



**Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership  
Cooperative Agreement No. 690-A-00-04-00319-00  
Quarterly Report for October 1 – December 31, 2008  
Submitted by Family Health International (FHI)  
January 31, 2009**

## 1. EXECUTIVE SUMMARY

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

This quarter, ZPCT supported implementation of HIV/AIDS services in 219 health facilities in 35 districts in the five target provinces, with 218 of these facilities now reporting results. The health facility in Milenge District in Luapula Province has started services but is not yet reporting. This is one less facility than was reported last quarter. Two facilities were removed from Mpika and Kasama Districts MoH management and one additional health facility was included in the Isoka District agreement.

Key activities and achievements for this reporting period include:

- CT services are ongoing in 217 out of 219 health facilities, with 51,119 individuals receiving CT services in these facilities.
- PMTCT services were provided in 208 ZPCT supported facilities. 36,587 women were provided with PMTCT services (including CT), and 5,006 were provided with a complete course of ARV prophylaxis.
- Ongoing technical assistance was provided to expand and improve clinical palliative care services in all targeted health facilities. 89,620 individuals received palliative care in all 218 reporting ZPCT supported health facilities during this quarter.
- ART services were available in 34 districts supported by ZPCT. It is still to be determined if the site in Milenge District will have the capacity to provide ART services in the future. This quarter a total of 7368 new clients (including 579 children) were initiated on antiretroviral therapy through 99 (including 53 outreach sites) out of the total 102 ART centers. Initially, the total number of sites planned for ART was 101. However, at the request of the Ndola DHO, another site (Kaniki clinic) was added this quarter. Of the 99 ART sites, 93 report independently and six sites report through larger facilities. By the end of this reporting period 67,906 individuals were receiving antiretroviral therapy at ZPCT supported sites and of these, 5018 were children.
- The following training courses were conducted this quarter:
  - 38 HCWs and 70 community volunteers were trained in basic CT through two, two week courses
  - 15 HCWs already trained in basic CT, were trained in child counseling
  - 38 community volunteers already trained in basic CT were trained in child counseling through three, one week courses
  - 16 HCWs were trained in couple counseling through a two week course
  - 23 HCWs were trained in counseling supervision through a two week course
  - 72 HCWs were trained in three, two-week courses in provision of PMTCT services
  - 80 community volunteers were trained in provision of PMTCT services through a one week course.
  - 48 HCWs were trained in pediatric ART and opportunistic infection (OI) management through three, one week courses

- 72 HCWs were trained in ART and opportunistic infection (OI) management through four two week courses
  - 9 HCWs were trained in stigma reduction Training of Trainers (TOT) through a three day course.
  - 62 community volunteers were trained in adherence counseling through a two week course
  - 14 M&E staff and data entry clerks were trained in SmartCare software use
- 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.
- Two of the seven districts across the five provinces that were identified for graduation by December have been graduated; Samfya in Luapula Province and Luanshya in Copperbelt Province. Additional districts that meet the required standard will be graduated by the end of this workplan period. ZPCT and MoH have been working together to monitor the implementation of the QA/QI tools and offer guidance to facility staff on how best they can improve and provide services of good quality.
- District wide referral networks are fully functional in 27 districts and are in development in eight additional districts. Implementation of referral network activities will be completed in the remaining districts by the end of this workplan period.
- ZPCT has identified and worked with 19 community groups to implement community purchase orders to enable the groups to conduct mobilization activities in communities surrounding ZPCT supported facilities, in this quarter. Community mobilization activities are ongoing in all five ZPCT supported provinces.
- ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the central level. ZPCT actively participates in eight national technical working groups, as well as in several ad-hoc implementation groups.

Results for the quarter are summarized in the following table:

<b>Services in Health Facilities Receiving ZPCT Support</b>							
<b>Indicator</b>	<b>Achievements (May 1, 2005 to December 31, 2008)</b>						<b>Cumulative LOP Achievements (1 May 05 to 31 Dec 08)</b>
	<b>Workplan (1 Oct 08 to 31 May 09)</b>	<b>Quarterly Achievements (1 Oct 08 to 31 Dec 08)</b>			<b>Achievements (1 Oct 08 to 31 May 09)</b>	<b>Percent Achievement</b>	
	<b>TARGET</b>	<b>FEMALE</b>	<b>MALE</b>	<b>TOTAL</b>			
<b>CT</b>							
Service outlets providing CT	220						217
Persons trained in CT	340			200	200	59%	1,805
Persons receive CT services	85,000	27,436	24,683	52,119	52,119	61%	367,272
<b>PMTCT</b>							
Service outlets providing PMTCT	208						208
Persons trained in PMTCT	200			152	152	76%	1,094
Pregnant women provided with PMTCT services, including CT	69,825	36,587		36,587	36,587	52%	273,169
Pregnant women provided with a complete course of ART prophylaxis	7,820	5,006		5,006	5,006	64%	28,316
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services	220						218

