services: ZPCT has continued to bring CT services closer to the people by providing mobile CT services in different locations of the facility catchment areas. This has helped increase access to CT services particularly for more people, even those who feel reasonably well and do not see the need to go to the clinic to access these services. This quarter 2,777 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 been strengthening the QA system being implemented in the facilities through the use of QA/QI tools. During this quarter, QA tools were administered in 96 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. ZPCT provides technical assistance and limited financial support in this area.
- 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. In addition, trained staff are continuously rotated from CT service areas to other areas bringing in others that may not be trained counselors. This leads to disruptions in service provision. However, ZPCT continues to address this issue by training additional staff in the facilities to provide CT services, as well as training lay counselors to supplement HCWs. ZPCT provides limited support for transportation to HCWs working extra shifts for CT.
- Inadequate space for CT has continued to be an issue especially 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

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

During this quarter, all 96 health facilities targeted for ZPCT assistance in this area are providing PMTCT services. This figure includes the additional ten facilities from Nchelenge District in Luapula province (9 health centers and St. Paul's Mission Hospital under CHAZ).

#### 4.3.2.1 PMTCT Training

During this reporting period, the following trainings were conducted:

- 21 HCWs from 18 health facilities in Central and North Western, provinces were trained in PMTCT.

- 239 HCWs from health facilities in Copperbelt, Central and North Western 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.
- A technical update workshop was held for the ZPCT PMTCT/CT officers from July 18 to 20, 2007.
- Nine ZPCT staff were trained as trainers in DBS collection, storage and transportation, in a training organized by CHAI and the University Teaching Hospital on July 16 to 17, 2007. Following this training, staff have facilitated a number of DBS trainings this quarter.

#### 4.3.2.2 PMTCT Services

By the end of this reporting period, services were being provided in 96 ZPCT-supported facilities targeted for PMTCT.

Routine counseling and testing in the ANC settings is on-going and well established now with over 95% of pregnant women accepting HIV testing and receiving results. This has been achieved through the implementation of the national opt-out strategy. In addition, uptake of ARVS for PMTCT for pregnant women has increased to over 80% in the last quarter compared to 50% a year ago. ZPCT has continued to strengthen the provision of more efficacious ARVS for PMTCT as per the Zambian national PMTCT protocol guidelines and the WHO recommendation. Of the 96 ZPCT supported sites, over 62 facilities are providing dual therapy (AZT and nevirapine) instead of single dose nevirapine. The remaining facilities are providing single dose monotherapy regimen due to lack of appropriate equipment to estimate hemoglobin levels. ZPCT is working to expand dual therapy to all health facilities.

The areas of focus in PMTCT technical assistance during this report 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 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, 251 HIV exposed children were provided with cotrimoxazole prophylaxis.  
In addition, with the establishment of the PCR laboratory at ADCH in Ndola and the training of HCWs in DBS in September 2007, three health facilities collected and sent DBS samples for HIV testing at the PCR laboratory. The DBS sample transportation system will be operationalized in the upcoming quarter, to provide access to early infant diagnosis to health facilities across the five target provinces.
- Provision of more efficacious ARVs for HIV positive pregnant women: The sample referral system is on-going in ZPCT supported facilities and all pregnant women testing HIV positive have their blood drawn for a CD4 count, to assess eligibility for ART. 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 to ZPCT.
- 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 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.
- PMTCT/Pediatric HIV services: ZPCT is supporting transport reimbursements for HCWs to work extra shifts in five health facilities to provide routine CT for children at under-five clinics. With the established PCR laboratory in Ndola, ZPCT now has the capacity to provide early infant diagnosis through DNA PCR and therefore more children below the age of twelve will be tested. ZPCT is providing technical assistance and mentorship to HCWs to strengthen the DBS sample collection skills, storage and sample referrals.

#### 4.3.2.3 Key Issues/Constraints in PMTCT

- Staff shortages have persisted and have been coupled with high staff turn-over through rotation, transfers, retirements and death. 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.

- Lack of Septrin for HIV positive mothers in all facilities is a problem at the national level, being addressed by MOH.
- Lack of hemoglobin estimation capabilities at facilities -without the capacity to determine hemoglobin levels, HIV positive 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.
- Delays in the completion of the PCR laboratory - the PCR laboratory was opened in August, but was not fully functional until September due to additional quality improvements determined by the University Teaching Hospital and FHI technical consultants. This contributed to delays in implementing early infant diagnosis across the five provinces.

### 4.3.3 Antiretroviral Therapy (ART)

During this quarter, technical assistance and mentoring continued in the 52 ART sites, while an additional ten sites were added from the sites handed over to ZPCT by MSF in Nchelenge, Luapula Province making a total of 62 ZPCT-supported ART centers (36 static ART centers and 26 ART outreach sites in ZPCT-supported clinics) During the next quarter there will be an increased focus on quality assurance and quality improvement of services especially in the phase one and two ART sites and a focus on establishing, improving and expanding other important aspects of ART services including pediatric ART services in all ART sites.

#### 4.3.3.1 ART Training

ZPCT conducted ten trainings as follows:

- 32 HCWs were trained through an in-house ART/OI training
- 17 HCWs were trained through a three-day training in pediatric ART/OI management in Luapula Province.
- 75 HCWs were trained in adherence counseling in Central, Luapula and Copperbelt provinces.
- 24 community volunteers were trained in adherence support and 88 trained ASWs received a two-day refresher training.

#### 4.3.3.2 ART Services

ZPCT staff provided technical assistance to 60 facilities providing ART services. Two of these sites (Solwezi Urban and Saint Dorothy) report their results through Solwezi General Hospital and are not included as independent sites in the indicator reporting matrix. This quarter, a MOH team conducted an assessment of Solwezi Urban Clinic to determine if it could be accredited as an ART site. The team recommended to the PHO that the facility be accredited and assigned an ART center number to this facility and enable it to begin reporting independently next quarter.

ZPCT continues to focus on the issues outlined below:

- Orientation and mentorship in the New ART Protocols and SmartCare training: ZPCT has rolled-out the orientation and mentorship in the new ART protocols and SmartCare health information system in ZPCT-supported facilities in Kabwe, Ndola, Solwezi, Mansa and Kasama districts. During continued TA visits ZPCT staff will ensure that the appropriate SmartCare forms are used and used correctly each time an HIV+ client visits the ART Clinic.
- Collaboration with home-based care programs: ZPCT continues working closely with home-based care services in Chishilano in Ndola, Twatasha Trakk in Kitwe, Iseni in Chingola and Mpatamatu in Luanshya to ensure that the chronically ill have access to testing and, if eligible, to ART. Whilst providing this service ZPCT will assess the patient load per site and slowly transition stable patients that have been on treatment for more than six months to nearby outreach sites. Through this collaboration, 162 new clients were initiated on ART and 926 clients were monitored this quarter.

ZPCT began supporting ART outreach services at the Mpatamatu Home-Based Care Program this quarter, in collaboration with the Luanshya District Health Office (under a memorandum of understanding signed last quarter). Mpatamatu HBC program provides services to over 950 HBC clients and 1500 orphans and vulnerable children. ZPCT, in collaboration with the Luanshya District Health Office, began to provide ART outreach services at the HBC center to initiate clients on ART and review cases on a weekly basis since August 2007. In the first two months of the collaboration, 15 new clients were initiated on ART and 82 clients were monitored.