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to December 31, 2008)						
	Workplan (1 Oct 08 to 31 May 09)	Quarterly Achievements (1 Oct 08 to 31 Dec 08)					
Service outlets providing general HIV-related palliative care	220						218
Persons provided with OI management and/or prophylaxis	103,000	54,074	35,546	89,620	89,620	87%	99,464
Persons provided with general HIV-related palliative care	103,000	54,074	35,546	89,620	89,620	87%	99,464
Persons trained to provide general HIV- related care	250			120	120	48%	1,675
<b>Treatment</b>							
Service outlets providing ART services	101						93
Health workers trained in ART	250			120	120	48%	1,675
New clients receiving ART	14,000	4,013	2,776	6,789	6,789	48%	69,861
Total clients receiving ART	69,000	40,657	27,249	67,906	67,906	98%	67,906
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	90			48	48	53%	599
New pediatric clients receiving ART	1,104	279	300	579	579	52%	5,018
Total pediatric clients receiving ART	4,700	2,330	2,404	4,734	4,734	101%	4,734
<b>TB and HIV-related services</b>							
TB infected clients receiving CT services	3,395	709	848	1,557	1,557	46%	12,959
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	2,819	498	556	1,054	1,054	37%	8,831
<b>Laboratory Infrastructure</b>							
Number of laboratories with capacity to perform 1) HIV tests and 2) CD4 tests and/or lymphocyte tests	51						81
Number of individuals trained in the provision of lab-related activities	110				0	0%	291
Number of tests performed at USG-supported laboratories during the reporting period: 1) HIV testing, 2) TB diagnostics, 3) syphilis testing, and 4) HIV disease monitoring	456,536			202,030	202,030	44%	1,451,396

## 2. INTRODUCTION

The Zambia Prevention, Care and Treatment Partnership (ZPCT) works with the Ministry of Health (MoH), the Provincial Health Offices (PHOs), and District Health Office (DHOs) to strengthen and expand HIV/AIDS clinical 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 DHOs 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, HIV/AIDS programming.

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) through the established technical working groups.. At the provincial level, the program supports the MoH through technical assistance and coordination in five provinces and at the district level ZPCT assists the DHOs 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.

All activities and related monitoring and evaluation processes and indicators are designed to meet USAID and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) 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) is the partner responsible for laboratory and pharmaceutical assistance to provide technical leadership within ZPCT and nationally in these areas.

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

During this quarter, the CHAZ program officer conducted monitoring and support visits to three of the seven ZPCT supported CHAZ facilities, including; St. Kalemba, Chitokoloki, and Luwi to monitor implementation progress on planned activities. Refurbishment works at Chitokoloki have been completed while St. Kalemba and Chilubula will commence next quarter. Procurement of pending equipment and furniture will also be completed next quarter.

ZPCT will continue to support CHAZ through March 31, 2009. CHAZ is also a principle recipient for HIV services through the Global Fund to fight AIDS, TB and Malaria and are also rolling out their ART program. ZPCT and CHAZ continue to discuss and resolve overlapping implementation issues.

Kara Counseling and Training Trust (KCTT) is responsible for training CT counselors and counselor supervisors at ZPCT supported health facilities at the district level. Under the current contract, KCTT continues to organize and facilitate counselor supervision trainings and basic CT trainings. This quarter, KCTT conducted four basic CT trainings and two counselor supervision trainings. The remaining counselor supervision training will be conducted next quarter.

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

##### Recipient Agreements

In the previous quarter ZPCT was working with the MoH to improve HIV/AIDS services in 220 facilities in 35 districts through 52 recipient agreements. This quarter, services in two facilities, Kasama and Mpika TAZARA Clinics in Northern Province were dropped since ZPCT was unable to proceed with refurbishment works required to support HIV/AIDS services as these two facility buildings did not belong to MoH, but to the TAZARA Company. However, a new facility Muyombe, was added in Isoka district, Northern Province, bringing the total to 219 facilities. Medical supplies already delivered to the TAZARA Clinics were left to be used by the facility.

This quarter, ZPCT executed nine amendments to add additional equipment and renovations identified as a priority to the existing recipient agreements and extended the end date of these agreements through March 31, 2009. A majority of the recipient agreements ending on March 31, 2009 will be closed out with only a handful remaining to complete pending activities. .

##### Renovations and Environmental Site Assessments

ZPCT is supporting renovations at 180 health facilities with 100 health facility renovations completed. Currently, 80 health facilities have ongoing renovations. Bills of quantities and tender documents have been developed for all health facilities excluding those that are in discussion with the DHOs regarding question on completion of renovation by March 2009.

During this quarter, renovation contracts were signed for 27 health facilities and renovations completed in 15 health facilities. ZPCT provincial office staff continue to work closely with the DHOs and facility management in the vendor selection process as well as ongoing monitoring of refurbishments. As renovations are completed, certification of quality and completeness of works is an ongoing follow-up activity by the infrastructure support officers and ZPCT's consulting architect in collaboration with the relevant Provincial Public Works and Supply Department.

ZPCT has continued to carry out environmental site assessments (ESAs) in facilities undergoing renovations funded by ZPCT, as per USAID guidelines. 148 ESAs have been completed to date of which, seven were completed this quarter.

##### Rural Refurbishment

In addition to renovations at health facilities, ZPCT identified staff housing to be renovated in order to increase the quality of working and living conditions of health care workers. This activity will contribute to addressing the human resources crisis in Zambia by enhancing staff retention in the most remote, rural areas of Northern and North Western provinces.

During this quarter, renovations for the selected 52 housing structures in 22 facilities were advertised at both the district and provincial levels. ZPCT, in collaboration with the relevant PHOs, is selecting contractors to carry out the works, signed 20 contracts and works have commenced in 11 facilities in Northern Province and nine in North Western Province. Currently, 45 housing structures out of 52 are being renovated.

##### Procurement

During this quarter, seven UPS, seven printers, one microscope and one centrifuge were ordered and delivered. In addition, 52 fire extinguishers, three refrigerators, 83 lockable filling cabinets, ten storage cabinets, six hemocues, seven computers, three bench centrifuges and one RPR shaker were ordered and will be delivered to respective facilities once they are received from vendors.

The ten vehicles that were procured for the ZPCT provincial offices were distributed to the provincial offices after all the clearing procedures were completed.

### Graduation

During this quarter, two districts (Samfya in Luapula Province and Luanshya in Copperbelt Province) were graduated. Graduation plans are a continual process as we address the many challenges faced in implementing this strategy. ZPCT provincial offices continue to plan with their respective provincial health directors and facility in-charges to graduate additional districts when facilities meet the requirements outlined in the QA/QI section.

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

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

Health Care Workers in Facilities: ZPCT provincial offices continue to work with DHOs and facilities to implement a transport cost reimbursement plan which follows the districts policies. HCWs who work approved extra shifts are eligible for this reimbursement. This initiative has been implemented at most health facilities and has helped to alleviate staff shortages. ZPCT provincial staff continue 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, PMTCT Volunteers and Adherence Support Workers (ASWs): ZPCT continues to train and place lay counselors, PMTCT volunteers and ASWs in facilities to relieve some of the burden on HCWs in the facilities, and to improve services and the well being of PLHA.

Data Entry Clerks (DECs): All DECs are hired as FHI employees, at MoH rates, and placed at MoH health facilities through funding included in the recipient agreements. To date, 95 DECs trained and placed by ZPCT in collaboration with the DHOs at the ART facilities has resulted in improved timeliness and quality of HIV/AIDS data at these sites. To further improve data quality, these DECs assist in the compilation of data from non-ART sites supported by ZPCT once a month.

Outreach: Transport allowances for ART outreach have been included in all recipient agreements. This includes support for staff from the DHO 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 program management activities took place:

- Accelerated Professional Development: 18 ZPCT technical staff attended a comprehensive six day training which was conducted at ZPCT offices and was facilitated by ZPCT staff and consultants from an organization called Knowledge Cube. The purpose of the training was to develop a core of technical staff to be experts in their respective fields within six months in order to create a pool of highly skilled technical resource for ZPCT. Participants were trained in SPSS, MS Excel.
- Office Management Workshop: On 6 November 2008, four Administrative Assistants attended a one day Secretary's Workshop planned by an organization called Pro-soft. Some of the topics that were discussed at the workshop included time management, telephone etiquette and motivation in the workplace.
- Defensive Driving and First Aid Training: During this quarter, 21 drivers from ZPCT Lusaka office and all five provincial offices were trained for a week, in defensive driving and first aid training. The training was held at the ZPCT Lusaka office and was facilitated by staff from National Red Cross Society and consultants from an organization called Hilburn. The training was split in two sessions. One session focused on various motor vehicle documentation issues such as routine vehicle log books, trip authority forms incident reports and the other session focused on basic first aid including, responding to casualties in accidents, snake bites, and several other unexpected casualties encountered on long trips.
- World AIDS Day (December 1, 2008): ZPCT staff in Lusaka and the five provincial offices participated in activities to commemorate World AIDS Day. Mobile CT services were provided and community mobilization activities were conducted in the days prior to World AIDS Day and on the actual day.
- Human Resources: This quarter, ZPCT hired 17 staff to fill vacancies; six DEC's for the Copperbelt Province, eight drivers for the additional vehicles that were procured for the provincial offices, an assistant training officer for Lusaka, and a program officer and an administrative officer for Northern Province.

Decentralization of Provincial Offices: ZPCT senior management continues to monitor the provincial offices as they decentralize aspects of program management, technical and financial services. All provinces are decentralized for monthly reports, community purchase orders and hiring of local support staff.

- Information Technology (IT) Capacity Building and System Maintenance: The ZPCT IT team continues to provide technical assistance to provincial offices on computer hardware, software, and use of applications. This is provided by help desk support officers in the five ZPCT provincial offices and three IT officers in Lusaka. The IT staff are funded through FHI G&A.

During this quarter the Ndola and Kabwe field offices were experiencing slow internet speed due to the type of connection that was used initially. To improve communication in the two offices, Vsat equipment was procured and waiting to be installed next quarter.

In the next quarter, the IT Unit plans to have its first quarterly meeting to complete the work plan for the fiscal year. Some planned activities for the year include: capacity building for all ZPCT staff through in house training, IT infrastructure maintenance and upgrades, and skills update for all IT staff.

#### 4.2. National Level Activities

ZPCT continues to provide assistance and leadership on technical and programmatic issues in all key areas at the national level. ZPCT actively participates in eight national technical working groups, as well as several ad-hoc implementation groups. Participation in national meetings and workshops ensures ZPCT input into national activities and enhances continued collaboration with the MoH and other partners.