- Progress on Pediatric HIV/AIDS care and treatment: ZPCT continues to provide technical assistance and mentoring in pediatric AIDS treatment to ART centers and outreach sites, with attention to dosing issues, working with families, and disclosure issues. ZPCT is strengthening linkages with PMTCT services and ensuring that children that are eligible for ART are provided with appropriate treatment. Cotrimoxazole prophylaxis for children is being provided through the OPD, in-patient and ART centers and intra- and inter-facility referral of children under 14 to ART is being facilitated by improving staff skills in the early identification of OIs. The family care center for the family (parents and children) at ADCH was opened this quarter and is operational. ZPCT is finalizing the distribution guidelines for the Ready to Use Therapeutic Food Supplements (RUTFs), also known as Plumpy Nuts. The RUTFs have been provided by CHAI and ZPCT will distribute these to children on ART at ten health facilities providing pediatric ART services.
- Pediatric Preceptor Program: With funding from CHAI, ZPCT commenced the preceptor 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 aim of this program is to provide on-the-job, practical training to HCWs by experienced, practicing pediatricians. ZPCT engaged consultants with experience in pediatric HIV care and ART in public health institutions to mentor HCWs at seven health facilities this quarter: Kabwe General Hospital, Mahatma Gandhi Health Center, Nchanga North General Hospital, Ronald Ross Hospital, Kasama General Hospital, Mansa General Hospital and Solwezi General Hospital. The activity involves teaching and discussing with HCWs comprehensive management of pediatric HIV care including ART. The goal of this program is to develop a cadre of HCWs with adequate knowledge, skill and confidence to provide comprehensive management in pediatric HIV care and contribute significantly to the rapid scale up of pediatric HIV care services.
- Quality assurance/quality improvement: ZPCT continues to 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.
- Adaptation process of the SOPs for ART, adherence counseling and post exposure prophylaxis (PEP) was initiated in this quarter and will be finalized in the next quarter in readiness for orientation and mentoring of providers and management in ZPCT-supported facilities in the use of newly adapted SOPs.
- Continued support to clinical seminars for HCWs to discuss case studies and any new developments in HIV care.
- Provision of reference materials - The following job aids were printed and distributed to ZPCT supported facilities this quarter:
  - ARV Adherence Counseling Flow Chart
  - Ten Step Adherence Counseling Guide
  - Approved Antiretroviral Agents included in the National ARV Guideline (Adult / Adolescent Dosage)
  - Antiretroviral Drugs for Adults – Dosing Guidelines and Side Effects
  - WHO Recommendations for Initiating ART in HIV-infected Infants and Children
  - HIV Post-Exposure Prophylaxis (PEP)
  - WHO Staging System for HIV Infection & Disease / Recommendations for Initiating ARV (Adults and Adolescents)
  - WHO Staging System for HIV Infection and Disease in Children
  - Cotrimoxazole Prophylaxis for Adults and Children
  - Table on Monitoring Patients on ART
  - Initiation of ART in TB patients
  - Tables on the WHO T-staging

#### **4.3.3.3 Key Issues/Constraints in ART**

The following constraints were faced in ART service provision:

- Patient monitoring: The regular clinical monitoring of patients on ART according to national guidelines was a challenge in some cases due to the clinicians' failure to regularly monitor clients using clinical and laboratory parameters. However, ZPCT continues to assist with the improvement of clinical and laboratory monitoring of patients on ART through technical visits, mentorship and provision of reference materials. New job aids for the monitoring of patients on ART were printed and distributed during the quarter under review.

- **Pediatric ART challenges:** Though the number of pediatric patients being tested for HIV has increased significantly, the challenge continues to be that it has not resulted in a significant corresponding increase in the number of pediatric clients initiated on ART. ZPCT continues to provide technical assistance and training in pediatric ART. ZPCT initiated a pediatric HIV/AIDS management preceptor program, through funding from CHAI. Through this initiative, consultants were deployed to seven high density facilities to offer hands-on technical support to HCWs in the management of pediatric HIV/AIDS cases. Pediatric job aids including guidelines on cotrimoxazole prophylaxis and when to initiate of ART in children were provided and HCWs oriented on how to use these materials.
- **Patients lost to follow-up:** Tracing defaulters in the community still remains a challenge, especially since some clients do not consent to being followed up in the community due to stigma issues. Insufficient logistical arrangements and the increased patient load have posed a challenge for ASWs conducting home visits to follow-up on patients in need. ZPCT has continued increasing the number of ASWs in high density sites, as well as increasing the number of bicycles allocated per site. ZPCT is also allocating funds for bicycle maintenance and repair in the recipient agreements. The collection of data on transfers-in and transfers-out from neighboring health facilities to trace some of these patients is being implemented and is showing some positive results. ZPCT has put in place mechanisms to find lost to follow up clients including checking mortuary records from the hospitals to collect data on those that might have died, and to checking and compare patient information, on a monthly basis, in both the dispensing tool and ART registers.

#### 4.3.4 Clinical Palliative Care

ZPCT is working with staff in 97 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, two trainings were conducted this quarter in the areas of ART/OI and pediatric ART/OI, reaching a total of 49 HCWs.

##### 4.3.4.2 Clinical Palliative Care Services

ZPCT staff provided technical assistance in clinical care to the 97 sites in the five provinces. During the quarter under review, technical assistance focused on the following issues:

- ZPCT has continued to mentor and supervise HCWs in the management of opportunistic infections and pediatric HIV/AIDS cases, identification and documentation of adverse drug reactions, and the scaling-up of cotrimoxazole prophylaxis in both adults and children.
- The half-day orientation package for nurses in the early identification of OIs in children in order to enhance their skills has been rolled out and implemented in all facilities. It is proving to be a useful strategy in improving care for children living with HIV and AIDS.
- ZPCT continues to strengthen routine HIV testing for all pediatric admissions and those in out-patient care. This quarter, a total of 2,792 pediatric patients were pre-test counseled and tested for HIV, compared with 2,440 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. A system is needed to record CD4 count data for TB clients who have undergone CT, alongside the HIV testing results in one register.

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

- **Referral Linkages:** Collection of correct documentation and usage of the referral process continues to be a challenge for patient follow up. However, ZPCT continues to address this challenge through technical visits and mentorship and is working towards ensuring that all referral documents used (referral notes and registers) are adequately filled out with all the relevant information as is required. ZPCT continues to encourage feedback from clinicians.
- **Erratic Supply of Drugs for OIs:** OI drug supply still remains a challenge in some sites, though with the support of JSI/Deliver to the Medical Stores Limited, the situation is expected to continue improving. JSI/Deliver is in the process of developing a drug logistic system for OI drugs which should eventually ensure adequate supply of all essential drugs. However, the supply of cotrimoxazole (Septrin) has improved tremendously.

- Palliative Care Data: Collection of palliative care data continues to improve especially after the review of the HMIS through the MOH and HSSP.

#### **4.3.5 Pharmacy Services**

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

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

ZPCT trained eight laboratory and 13 pharmacy health facility staff from 12 districts in Northern, Luapula and Central provinces in commodity management.

ZPCT staff facilitated at two trainings in the management of the new national PMTCT Drug Logistics System in collaboration with JSI/Deliver as part of the national ARV supply chain system as follows:

- July 30 to Aug 3, 2007: 20 district PMTCT coordinators and pharmacy staff from Central and Lusaka provinces were trained, of which eight HCWs were from ZPCT-supported sites and two were ZPCT staff.
- September 10 to 15, 2007: 18 district PMTCT coordinators and pharmacy staff from Luapula province were trained, including ten HCWs were from ZPCT-supported sites and three ZPCT staff.

A ZPCT staff attended a training on Antiretroviral Program Management and Adherence Issues in Low-Resource Settings at the Boston University School of Public Health Summer Institute in International Health in July 2007.

##### **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. One facility in Northern Province, Chilubula Mission Rural Health Center, began using the tool during this quarter. A total of 11 staff were oriented on its use. In addition, ongoing training of additional pharmacy staff in 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.