Meetings and workshops attended by ZPCT staff during this quarter are in the table below

Date	Technical Area	Meeting/Workshop/Training
December 30, 2008	General	<u>NAC Fourth Quarter Treatment, Care and Support Theme Group Meeting:</u> This meeting held at CHAZ office in Lusaka provided an update on SmartCare implementation and successes in CDC supported sites and how they plan to complete SmartCare trainings in Eastern Province. CDC staff also talked about producing training videos and implementing family planning modules. TASLY World International (a Chinese pharmaceutical company) also presented on various herbal medications available for use by PLWHA for various illnesses and immune boosting.
December 11, 2008	PMTCT	<u>Fourth Quarter 2008 National PMTCT Stakeholders Meeting:</u> This meeting was organized by NAC where PMTCT stakeholders from various organizations were invited to participate. The objectives of the meeting were to share the national framework focus on PMTCT and the challenges in implementing PMTCT and pediatric ART services. It was noted that, there has been an increase in the uptake of ARVs and cotrimoxazole prophylaxis by HIV positive pregnant women and HIV exposed babies.
November 28, 2008	PMTCT	<u>PMTCT TWG Meeting at MoH:</u> During this meeting, the draft policy statement on the use of HAART for all HIV positive pregnant women in Zambia was reviewed. The statement indicated that, HAART for all HIV positive pregnant women in Zambia was not yet feasible at national scale at this time.
November 26, 2008	PMTCT	<u>Stakeholders Meeting on the Training Manual on Nutrition and HIV:</u> ZPCT staff attended the meeting organized by MoH, the National Food and Nutrition Commission in collaboration with USAID/Food and Nutrition Technical Assistance (FANTA). The purpose of this meeting was to share with partners the details of the proposed Nutrition and HIV/AIDS training manual and the out come of its pre-test. The training manual was developed to standardize and harmonize future trainings to be conducted for frontline health care providers and other service providers

Date	Technical Area	Meeting/Workshop/Training
November 20, 2008	Lab/Pharm	in the area of nutrition and HIV/AIDS. <u>DNA PCR Stakeholders Meeting</u> : The meeting was held at Clinton Foundation offices in Lusaka to review the Early Infant Diagnosis (EID) assessment survey. The survey was conducted in early December, 2008 in Eastern, Luapula and Southern provinces
November 18, 2008.	PMTCT	<u>Infant and Young Child Nutrition Meeting (IYCF)</u> : ZPCT PMTCT staff participated in the monthly program sub-committee meeting held at IYCF office in Lusaka. The focus of the meeting included reviewing progress that has been made from the previous sub-committee and task team meeting and recapping on what each organization had committed to doing for the IYCF.
October 27– 28, 2008	PMTCT	<u>Orientation Workshop for the Infant and Young Child Feeding (IYCF) Coordinating Committee</u> : The workshop was organized by the National Food and Nutrition Commission in conjunction with MoH and other collaborating partners. The objectives of the workshop were to orient committee members to the IYCF program strategy for 2006-2010 in order to come up with action points for stakeholders' implementation of IYCF operational strategy.
October 22, 2008	CT	<u>Psychosocial Care and Counseling Curriculum for HIV Positive Children and Adolescents</u> : The meeting was organized by CRS. Stakeholders and staff from various HIV/AIDS programs attended the meeting. Objectives of the meeting included reviewing the psychosocial care and counseling curriculum for HIV positive children and adolescents; developing a child's positive living flip chart. A presentation regarding the trauma counseling programme and the Child Sexual Abuse Centre at UTH, Lusaka, was also conducted.
October 14, 2008.	CT	<u>National HIV Test Kits Forecasting Quarterly Review meeting</u> : ZPCT staff participated in the quarterly consultative review meeting hosted by USAID/Deliver Project. The purpose of the meeting was to do the forecasting and quantification of HIV Test kits following an annual forecasting and quantification exercise for HIV tests held in June 2008.
October 1, 2008	Clinical Care	<u>Mid Term Review Meeting for MoH</u> : ZPCT staff attended the meeting which was held to disseminate findings on the review of the National Health Strategic Framework (2006 – 2010). Gaps in several key areas such as service delivery, support systems, regulation, governance, cooperating partners' planning and implementation support were identified and discussed.
October 9, 2008	Clinical Care	<u>CRS Food by Prescription Consultative Meeting</u> : At this meeting, CRS informed stakeholders that they had resources to implement the food by prescription program in ten ART sites including two ZPCT supported facilities. During a follow up meeting in December, Ndola Central and Serenje District Hospitals were confirmed as the two ZPCT sites that would be included in the program. The results of CRS' pilot rapid assessment in five facilities and details of the roll out plan scheduled to start in January 2009 were also shared.
October 12, 2008	ART	<u>Review of ART Accreditation Guidelines</u> : ZPCT together with other stakeholders participated in this meeting convened by the Medical Council of Zambia (MCZ) at Crossroads lodge. The aim was to review the ART sites accreditation tool. It was discussed that the tool has been found to be difficult to apply as some requirements such