##### **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, there is need to update the Zambia ART Pharmacy SOPs. This activity is planned for next quarter once discussions with MOH are finalized. Once the review process is complete, the new SOPs will

be distributed and site specific adaptations are planned for all 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. There are many challenges in meeting this goal.

- Medical Stores Limited logistics constraints: Occasional lapses in the transport system at MSL 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. ZPCT is working with DHMTs and facilities to improve this situation through implementation of the transport reimbursement system for staff working extra shifts.
- Inadequate supply of commodities: The erratic supply of commodities affects service delivery across all elements of care. While there has been an improvement in the national level supply chain for ARVs and selected OI drugs, ZPCT continues to employ multiple strategies, including training and technical assistance, to ensure an uninterrupted supply of essential commodities. Also, by actively participating in national level forecasting and quantification activities, ZPCT ensures 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 65 facilities by providing technical assistance, supporting renovations and procurement of equipment. ZPCT has also developed a PCR laboratory to increase early infant diagnosis of HIV and has recruited a Laboratory Manager to work at the PCR laboratory at Arthur Davison Children's Hospital. A laboratory technician will be recruited next quarter. The laboratory was officially opened on August 2, 2007 and began receiving and processing specimens from the surrounding health centers in September.

Technical assistance is routinely provided to support laboratory needs at additional ART sites (both static and outreach) added with ART Plus-Up funds.

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

As mentioned in the previous section, ZPCT conducted a training in commodity management for laboratory and pharmacy staff from Northern, Luapula and Central provinces.

The second of three cycles of trainings in HIV DNA PCR techniques was held at the University Teaching Hospital from July 16 – August 3, 2007. Three laboratory technologists from Ndola Central Hospital, Lubuto Health Center (Ndola DHMT) and the Biomedical Science College in Ndola were trained, as well as one ZPCT staff. The feedback received from the participants was all positive. The three MOH staff will support the ADCH PCR laboratory on a rotational basis.

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.

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

ZPCT staff provided technical assistance in laboratory services to 65 health facilities in all districts 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 they are not 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 recently developed 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 are on going within the unit on how best to handle the question of acute shortage of staff and increased work load.

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.

#### **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. This activity is planned for next quarter once discussions with MOH are finalized. Once the review process is complete, the new SOPs will be distributed to all ZPCT supported static and outreach ART sites.

The revised Internal Quality Control (IQC) guidelines are being finalized, following the pilot results and the recommendations from facilities. The document will be presented to the MOH for adoption and roll out during the next quarter.

#### **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 53 health facilities referring specimens to the 29 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.

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 will be batched at the district level and transported by Express Mail Service (EMS) operated by the Zambia Postal Service.

Few shortages of CD4 reagents were experienced during the quarter under review, and as before for ZPCT-supported facilities that were affected, ZPCT reallocated CD4 reagents within health facilities to minimize interruption of services. ZPCT is working to ensure additional CD4 reagents are brought into the country to normalize the situation.

#### **4.3.6.5 Procurement, Installation and Maintenance**

## Equipment

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

- CD4 Count Equipment (FACSCount): FACSCount equipment is functional in all facilities. BD promptly attends to faults once reported.
- Chemistry Analyzer: Two Humalyzer 2000 for Central Province were installed during the quarter and one is awaiting installation once laboratory renovations are complete at Masansa Health Center.
- ZANARA and the MOH have finalized the distribution and installation of the Cobas Integra, a high-volume chemistry analyzer, to the following ZPCT-supported facilities: Nchanga North General Hospital, Ronald Ross Hospital, Thomson District Hospital, Solwezi General Hospital, Kabompo District Hospital, Kabwe General Hospital, Kasama General Hospital, Mbala General Hospital and St. Paul's Mission Hospital. Mansa General Hospital is scheduled to receive theirs during the next quarter.
- Nearly all the equipment procured by ZANARA and MOH has been distributed and installed. Where there is duplicate equipment, equipment will be re-allocated with permission from MOH.
- Hematology Analyzer: All Sysmex poch-100i and the ABX Micros (except the one at Nakonde) are working well. The sample holder on the Nakonde machine is broken and we have contacted the technician for repairs. A quotation has been submitted for the procurement of the replacement part and this will be followed up early next quarter.
- PCR Equipment: All the equipment procured for the PCR laboratory at Arthur Davison Children's Hospital was successfully installed. Trial runs were completed successfully in preparation for the opening of the laboratory on August 02, 2007. FHI and UTH consultants recommended a few more renovations which were completed and the lab became fully functional in September. ZPCT is following-up to ensure that the laboratory is fully functional in readiness to receive DBS samples for processing and analysis from its support.

## Reagents and Consumables

ZPCT-supported sites access reagents procured by GRZ and stored at MSL. Most reagents are available in sufficient quantities.

ZPCT draws the Sysmex poch-100i reagents from MSL, for distribution to ZPCT sites. In addition, CDC provides controls for the Sysmex, ABX Micros 60 and Pentra 60 for selected facilities. Quality control materials need to be quantified and plans put in place to order and deliver to sites, taking into account short expiration dates. The MOH will work with MSL to try and see how the quality control materials can be distributed through the existing systems to avoid the supplies expiring on the shelf due to their short shelf life dictated by the nature of the materials.

ZPCT also procured reagents for use in the DNA PCR laboratory at Arthur Davison Children's Hospital through the agreement with CHAI.

### 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 continues to be a challenge due to non-submission of data from sites that ZPCT does not support. This delays the re-supply of these commodities to the sites since this is linked to district-level data submission. Stock outs have reduced but are still experienced at some facilities, hindering service provision. ZPCT is working with DHMTs to build capacity at the district level to reduce the delays.
- Lack of qualified staff in the facilities: Shortages of trained staff have compromised the quality of service delivery in the facilities. ZPCT is 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. ZPCT continues to procure selected commodities to fill the gaps created by these shortages for our sites.

- 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. Vendors such as Scientific Group and Becton Dickinson continue to service the equipments and retrain the users.
- Specimen referral systems: Overall, the specimen referral is working well, but has occasionally been affected by breakdown of motorbikes and / or CD4 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.

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

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

As part of the roll-out strategy of the SmartCare Patient Tracking System, a total of 116 people (clinicians and data entry clerks) were trained in using the paper forms in Ndola, Kabwe, Kasama, Solwezi and Mansa. A total of 33 data entry clerks were trained in the use and management of the SmartCare software immediately following the forms training.

Following this training, SmartCare was deployed to Ndola Central Hospital, Kabwe General Hospital, Mansa General Hospital and Kasama General Hospital. Preparations for the SmartCare roll-out in the remaining facilities are underway.

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

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. The quality control in SmartCare is meant to ensure that quality data is generated from the software once it is fully operational. This exercise is being done in close collaboration with CDC who is responsible for the design of the SmartCare software.

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

With the roll out of SmartCare, there is evidence that the GRZ data clerks, who are counterpart clerks to the ZPCT Data Entry Clerks, have limited and sometimes no computer experience. This has tended to slow down the process of updating patient records in the database (SmartCare). The ZPCT DECs have embarked on onsite training for their counterparts to bring them to acceptable levels of competence in the use of computers.