Date	Technical Area	Meeting/Workshop/Training
		as having a qualified pharmacist at every ART site are unattainable. The finalization of the tool was done at a second meeting held at Chaminuka lodge in November 2008. Other domain areas for data/records and national guidelines were also discussed. The final document is due for adoption in early 2009.
October 16, 2008	ART	<u>Meeting on Certification of ART Providers:</u> ZPCT, other partners and formal training institutions involved in training ART providers namely CIDRZ, UNZA, Chainama college and JHPIEGO were requested by the Medical Council of Zambia (MCZ) to make presentations outlining their approaches to training. The purpose was to harmonize training activities based on MoH/MCZ approved guidelines in order to develop a method of certifying ART providers.
October 22, 2008	Clinical Care	<u>Psychosocial Care and Counseling Curriculum for HIV Positive Children and Adolescents:</u> This meeting was held to present the curriculum developed by CRS in partnership with MoH, ZNCC, EDPAF, Uganda, Kenya, and Ethiopia. HCP also introduced the Pediatric AIDS Communication Framework; including the child's positive living Flip chart. Further, UTH and partners also introduced the establishment of the Child Sexual Abuse Center at UTH where counseling and therapy for children who are sexually abused is being offered.
October 22, 2008	Clinical Care	<u>Palliative Care Forum Monthly Update Meeting:</u> Various issues were discussed at this meeting including; the morphine fact book being available, early identification of patients and initiation of treatment, preparation of annual progress reports, and updates on pediatric diagnosis (DBS/PCR), nutrition and HBC programmes.
October 23, 2008	ART/Clinical Care	<u>Mobile CT, PMTCT and ART Operational Guidelines:</u> As pioneers of the mobile/outreach programs, ZPCT clinical care team and JICA HIV care team met at ZPCT offices to review and discuss draft guidelines before attending the main NAC meeting that was held later in December, 2008 to finalize the guidelines.
November 5 - 7, 2008	Clinical Care	<u>Revision of the Opportunistic Infections (OIs) National Training Package:</u> ZPCT participated in this training organized by MoH to review and update the material. A new approach was adopted in management of TB and STIs.
November 7, 2008	ART	<u>Continuing Medical Education (CME) Modules for Pediatric ART:</u> MoH in collaboration with JHPIEGO and active participation from key partners met to develop electronic resource material for pediatric ART. The resource materials were developed in addition and to enhance the already existing standard HIV care/ART HCWs being used to train HCWs. These materials will be put on CDs and DVDs and will be distributed accordingly.
November 11, 2008	ART	<u>MoH/ZPCT Meeting on QA/QI Tools:</u> MoH and ZPCT met to discuss the clinical care and ART QA/QI tool developed by ZPCT. Several follow up meetings were held with partners including HSSP. MoH advised that the tools should be piloted next quarter during one of the Performance Improvement Approach (PIA) trainings.
November 11, 2008	ART	<u>Implementers' Meeting:</u> This meeting was organized by USAID where a consultant in HIV and nutrition was introduced to participants from ZPCT, RAPIDS and CRS. The partners shared their respective profiles and roles in nutrition support and also brainstormed on long term nutritional sustenance. The visiting consultant was due to make a report to USAID.

<b>Date</b>	<b>Technical Area</b>	<b>Meeting/Workshop/Training</b>
November 14, 2008	ART	<u>Medical Council of Zambia (MCZ) Consultative Meeting on ART Sites Accreditation:</u> These are monthly meetings between MCZ and stakeholders to review the pace of accreditation of ART sites, to discuss challenges and to revise the guidelines and certification of ART providers.
November 19, 2008	Clinical Care	<u>Palliative Care Monthly Stakeholders Meeting:</u> This meeting was attended by Palliative Care Forum (PCF) members to discuss activities planned for world Aids Day. Presentations were made by various stake holders. However, the FHI presentation on palliative care strategy was deferred to the next meeting scheduled in January, 2009.
November 26, 2008	Clinical care	<u>Stakeholders Meeting on Nutrition and HIV/AIDS:</u> ZPCT participated at this meeting held at Courtyard Hotel to finalize nutritional training manuals such as the facilitators guide and participants' hand-outs. The roll out is planned for early 2009 with a prior stakeholders meeting to be hosted by National Food and Nutrition Commission (NFNC) and MoH.
December 3 – 4, 2008	ART	<u>National ART Update Seminar:</u> This seminar was organized by AIDS Relief at the Intercontinental Hotel, Lusaka. The objectives of the seminar were to review progress made in ART provision in Zambia, share best practices, lessons learnt, challenges and future directions and to discuss the new HIV/AIDS and ART management trends. The management of various opportunistic infections and launching the new NAC HIV management guidelines were also discussed.
December 8, 2008	ART	<u>Review of Basic ART Training Material:</u> This meeting was called to review and update the Basic ART training material for first level health facilities which was last updated in 2006. The review was necessary in order to accommodate changes, developments and emerging issues in the management of HIV care and ART.
December 8, 2008	ART	<u>National AIDS Council (NAC) Consultative Meeting to Develop 2009 Work-plan and Targets:</u> ZPCT participated in this meeting where lessons learnt in 2008 were shared and national priorities for 2009 and output targets were agreed upon.
December 11, 2008		<u>Collaborative Meeting on Palliative Care Trainings:</u> This meeting was called to synchronize and standardize the palliative care training packages. A follow up meeting is expected in early 2009.
December 15 -16, 2008	ART	<u>Global Development Alliance Technical Meeting:</u> The meeting was held to share and discuss best clinical practices in both the public and private sectors and use this as a means to strengthen collaboration between the two sectors.
December 15 -17, 2008	ART	<u>Mobile CT, PMTCT and ART Operational Guidelines:</u> NAC and MoH convened this meeting to review and finalize the draft Mobile CT, PMTCT and ART Operational Guidelines.
December 30, 2008		<u>NAC Fourth Quarter 2008 Theme Group Meeting:</u> This was a scheduled meeting for the Treatment, Care and Support group. Issues discussed included SmartCare updates, development and finalization of Mobile CT, PMTCT and ART Operational guidelines. NAC also expressed concern about the apparent cost/financial gaps for ART beginning 2009 onwards and advised members to support the advocacy for more funding from donors.
October 03, 2008	ART, Pharmacy	<u>Pediatric ART Meeting:</u> ZPCT staff attended a one-day meeting at Cresta Golf View Hotel which was also attended by implementing partners and representatives