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

The following table shows service statistics and related data through September 30, 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 97 Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to September 30, 2007)						
	Workplan (1 Apr 06 to 30 Sep 07)	Quarterly Achievements (1 Apr 07 to 30 Sept 07)			Achievements (1 Apr 06 to 30 Sept 07)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 30 Sept 07)
	TARGET	FEMALE	MALE	TOTAL			
<b>CT</b>							
Service outlets providing CT							97
Persons trained in CT	402			125	594	148%	974
Persons receive CT services	52,512	13,945	13,301	27,246	129,050	246%	162,433
<b>PMTCT</b>							
Service outlets providing PMTCT							96
Persons trained in PMTCT	200			21	212	106%	460
Pregnant women provided with PMTCT services, including CT	35,851	16,799		16,799	90,758	253%	117,562
Pregnant women provided with a complete course of ART prophylaxis	8,963	2,015		2,015	8,817	98%	10,680
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services							97
Service outlets providing general HIV-related palliative care							97
Persons provided with OI management and/or prophylaxis		34,547	22,895	57,442			62,474
Persons provided with general HIV-related palliative care		34,547	22,895	57,442			62,474
Persons trained to provide general HIV- related care	100			32	280	280%	663
<b>Treatment</b>							
Service outlets providing ART services							60
Health workers trained in ART	100			32	280	280%	663
New clients receiving ART	16,300	2,769	2,017	4,786	28,804	177%	39,619
Total clients receiving ART	28,410	24,366	16,633	40,999	40,999	144%	40,999
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			17	364	243%	364
New pediatric clients receiving ART	660	156	175	331	2,027	307%	2,751
Total pediatric clients receiving ART	1,151	1,408	1,399	2,807	2,807	244%	2,807
<b>TB and Care</b>							
TB infected clients receiving CT services	5,000	440	499	939	6,210	124%	6,210
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	2,188	537	569	1,106	3,515	161%	3,515

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

During the reporting period, a Trainer-of-Trainers Workshop for Stigma Reduction in ZPCT-supported health facilities was held in the Lusaka office from July 9 to 13, 2007. The focus of the meeting was to equip all ZPCT community staff with the skills to increase awareness of stigma in ZPCT-supported facilities and devise strategies to work with facility staff to address it. One of the key outcomes of the meeting was the planning for activities that will be implemented in nine districts (Kabwe, Mkushi, Ndola, Chingola, Mansa, Solwezi, Kabompo, Kasama and Nakonde) to address stigma related behaviors in ZPCT-supported health facilities. A guide for focus group discussions among PLHA was developed during this workshop to assess the extent of stigma in ZPCT-supported facilities.

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

In planning for the upcoming workplan period, ZPCT will focus its community mobilization activities to expand its work through faith-based organizations, target mobilization for pediatric clinical care services and increase the uptake of PMTCT services, particularly uptake of ARV prophylaxis. In addition, ZPCT is exploring strategies to increase male involvement within PMTCT. Discussions have been held with HCWs at Mahatma Gandhi and Pollen Health Centers in Kabwe to increase male involvement at these facilities. HCWs in both facilities will issue invitation letters to the partners of pregnant women requesting them to attend ANC clinic at respective health facilities to learn more about the health of their partners and unborn babies.

A Community Purchase Order (CPO) was signed with Mahatma Gandhi HBC to mobilize pediatric clients and their parents and/or guardians for CT and ART. Activities included discussions with HBC clients and their families on the benefits of CT services and the identification and referral of children who would benefit from CT services.

The inclusion of community health workers (CHWs) in mobilization activities implemented by Senama, Chembe and Central Clinics in Mansa district had a significant impact on the numbers of community members referred and reaching the facility. CHWs have stronger links with the communities as they assist health care workers in their routine outreach activities. Some of the activities of CHWs include support with MCH and child growth monitoring including the follow up of clients in their homes. This is a comparative advantage over neighborhood health committee (NHC) groups who wait for facilities to request mobilization activities.

In Chingola, Kabundi NHC was unable to meet its targets of numbers referred and reaching Kabundi Clinic for CT as outlined in the purchase order. This is due to the fact that the group had little prior training in HIV/AIDS. HCWs and ZPCT staff recommended the inclusion of a youth group to conduct drama performances at the mobilization activities in subsequent CPOs. Their performances attracted large numbers of community members to central locations in the catchment areas of Kabundi Clinic where Kabundi NHC members held focus group discussions on the benefits of CT and PMTCT. This enabled Kabundi NHC meet its target number of community members who were mobilized and accessed CT services.

In districts such as Kabwe and Ndola where the referral networks are well established, network members contribute significantly to the numbers of clients referred for CT services in ZPCT supported facilities. The referral networks therefore are a conduit for community mobilization.

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

Expanded Church Response: During the no cost extension period of July and August 2007, ECR mobilized churches in Kabwe district to access community based CT services. Church leaders made announcements in churches about the CT services that would be offered in the Makululu catchment areas and facilitated focus group discussions with church members to discuss the benefits of CT services. A new coordinating committee was established at Makululu which conducted door-to-door mobilization in the Makululu catchment area for mobile CT services held in the last week of August, 2007. A total of 286 clients (177 males and 109 females) were counseled and tested during this event.

Churches Health Association of Zambia: A CPO was developed with a group of NHC members operating in the St. Kalemba catchment area to mobilize community members for CT and PMTCT through door to door meetings. NHC members decided to utilize funds obtained from the purchase order to initiate income generating activities for long term sustainability of the group. At Lubwe Mission, a CPO was developed with Lubwe Home Based Care to mobilize the community in

Samfya district. Loloma Mission Hospital will support and host the next referral network meeting for Kabompo district.

#### **4.4.1.2 Working with Local Community Groups**

During the quarter, community mobilization activities began in new districts. ZPCT staff obtained information on active community partners from HCWs at ZPCT-supported sites. Based on this information, ZPCT staff met with recommended community groups to discuss CT and PMTCT mobilization activities. In Luanshya, ZPCT signed a purchase order with peer educators working under Mpatamatu HBC. The ZPCT M&E Officers supported the purchase order process by providing technical assistance to strengthen documentation of referrals.

In Ndola, the NHC at Nkwazi Clinic consistently failed to meet targets established in the three CPOs. This was due to the fact that NHC members were motivated to participate in activities supported by other partners that had higher incentives. ZPCT staff worked closely with facility staff to select another suitable organization for community mobilization activities. Zambia Association for the Employment and Education of the Disabled, a group comprising of disabled community members, was selected to implement mobilization activities in Nkwazi clinic catchment area. Supported by HCWs at the clinic, the group members conducted door-to-door mobilization and referred clients to both the Nkwazi Clinic and mobile CT services.

The ZPCT Copperbelt office in Ndola signed a CPO with the United Church of Zambia (UCZ) in Chifubu, which is in the catchment area of Chipokota Mayamba Clinic. Church members were mobilized during the various church activities and referred to Chipokota Mayamba Clinic for CT and PMTCT services. During the orientation meeting prior to implementation of the CPO with UCZ, a special emphasis was placed on the need for children to be tested. This was done to increase the demand for pediatric clinical care services.

In Luapula Province, ZPCT staff noted significant improvement in the documentation of referrals and reporting on mobilization activities by community partners who have had more than one CPO. Additionally, their skills in mobilization have also significantly improved, leading to increased uptake of CT services and consistent attainment of targets established in the CPOs. Orientation for community groups in CT/PMTCT showed that the use of community job aides and referral forms yield better results when conducted in local languages.

During the reporting period, a CPO was developed with Samfya HBC. As part of their mobilization, Samfya HBC members ensured that all patients enrolled under their program accessed CT services. Those requiring treatment services were referred for ART baseline investigations and other clinical care services.