Date	Technical Area	Meeting/Workshop/Training
		from MoH. The workshop was held to launch the new guidelines for clinical mentorship of HCWs in the provision of ART in Children.
October 8 – 10, 2008	ART, Pharmacy	<u>National ARVs Quarterly Quantification Review:</u> MoH and JSI convened this meeting. Key partners attended and participated in drafting the five year long term forecasting plan for the period 2011 - 2015. This was a follow-on exercise to the three year national ARV drug forecast and quantification workshop conducted last quarter for the period 2008 - 2010. JSI has been mandated by MoH to coordinate this program.
October 27 – 29, 2008	PMTCT, Pharmacy	<u>Evaluation of the National PMTCT Drug Logistics System:</u> MoH in collaboration with JSI conducted an evaluation of the PMTCT Drug Logistics System in an effort to determine why it was not working as expected. The reporting rates have been below 50 percent and facilities have been accessing the commodities through other systems and not the PMTCT Drug Logistics System. A total of 25 facilities were sampled from five districts and ZPCT has been working in three of the districts, namely Kabwe, Isoka and Mufulira.
November 04, 2008	PCR	<u>DNA PCR Laboratory TWG Meeting:</u> ZPCT attended this meeting to review the PCR results from all partners implementing EID. In addition, discussions whether there is a need to have another DNA PCR lab were held. A final decision was not made but will be discussed further in the next meeting. Plans for the roll out of the new DNA PCR requisition form were also discussed.
November 12, 2008	PMTCT, Pharmacy	<u>Dissemination of Findings of the Evaluation of the PMTCT Drug LS:</u> Stakeholders were invited to this one day meeting where findings and recommendations of the PMTCT Drug LS evaluation were disseminated. In order to enable the PMTCT Drug LS to be effective, participants recommended the involvement of the DHO and PHO and strengthening logistics systems on the ground.
November 23 – 28, 2008	ART, Laboratory	<u>Quantification of Laboratory Reagents and Supplies:</u> ZPCT participated in the five day forecasting and quantification exercise conducted by MoH in collaboration with the Supply Chain Management System. The activity was conducted mainly for purposes of securing long term funding. The outcome of this meeting was a seven year plan based on MoH standard equipment policy. As a result, ZPCT highlighted laboratory equipment it planned to procure before June 2009 to ensure that it is considered in the quantification.
December 1 – 5, 2008	Laboratory	<u>Revision of Laboratory QA Guidelines:</u> ZPCT attended a five day meeting organized by MoH to review the national laboratory quality assurance guidelines which extensively cover issues of quality assurance for routine haematology, bacteriology, parasitology, virology, clinical chemistry, histology and cytology tests. The final document will be circulated after all edits have been submitted.
December 10 -12, 2008	ART, Pharmacy	<u>National HIV/AIDS Commodity Security (HACS) Coordinating Committee Meeting:</u> ZPCT staff attended this meeting where the third draft HACS strategy and launch plans were reviewed. The way forward included plans for a costing exercise to be conducted to facilitate completion of the budget and forwarding the document on for final editing. The document will undergo one final review by the review committee members before the strategy launch planned for March, 2009.

Date	Technical Area	Meeting/Workshop/Training
November - December 2008	QA/ QI	<u>Developing a National QA/QI System for HIV/ AIDS Services:</u> MoH in collaboration with HSSP is developing a national HIV/AIDS Services QA/QI tool. ZPCT and other key partners participated in three consultative meetings that were started last quarter. ZPCT ART/CC QA/QI tools have been proposed for national adoption but the process has not yet been concluded.

### 4.3. Technical Program Areas

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

#### 4.3.1 Counseling and Testing (CT)

CT services were available in 217 out of 218 reporting health facilities during this quarter. One facility, Namukolo, Isoka District, Northern Province, is attached to the Isoka Urban Health Center where they refer CT clients.

##### 4.3.1.1 CT Training

ZPCT continues to strengthen the capacity of providers to provide counselling and testing services (both HCWs and community cadres). The following training courses for health care workers and lay counselors were supported by ZPCT during this quarter:

- 38 HCWs from ten districts of Copperbelt and North Western Provinces were trained in basic CT
- 70 lay counselors were trained in basic CT from 17 districts of Central, Copperbelt, Luapula and Northern Provinces
- 38 lay counselors already trained in basic CT from 15 districts of Central, Northern, and North Western Provinces were trained in child counselling
- 15 HCWs already trained in basic CT were trained in child counselling in two districts of Copperbelt Province
- 23 experienced counselors from nine districts of Central and Luapula provinces were trained in counseling supervision
- 16 HCWs already practicing counsellors from four districts of Luapula Province were trained in couple counseling

##### 4.3.1.2 CT Services

ZPCT provided technical assistance to HCWs and lay counselors in ZPCT supported facilities in the five supported provinces in order to strengthen CT services, maintain a high uptake of testing and collection of same day results and strengthen the linkage to clinical care for ART services. The training of 70 more lay counselors in basic CT during this quarter contributed to the strengthening of CT services in 17 districts from four of the supported provinces excluding North Western Province.