During the reporting period a total of 28 CPOs were developed and implemented with community groups in the five provinces. The following table indicates community partners that implemented CPOs during this reporting period quarter:

Province	District	Facility	Group
Copperbelt	Chingola	Chawama	Chawama NHC
	Chingola	Chiwempala	Chiwempala NHC
	Chingola	Kabundi	Kabundi NHC
	Kitwe	Luangwa Clinic	ASAYI
	Kitwe	Ipusukilo	ASAYI
	Kitwe	Ndeke Clinic	ASAYI
	Luanshya	Mpatamatu Clinic	Mpatamatu HBC
	Mufulira	Kansuswa Clinic	Mutende HBC
	Mufulira	Kansuswa Clinic	Kansuswa NHC
	Ndola	Nkwazi Clinic	ZANAEED
	Ndola	Kawama Clinic	Kawama NHC (2)
	Ndola	Mushili Clinic	Mushili NHC
	Ndola	Ndeke Clinic	Ndeke Youths
Central	Kabwe	Mahatma Gandhi	Mahatma Gandhi NHC
Luapula	Mansa	Chembe Clinic	Chembe NHC
	Mansa	Senama Clinic	Senama NHC
	Mansa	Central Clinic	Central NHC
	Mwense	Mwense Stage II	Mwense HBC
	Mwense	Mwense Stage II	Mulundu CBO
	Samfya	Samfya Stage II	Samfya HBC
	Samfya	Lubwe Mission Hospital	Lubwe HBC
Northern	Kasama	Lukupa RHC	Lukupa Mobilization Group
	Nakonde	Nakonde District Hospital	Nakonde Mobilization Group
	Nakonde	Mwenzu RHC	Mwenzu Mobilization Group
North Western	Solwezi	Mapunga RHC	Mapunga NHC
	Solwezi	St Dorothy RHC	St Dorothy NHC
	Kabompo	St Kalembe RHC	St Kalembe NHC

#### 4.4.2 Lay Counselors

Lay counselors continue to support HCWs in the provision of HIV CT services. During the reporting period, lay counselors participated in mobile CT events, DHMT supported outreach activities and information dissemination during community mobilization activities. In Mansa, HCWs at Senama Clinic have requested that more lay counselors are trained and placed in the health facilities in order to meet the demands of the community. HCWs have also requested that the existing counselors are allocated more time during the week to operate in the health facility. Currently, as a quality control measure, lay counselors are advised not to counsel more than five clients per day. However, when community mobilization activities are conducted in the catchment areas of ZPCT supported facilities, the number of community members seeking CT services increases. This makes it necessary for HCWs to meet the extra demand for CT services. At Senama Clinic in Mansa district, HCWs discussed the possibility of CT service provision on a Saturday to meet current demand with facility management.

ZPCT staff in Luapula met with staff from Luapula Foundation to discuss the use of ZPCT-trained lay counselors in Mansa district. ZPCT trained lay counselors from Central Clinic and Mansa General Hospital spent more time at the New Start site managed by Luapula Foundation as opposed to the ZPCT supported MOH sites. New Start offers higher monetary incentives to lay counselors for CT service provision which has had a negative effect on the uptake of services, particularly during the community mobilization activities.

An intern from Columbia University School of Public Health completed the data review for all ten sites (Mansa and Copperbelt sites where lay counselors are placed) to investigate the effects of lay counselors on HIV CT service provision in ZPCT supported sites. Interviews were held with all facility managers except the in charge of Mushili Clinic. All lay counselors were interviewed except those at Chipokota Mayamba and Mushili. 40 client exit interviews were held in the Mansa sites with ten interviews per site. A focus group discussion was held with PLHA in Ndola. However, it was challenging to organize interviews with health care workers for focus group discussions. This was because a minimum of three participants were required and HCWs were often busy with clinical duties. Additionally in sites with a low client flow, it was difficult to hold client exit interviews. In this quarter the community mobilization unit with support from ZPCT staff in Copperbelt and Luapula Provinces will complete client exit interviews in the Copperbelt sites, Focus group discussions with health care workers in all ten sites and a focus group discussion with PLHA in Mansa district. Data analysis will be

supported by the M&E Unit in the Lusaka Office. And the preliminary report will be ready at the end of December 2007.

#### 4.4.3 Stigma Reduction

Provincial community staff held workplace meetings with ZPCT staff to introduce the concepts around stigma reduction and discuss training and activities that will be held in the next quarter. ZPCT staff also met with respective PHOs and DHMT to discuss stigma reduction related activities targeted at health care workers in ZPCT supported facilities. In a few districts, the DHMTs will select staff and community members to be trained as trainers in stigma reduction. These trainers in turn will facilitate group sessions in ZPCT supported facilities to increase awareness of stigma and devise strategies to address it.

#### 4.4.4 Mobile Counseling and Testing

During the reporting period mobile CT activities were conducted in Kasama, Ndola, Nakonde, Kabwe, Solwezi and Zambezi districts. In Solwezi district, mobile CT activities conducted during the Lubinga traditional ceremony held at Mumena palace in the Mapunga catchment area and in Zambezi during the Likumbi Lyamize ceremony. 286 clients were counseled, tested and received results at Lubinga traditional ceremony and 248 at Likumbi Lyamize ceremony.

In Nakonde, district women accessing CT services during mobile CT events without the consent of their partners have had negative repercussions. Three women were asked to leave their marital homes and a headman's wife was beaten in public. ZPCT staff engaged traditional leaders in a dialogue to address this matter. An advocacy workshop will be held with all community and traditional leaders in the catchment areas of ZPCT supported facilities to disseminate information about the benefits of HIV CT particularly for pregnant women and to address negative traditional practices and beliefs that affect uptake of CT services.

During the reporting period the CT/PMTCT, Community Mobilization and QA/QI units met to discuss quality assurance strategies for mobile CT. Key revisions to be made to the guidelines are as follows:

- The number of mobile CT events to be implemented by the provincial teams will be limited to three per quarter to allow for adequate planning and ensure that the DHMT has all necessary logistics in place.
- Revisions to the guidelines will reinforce mobile CT being implemented over a number of days. This is to allow for counselors to attend to a reasonable number of clients per day and ensure that all community members seeking services are attended to.
- The guidelines reinforce the need for group information sessions to be conducted by counselors to ensure that community members receive adequate information prior to pre test counseling.
- Each mobile CT event will need to have a minimum of eight counselors available to provide services. During mobile CT service provision, where comprehensive group discussions have been conducted, the pre test counseling will be abbreviated and counselors will attend to a maximum of ten clients. However during events where there is no group information session conducted counselors will attend to only five clients.

The table below indicates the number of people provided with CT services through mobile activities this quarter, including the activities conducted by ECR:

District	Males Counseled and Tested			Females Counseled and Tested			Children		
	Total	# positive	% positive	Total	# positive	% positive	Total	# positive	% positive
Kabwe	191	20	10.5%	145	24	16.6%	0	0	N/A
Kasama	608	37	6.1%	366	39	10.7%	0	0	N/A
Luanshya	19	5	26.3%	14	5	35.7%	2	2	100.0%
Nakonde	70	0	0.0%	83	2	2.4%	0	0	N/A
Ndola	201	22	10.9%	245	38	15.5%	21	2	9.5%
Solwezi	242	19	7.9%	156	17	10.9%	166	2	1.2%
Zambezi	133	1	0.8%	49	0	0.0%	66	0	0.0%
<b>Total</b>	<b>1464</b>	<b>104</b>	<b>7.1%</b>	<b>1058</b>	<b>125</b>	<b>11.8%</b>	<b>255</b>	<b>6</b>	<b>2.4%</b>

#### 4.4.5 Referral Network Development

District wide referral networks are fully functional in the following districts: Kabwe, Mkushi, Ndola, Chingola, Solwezi, Kabompo, Zambezi, Mansa and Samfya. Fully functional referral networks are characterized by the availability of tools (referral forms, directory of services and operational guidelines), a defined feedback mechanism, consistent quarterly meetings and a referral coordinating unit that is engaged and proactive in its leadership role.

Initials stakeholders meetings have been held in Serenje, Chibombo, Kitwe, Mufulira, Chinsali, Mbala, Mpulungu, Mwinilunga, Mwense and Kawambwa. In each of these districts, referral network concepts have been reviewed and committees established to develop referral network tools.