Technical assistance during this period focused on:

- CT services in TB, FP and STI clinics: ZPCT continues to provide technical support to facility staff working in the TB, STI and family planning services by emphasizing the importance of integrating CT into these service areas and ensuring that all clients and patients are offered CT services using the "Opt Out" strategy.
- Strengthening CT services for children admitted in care or attending the under-five clinics: ZPCT continues to strengthen routine CT for children in care with on-going mentorship of newly trained pediatric lay counselors and HCWs from Copperbelt, Central, North Western and Northern Provinces.

During this quarter, with support from CHAI, more rooms for pediatric CT were identified and baby friendly materials were placed in ten facilities in order to improve the quality of care. To improve on the number of tested children, more testing points have been identified in addition to the already piloted hospitals and clinics. This has been done through provider initiated services in mobile CT and static under five clinics. The mobile CT figures are reported under the community mobilization and outreach CT section of this report.

This quarter, a total of 579 children were tested and received their results for HIV. CT services were extended to the parents or guardians of the children using a family centered approach by extending services to other family members.

- Strengthening the documentation of CT services provided: ZPCT continues to mentor HCWs and lay counselors working in CT corners on how to accurately document CT services in the appropriate registers.
- Implementation of the revised and updated QA/QI tools: During this quarter, the revised and updated QA/QI tools (including the graduation tools for districts targeted for graduation) were sent to all the provinces and were administered in the ZPCT supported facilities as part of the ongoing monitoring of quality of services being provided and also to prepare districts targeted for graduation.
- Strengthening of linkages of all HIV positive clients to ART: ZPCT continues to strengthen the linkage of HIV positive clients to ART services by encouraging clients to access ART services.

#### 4.3.1.3 Community Mobilization and Outreach in CT

During the reporting period, ZPCT collaborated with health facility staff and community groups to encourage people in communities to access HIV/AIDS by conducting community mobilization. A total of 19 community purchase orders (CPOs) were implemented in 16 districts across the five ZPCT supported provinces (see details under the community mobilization and referral network section).

- Mobile CT services: ZPCT continues to provide mobile CT services in various locations of the facility catchment areas. Mobile CTs increase the number of people accessing CT services, including those that do not see the need to go to the clinic to access these services. During this quarter, mobile CT services were provided in 15 districts, bringing services closer and more accessible to the community.

The table below provides a breakdown of the mobile CT activities.

District	Males Counseled and Tested			Females Counseled and Tested			Children Counseled and Tested		
	Total	# positive	% positive	Total	# positive	% positive	Total	# positive	% positive
Chibombo	96	9	9	148	23	15	29	1	3
Kabwe	554	52	9	473	58	12	412	15	4
Ndola	133	18	14	106	16	15	31	1	3
Kalulushi	55	4	7	74	10	14	18	2	11
Mufulira	94	3	3	99	16	16	19	1	5
Kasama	34	3	9	48	2	4	57	2	4
Mpika	0	0	0	228	11	5	166	5	3
Chinsali	77	3	4	79	2	3	51	1	2
Isoka	88	2	2	268	4	2	128	0	0
Nakonde	74	1	1	129	7	5	250	1	0.4
Kasempa	200	16	8	193	11	6	22	0	0
Kabompo	123	3	2	256	8	3	10	0	0
Solwezi	38	0	0	161	19	11	39	0	0
Samfya	112	18	16	65	17	26	57	2	4
Kawambwa	11	1	9	26	0	0	69	1	1
<b>Grand total</b>	<b>1,689</b>	<b>133</b>	<b>8</b>	<b>2,353</b>	<b>204</b>	<b>9</b>	<b>1,358</b>	<b>32</b>	<b>2.4</b>

#### 4.3.1.4 Key Issues /Constraints in CT

- Human resource shortages continues to be a challenge and has persisted in a number of facilities. ZPCT continues to address this issue by training additional HCWs and lay counselors to supplement HCWs' efforts in providing CT services. ZPCT also provides limited support for transportation to HCWs working extra shifts for CT.
- Shortages and interruptions in supplying HIV test kits: Northern and Central provinces experienced limited stock outs of HIV test kits during this quarter, due to some facility staff delays in making orders. In some facilities, the logistics and supply ordering times were not followed by the staff and hence the stock outs. ZPCT staff continue to work closely with facility staff and also conduct short in house trainings on logistics management in order to provide staff with skills in forecasting and ordering of commodities.
- Long distances from CT to ART sites: In some provinces, HIV positive clients referred from CT to ART sites are unable to access services due to long distances to be covered. ZPCT is working closely with the PHOs to consider providing mobile ART services in affected areas.
- Quality Assurance/Quality Control: Re-testing ten percent of all samples tested by lay counselors for the purpose of external QA remain a challenge because lay counselors are not allowed to draw blood and so they rely on HCWs who are preoccupied with other facility duties. To resolve this issue, ZPCT is currently pursuing the possibility of having some of the ZPCT supported sites included in the HIV DBS QC pilot study which will enable lay counsellors to do DBS for QC. The pilot study is being undertaken by the JICA AIDSCARE project in collaboration with the MoH in Mumbwa and Chongwe.
- Inadequate space for child CT: Some facilities do not have available space for child counseling activities. As a result, child counseling services have been hindered in affected facilities. ZPCT has continued to address this challenge by supporting limited infrastructure refurbishments and by continuing to engage DHOs and hospital managements in identifying and allocating appropriate space for child CT services.