Provincial community staff worked with strategic community based partners to strengthen referral of clients from the community to the facility. In a number of districts where the referral coordinating unit is inactive, committees have been established to develop referral tools and taken up the leadership role to facilitate the functioning of network. This is often due to the fact that the district level partners involved in the tools development are the partners whose service provision is enhanced by standardized referral tools and systems.

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

- Incentives for clients: In some districts such as Mansa, mobile CT services are being offered by both New Start and the DHMT (supported by ZPCT). New Start offers wrist bands to clients receiving CT services, while the DHMT does not. Despite both services being free, community members have started to avoid services offered by the DHMT. The issue of clients being offered incentives for attending CT services will be addressed in the Mansa district quarterly referral network meeting.
- Documentation of referrals: Due to the high turn over of staff at government health facilities, it may take time to identify and orient new staff to document referrals. This is particularly true of large facilities and hospitals. Community based organizations do not receive documented feedback in these instances as the service providers are not familiar with the referral forms and tools. ZPCT staff continue to provide hands on technical assistance for HCWs in ZPCT supported facilities to ensure that all service providers receive feedback on clients referred for HIV/AIDS related services.

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

#### 4.5.1 Administration of QA/QI Tools

In an ongoing effort to develop a more systematic approach to ensuring quality, 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. The 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. This quarter, the MOH has finalized and disseminated the national quality assurance strategy and tools for CT services, based primarily on the ZPCT CT QA/QI tools. This will provide the framework to institutionalize QA/QI activities as part of the routine scale up of CT services country wide.

- CT/PMTCT Tools: During this quarter, the CT/PMTCT facility checklist, CT provider, PMTCT provider and counselor reflection QA/QI tools were administered in 70 of the 97 ZPCT supported health facilities 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 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. In addition, some of the key areas noted for program quality strengthening included routine PMTCT baby mother follow up, integrating PMTCT into under five clinic services, external QA for HIV testing and the consistent use of PMTCT dual therapy in qualifying facilities.<sup>1</sup>

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<sup>1</sup> facilities with blood bank services and capacity to conduct basic hemoglobin test

- **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 45 of the 62 ZPCT-supported ART sites. The tools have been instrumental in identifying gaps in initiating and prescribing ART, monitoring clients and referral practices. Key issues noted from the administration of the ART/CC tools included an erratic supply of new first line drug, Truvada and reagents for serum and creatine clearance from MSL. ZPCT is currently in the process of procuring reagents for serum creatine to meet the shortfall in the supported sites. Incorrect prescribing practices for cotrimoxazole prophylaxis were also noted in some of the facilities. To address this issue updated job aids have been distributed and refresher trainings on ART/OI have been planned. Immediate feedback was provided to health facility staff on the critical deficiencies identified. Technical assistance and mentoring was tailored to address key issues identified during the administration of the QA/QI tools.
- **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 53 of the 62 ZPCT-supported ART pharmacies. 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. Key weakness identified included the lack of adverse reactions and discrepancy reports, underutilization of ARV database by new dispensers, and malfunctioning air-conditioning systems. ZPCT provincial and Lusaka office technical staff will address these issues by ensuring regular maintenance of equipment and providing on going technical support, mentorship and training on weaknesses identified.
- **Laboratory Tools:** The laboratory used by ZPCT are 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 tools were administered in 52 of the 65 ZPCT-supported laboratories during this quarter. 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 erratic supply of FACS count and serum creatine reagents and EDTA containers by MSL, shortages of staff and lack of external QA sample referral system. ZPCT provincial teams will continue to work with the Lusaka office to purchase and supply commodities and reagents in short supply. ZPCT provincial staff to 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.
- **M&E Tool:** The M&E facility checklist was administered in 70 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. As the M&E system transitions from a paper based antiretroviral information system (ARTIS) to an electronic database called SmartCare, ZPCT Lusaka and provincial staff will continue to provide technical assistance and training in ensure data quality is maintained.

#### **4.5.2 Use of CSPro Software**

ZPCT staff, in collaboration with the Central Statistics Office (CSO) of the GRZ, adapted the CSPro software package for use in quantitatively analyzing data collected using the QA/QI tools. ZPCT staff have all been oriented in the use of CSPro for data entry. The next step is to ensure that all QA/QI data is correctly entered, analyzed and reported on a quarterly basis. To this effect a standardized reporting format and feedback mechanism based on the CSPro results is currently being developed. It is envisioned that as data is collected the ZPCT provincial M&E team will regularly analyze it to identify areas of program weakness and verify the size of the identified problems. The ZPCT technical teams will then be able to use the findings to prioritize the main causes and suggest corrective actions to be taken.

#### **4.5.3 Facility Graduation Sustainability Plan**

As part of its sustainability plans, ZPCT developed a graduation policy for ZPCT supported health facilities to continue to provide good quality services in the absence of external support. The graduation policy aims to transition supervision and technical assistance of facilities with a high level of technical quality from ZPCT to GRZ support without compromising service delivery or quality. ZPCT's technical strategies and QA/QI tools will be basis for assessing service quality in the facility. Facilities eligible for

graduation must maintain and sustain an acceptable standard in CT, PMTCT, clinical care, ART and pharmacy/laboratory for a period not less than three to six months before graduation.

All five provincial offices have identified phase one sites as those that require minimum technical assistance and have a relatively high level of technical quality in CT, PMTCT, clinical care, ART and pharmacy/laboratory services. In an ongoing process, specific graduation QA/QI tools are being administered on a quarterly basis to track technical quality in the provision of HIV services.

In the upcoming workplan period, a selected number of ZPCT facilities demonstrating a high level of technical quality will be graduated from ZPCT technical support. 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.

#### 4.5.4 Key Issues/ Constraints in QA/QI

- Human resource crisis: Shortages of trained staff to deliver quality services in all technical areas is a key challenge. A lack of sufficient CT and PMTCT counselor supervisors in some sites has compromised the consistent administration of the CT and PMTCT provider QA/QI tools. Transfer of ZPCT trained staff by DHMTs to non-ZPCT supported sites is posing a challenge in sustaining quality gained in supported sites. However, ZPCT continues to support DHMTs and PHOs by training lay counselors and adherence support workers to supplement HCWs and CT/PMTCT supervisors. In addition, refresher trainings are conducted as a way to motivate, avoid stress and burn out among HCWs in ZPCT-supported sites.
- Institutionalizing QA/QI process: For the process to be sustainable there is need to incorporate QA activities for PMTCT, ART, clinical care, pharmacy, laboratory into routine MOH operations. ZPCT will continue to work with MOH and other stakeholders to develop national QA strategies aimed at not only solving existing problems, but also to prevent other performance gaps from developing and by recognizing the potential areas of quality weakness that will need to be constantly monitored.
- Unclear roles and responsibilities: The current roles and responsibilities of MOH, provinces, DHMTs and facilities in QA/QI are currently not well defined. This has been a source of resistance and challenge to addressing key QA gaps identified by ZPCT staff. ZPCT will continue to sensitize and engage DHMT and PHOs on the benefits of QA/QI and will strive to communicate this during all quarterly review meetings. In addition, ZPCT will continue to promote the QA/QI process by being active partners, in the development and use of a QA/QI system for HIV/AIDS services in ZPCT supported facilities. Furthermore, ZPCT will continue to work with MOH and other partners to streamline QA/QI efforts to develop national policy documents and activities.

## 5. 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 supplies 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.

- Orient facility management and staff at the additional 119 health facilities to be supported by ZPCT next quarter.
- Complete procurement for all new equipment and initiate new renovations under the new and amended recipient agreements.
- Complete recruitment and orientation of additional staff to support the program expansion activities and initiate recruitment process.
- Conduct initial meetings to expand ZPCT support to Lufwanyama District in Copperbelt Province.
- Complete the process to transition all existing data entry positions hired by ZPCT from consultancy agreements to employment contracts under the recipient agreements.
- Support the PCR laboratory at Arthur Davison Children's Hospital, 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.
- Expand provision of more efficacious ARVs for PMTCT, including full ART for women who are eligible and dual therapy for those receiving prophylaxis only.
- Provide technical assistance and mentoring in pediatric AIDS treatment and implementation of the transition to new national treatment protocol.
- Ensure that children exposed to HIV infection are provided with cotrimoxazole prophylaxis.
- 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.
- Finalize guidelines for the distribution of the Plumpy nut a ready-to-use food supplement for HIV positive children on ART in ten high-density ART sites.
- Work with MOH and partners to roll out the GRZ-recommended SmartCare Patient Tracking System at selected hospitals. Migrate all data to SmartCare system.

- Continue to strengthen the specimen referral system at health facilities in the five target provinces, including the additional seven districts identified for ZPCT support.
- Collaborate with MOH and other partners in the routine review of the laboratory management information system for drugs and other supplies in support of the supply chain management and on the routine review of the health center drug kit contents and, specifically, supplementary essential medicines for OIs and other conditions.
- Conduct workshops to train facility level pharmacy and laboratory staff from ZPCT-supported facilities on commodity management.
- Update 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.
- Complete data analysis from a study conducted to evaluate the effectiveness of lay counselors in providing quality CT services and addressing the human resource issue at health facilities.
- Finalize the research report for the ASW study and research proposal for PMTCT effectiveness study.
- Develop targeted community mobilization activities to increase the numbers of children referred for HIV CT
- Implement strategy to monitor and assure quality at mobile counseling and testing services.
- Implement stigma reduction activities, including assessments, 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 and discuss the next steps.
- Conduct audit of the ZPCT program by external auditors, Ernst and Young.
- Participate in a commodity management audit, being conducted by USAID for PEPFAR activities.
- Continue to monitor and assist ZPCT provincial offices to be decentralized in selected program, technical and financial areas.
- 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.
- Develop standard guidelines for provincial offices on problem identification, prioritization of identified problems and regular QA/QI action planning from analyzed QA/QI data.
- Develop a scorecard system to track progress and technical quality of ZPCT supported sites towards graduation
- Plan and participate in World AIDS Day activities in Lusaka and across the five target provinces.
- Collaborate with CIDRZ on the second ART update seminar.

**Attachment A: Status of ZPCT-Supported Services and Facilities  
as of September 30, 2007**

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
<b>Central Province</b>										
<i>Kabwe</i>	1. Kabwe General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	2. Mahatma Gandhi Health Center		◆ <sup>1</sup>	◆		◆		◆	◆ <sup>3</sup>	
	3. Kabwe Mine Hospital		◆		◆	◆		◆	◆	◆
	4. Bwacha Health Center				◆	◆		◆	◆	◆
	5. Makululu Health Center		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	6. Pollen Health Center		◆ <sup>1</sup>	◆		◆		◆		◆
	7. Kasanda Urban Health Clinic		◆ <sup>1</sup>	◆		◆		◆	◆	◆
<i>Mkushi</i>	8. Mkushi District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	9. Chibefwe Health Center				◆		◆	◆		◆
	10. Chalata Health Center		◆ <sup>1</sup>		◆		◆	◆		◆
	11. Masansa Health Center		◆ <sup>1</sup>		◆		◆	◆	◆	◆
<i>Serenje</i>	12. Serenje District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	13. Chitambo Hospital		◆	◆		◆		◆	◆	◆
<i>Chibombo</i>	14. Liteta District Hospital	◆			◆	◆		◆	◆	◆
	15. Chikobo Rural Health Center				◆	◆		◆		◆
	16. Mwachisompola Health Demonstration Zone				◆	◆		◆	◆	◆
<b>Copperbelt Province</b>										
<i>Ndola</i>	17. Ndola Central Hospital	◆		◆			◆	◆	◆ <sup>3</sup>	
	18. Arthur Davison Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	19. Lubuto Health Center	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	20. Chipulukusu Health Center		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	21. Chipokota Mayamba Health Center	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	22. Mushili Clinic			◆		◆		◆		◆
	23. Nkwazi Clinic			◆		◆		◆		◆
	24. Kawama Health Center			◆		◆		◆	◆	◆
	25. Ndeke Health Center			◆		◆		◆	◆	◆
<i>Chingola</i>	26. Nchanga N. General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	27. Chiwempala Health Center		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	28. Kabundi East Clinic	◆ <sup>1</sup>			◆	◆		◆	◆	◆
	29. Chawama Health Center				◆	◆		◆	◆	◆
<i>Kitwe</i>	30. Kitwe Central Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	31. Ndeke Health Center	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	32. Chimwemwe Clinic	◆ <sup>1</sup>		◆		◆		◆	◆	◆
	33. Buchi Health Center			◆		◆		◆	◆	◆
	34. Luangwa Health Center		◆ <sup>1</sup>	◆		◆		◆	◆	◆
	35. Ipusukilo Health Center	◆ <sup>1</sup>		◆		◆		◆	◆	◆
<i>Luanshya</i>	36. Thompson District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	37. Roan General Hospital		◆		◆	◆		◆	◆	◆
	38. Mikomfwa Health Center				◆		◆	◆		◆
	39. Mpatamatu Sec 26 Urban Clinic		◆ <sup>1</sup>		◆		◆	◆	◆	◆
<i>Mufulira</i>	40. Kamuchanga District Hospital	◆		◆		◆		◆	◆	◆
	41. Ronald Ross General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	42. Clinic 3 Mine Clinic			◆			◆	◆		◆
	43. Kansunswa Health Center			◆			◆	◆		◆
<i>Kalulushi</i>	44. Kalulushi Government Clinic	◆			◆	◆		◆	◆	◆
	45. Chambishi Health Center		◆ <sup>1</sup>		◆	◆		◆	◆	◆

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
<b>Luapula Province</b>										
<i>Kawambwa</i>	46. Kawambwa District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	47. Mbereshi Hospital		◆	◆		◆		◆	◆ <sup>3</sup>	
	48. Kawambwa Health Center			◆		◆		◆		◆
<i>Mansa</i>	49. Mansa General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	50. Senama Health Center		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	51. Central Clinic				◆	◆		◆	◆	◆
	52. Matanda Rural Health Center				◆		◆	◆		◆
<i>Mwense</i>	53. Chembe Rural Health Center		◆		◆		◆	◆	◆ <sup>2</sup>	◆
	54. Mambilima Health Center (CHAZ)		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	55. Mwense Health Center		◆ <sup>1</sup>		◆	◆		◆	◆	◆
<i>Nchelenge</i>	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>	◆		◆		◆		◆
<i>Samfya</i>	65. St. Paul's Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>	
	66. Lubwe Mission Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>	
	67. Samfya Health Center		◆ <sup>1</sup>		◆	◆		◆	◆	◆
<b>North Western Province</b>										
<i>Solwezi</i>	68. Solwezi General Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	69. Solwezi Urban Health Center		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	70. Mapunga Rural Health Center				◆		◆	◆	◆	◆
	71. St. Dorothy Rural Health Center		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	72. Mutanda Health Center			◆		◆		◆		◆
<i>Kabompo</i>	73. Kabompo District Hospital		◆	◆		◆		◆	◆ <sup>3</sup>	
	74. St. Kalemba Rural Health Center (CHAZ)		◆ <sup>1</sup>		◆	◆		◆	◆	◆
<i>Zambezi</i>	75. Zambezi District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	76. Zambezi Urban Health Center						◆	◆		◆
	77. Mize Health Center				◆	◆		◆		◆
<i>Mwinilunga</i>	78. Mwinilunga District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	79. Kanyihampa Health Center			◆			◆	◆		◆
<i>Mufumbwe</i>	80. Mufumbwe District Hospital		◆ <sup>1</sup>	◆		◆		◆	◆	◆
<b>Northern Province</b>										
<i>Kasama</i>	81. Kasama General Hospital	◆			◆		◆	◆	◆ <sup>3</sup>	
	82. Kasama Urban Health Center				◆	◆		◆	◆	◆
	83. Location Urban Health Center		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	84. Chilubula Mission RHC (CHAZ)		◆	◆		◆		◆	◆ <sup>3</sup>	
	85. Lukupa Rural Health Center				◆		◆	◆	◆	◆
<i>Nakonde</i>	86. Nakonde Rural Health Center		◆		◆	◆		◆	◆ <sup>3</sup>	
	87. Chilolwa Rural Health Center				◆		◆	◆		◆
	88. Waitwika Rural Health Center				◆		◆	◆		◆
	89. Mwenzo Rural Health Center				◆		◆	◆	◆ <sup>2</sup>	◆
<i>Mpika</i>	90. Mpika District Hospital	◆		◆		◆		◆	◆	◆
	91. Mpika Health Center			◆			◆	◆	◆	◆
<i>Chinsali</i>	92. Chinsali District Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	93. Chinsali Health Center				◆		◆	◆		◆

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
<i>Mbala</i>	94. Mbala General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	95. Mbala Urban Health Center				◆		◆	◆		◆
	96. Tulemane Urban Health Center				◆	◆		◆	◆	◆
<i>Mpulungu</i>	97. Mpulungu Health Center		◆ <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
*Phase 1 Facilities are shaded	3 = Referral laboratory for CD4

**Attachment B: ZPCT Training Courses  
July 1 to September 30, 2007**

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT*	25/6/07 to 7/7/07	Copperbelt	Mufulira Chingola	1 4	2 19
CT*	12/8/07 to 26/8/07	Luapula Northern	Mansa Mwense Kawambwa Samfya Mpulungu Kasama Nakonde Mpika Mbala Chinsali	3 2 3 1 1 1 1 1 1 1 1	4 2 3 1 1 1 2 1 1 1 2
			<b>Total</b>	<b>20</b>	<b>39</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**	12/8/07 to 19/8/07	Northern	Kasama Nakonde Mpika Mbala Chinsali Mpulungu	4 1 1 1 2 1	6 1 1 1 2 1
Basic Child Counseling**	27/8/07 to 1/9/07	Luapula	Mansa Mwense Kawambwa Samfya	5 2 3 2	8 2 3 2
Basic Child Counseling**	3/9/07 to 8/9/07	North Western	Mwinilunga Solwezi Mufumbwe	1 2 1	3 7 1
Basic Child Counseling**	24/9/07 to 29/9/07	Central	Kabwe Mkushi Serenje Chibombo	2 4 2 3	2 6 3 4
Basic Child Counseling**	24/9/07 to 29/09/07	Copperbelt	Ndola Chingola Luanshya	5 3 2	8 3 2
			<b>Total</b>	<b>47</b>	<b>66</b>

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

**Table 3: Lay Counseling and Testing (Community)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Lay counseling	25/6/07 to 7/7/07	Central Luapula Northern	Kabwe Mkushi Chibombo Mansa Mwense Kawambwa Mbala Chinsali Nakonde	5 1 1 2 1 1 2 2 1	7 1 2 3 1 1 2 2 1
			<b>Total</b>	<b>16</b>	<b>20</b>

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
HIV Testing	23/7/07 to 25/7/07	Copperbelt	Ndola Luanshya	3 4	3 7
HIV Testing	31/7/07 to 2/8/07	Northern	Mpika	2	4
HIV Testing	19/8/07 to 21/9/07	Luapula	Samfya	2	4
HIV Testing	20/8/07 to 22/8/07	Copperbelt	Chingola	4	7
HIV Testing	27/8/07 to 29/8/07	Copperbelt	Mufulira	4	8
HIV Testing	21/8/07 to 24/8/07	Central	Serenje	2	5
HIV Testing	21/8/07 to 23/8/07	Northern	Nakonde	4	7
HIV Testing	24/9/07 to 26/9/07	Luapula	Mwense	2	2
HIV Testing	27/9/07 to 29/9/07	Luapula	Kawambwa	3	5
			<b>Total</b>	<b>30</b>	<b>52</b>

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT*	23/7/07 to 04/8/07	Central North Western	Kabwe	6	9
			Mkushi	2	2
			Serenje	2	2
			Chibombo	3	3
			Mwinilunga	1	1
			Solwezi	2	2
			Kabompo	2	2
		<b>Total</b>	<b>18</b>	<b>21</b>	

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

**Table 6: ART/OIs In-house Training**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs In-house	27/8/07 to 1/9/07	Copperbelt	Ndola	1	32
			<b>Total</b>	<b>1</b>	<b>32</b>

**Table 7: Pediatric ART/OIs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Pediatric ART /OIs	6/8/07 to 10/8/07	Luapula	Mansa	1	3
			Mwense	2	3
			Kawambwa	2	6
			Samfya	2	5
			<b>Total</b>	<b>7</b>	<b>17</b>

**Table 8: Adherence Counseling for HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence counseling HCWs	9/8/07 to 10/8/07	Central	Kabwe	7	12
			Mkushi	2	3
			Serenje	2	3
			Chibombo	1	2
Adherence counseling HCWs	06/9/07 to 07/9/07	Luapula	Mansa	2	6
			Mwense	2	4
			Kawambwa	2	6
			Samfya	2	4
Adherence counseling HCWs	4/9/07 to 5/9/07	Copperbelt	Ndola	5	12
			Luanshya	1	2
Adherence counseling HCWs	6/9/07 to 7/9/07	Copperbelt	Kitwe	4	11
			Luanshya	2	3
			Chingola	3	7
<b>Total</b>				<b>35</b>	<b>75</b>

**Table 9: Adherence Support Workers**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Support Workers	13/8/07 to 23/8/07	Copperbelt North Western	Kitwe	5	7
			Luanshya	2	3
			Ndola	2	3
			Mufulira	2	3
			Chingola	2	4
			Solwezi	1	2
			Kabompo	1	2
<b>Total</b>				<b>10</b>	<b>24</b>

**Table10: Adherence Support Workers Refresher**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ASW Refresher	13/9/07 to 14/9/07	Central	Kabwe	6	12
			Mkushi	2	4
			Serenje	2	2
			Chibombo	1	2
ASW Refresher	10/9/07 to 11/9/07	Luapula	Mansa	2	7
			Mwense	1	3
			Kawambwa Samfya	2 2	5 7
ASW Refresher	25/9/07 to 26/9/07	Copperbelt	Ndola	6	15
			Luanshya	2	4
ASW Refresher	27/9/07 to 28/9/07	Copperbelt	Kitwe	4	13
			Mufulira	2	5
			Chingola	3	7
			Kalulushi	1	2
<b>Total</b>				<b>36</b>	<b>88</b>

**Table 11: Laboratory/Pharmacy**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Commodity Management	15/8/07 to 17/8/07	Central Northern Luapula	Kabwe	6	7
			Mkushi	1	1
			Serenje	1	1
			Chibombo	1	1
			Kasama	2	4
			Nakonde	1	1
			Mpika	1	1
			Mbala	1	1
			Chinsali	1	1
			Mansa	1	1
			Kawambwa	1	1
Nchelenge	1	1			
			<b>Total</b>	<b>18</b>	<b>21</b>

**Table 12: Laboratory/Pharmacy**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
HIV DNA PCR Techniques	16/7/07 to 3/8/07	Copperbelt	Ndola	2	3
			<b>Total</b>	<b>2</b>	<b>3</b>

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