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

By the end of this quarter, PMTCT services were being provided in 208 ZPCT supported facilities instead of the previously reported 209 because two TAZARA Clinics were dropped, as mentioned above, and on facility, Muyombe, was added, in Northern Province.

##### 4.3.2.1 PMTCT Training

During this reporting period, ZPCT supported the training of 80 community cadres from 22 districts across four provinces (Copperbelt, Central, Luapula and North Western) in community PMTCT and 72 HCWs from 19 districts in Central, Northern and Copperbelt Provinces in PMTCT. The trained community cadres have been placed in the health facilities and are already supplementing the HCWs' efforts in providing PMTCT services.

##### 4.3.2.2 PMTCT Services

Routine counseling and testing in the ANC settings is on-going with more than 95 percent of pregnant women accepting HIV testing and receiving their results in all the ZPCT PMTCT supported sites. The "opt-out" strategy continued to be operationalized in line with the WHO recommendations and the Zambia national protocol guidelines. ZPCT also focused on the implementation of quality PMTCT services through strengthening provision of more efficacious ARV regimens for PMTCT, same day testing and results, DBS and CD4 sample referral networks as well as hemoglobin monitoring for HIV positive mothers to facilitate initiation of AZT and mother-baby follow ups through the under-five clinics. In addition, testing corners within ANC settings continue to be established to ensure same-day testing and results in all ZPCT supported facilities. The areas of focus in PMTCT technical assistance during this reporting period include the following:

- Providing more efficacious ARVs for HIV positive pregnant women: ZPCT continues to emphasize the three tiered approach in providing more efficacious ARVs for PMTCT with an emphasis on reducing the use of NVP monotherapy. In order to enable all facilities providing PMTCT services to conduct HB estimations for HIV positive pregnant women so that they can be given AZT, ZPCT will procure 71 additional hemocues in the next quarter.
- Strengthening the assessment of CD4 count for HIV positive pregnant women: ZPCT continues to assist facilities to harmonize ANC booking days and CD4 count testing. Women attending ANC clinics who test HIV positive can now get their CD4 tests done on the same day and can collect their results at the next ANC appointment. ZPCT also strengthened the sample referral system to encourage more HIV positive pregnant women to access CD4 count services.
- Strengthening mother-baby follow up as part of the continued pediatric HIV efforts: ZPCT continues to mentor facility staff in following up HIV infected mother-baby pairs through MCH services. The strengthening of DBS collection and initiation of cotrimoxazole prophylaxis for PCP at six weeks continued in the ZPCT supported facilities. During this quarter, 579 HIV exposed children were provided with cotrimoxazole prophylaxis. ZPCT continued to provide technical assistance by strengthening mother-baby pair follow-up through the use of PMTCT lay counselors. Infants with positive DNA PCR results are being tracked and referred to ART clinics for further management and initiation of HAART.
- Strengthening documentation: During this quarter, it was noted in some facilities that although dual therapy was being implemented, documentation was poor. ZPCT continued to encourage facility staff to ensure that all PMTCT services being provided were well documented.
- Linkage of PMTCT to family planning (FP): ZPCT has been providing technical assistance in linkages to family planning services through counseling during the ANC period and by providing dual protection method at the appropriate time after delivery. All women continued to be linked to family planning services within PMTCT. In addition, clients accessing FP services were offered CT services and sensitized in PMTCT services.

#### **4.3.2.3 Key Issues/Constraints in PMTCT**

- Limited human resource: Staff shortages continue to persist in ZPCT supported facilities. However, ZPCT is working with DHOs/PHOs to provide limited support for transport reimbursements for off duty facility staff who work extra shifts to provide services. In addition, the community cadres trained in community PMTCT are helping to supplement HCWs' efforts in providing PMTCT services.
- CD4 count assessment for HIV positive women: Assessing CD4 count for HIV positive pregnant women continues to be a challenge in some facilities due to problems with the sample referral system, lack of transport and long distances in some instances. ZPCT continues to address this issue by providing motorbikes to some of the supported districts to strengthen the CD4 count sample referral system and also by re-arranging the ANC booking days to fit in with the lab scheduled days for doing CD4 count.
- Uncollected DBS results: Due to long distances some mothers do not return to the health facilities to collect DBS results. ZPCT is addressing this challenge through the use of adherence support workers to help track exposed babies and by strengthening follow up in the under five clinics.
- Lack of hemoglobin estimation capabilities at some facilities: 71 facilities did not have hemocue machines to enable them to estimate hemoglobin levels on HIV positive pregnant women. ZPCT is in the process of procuring additional hemocues for the facilities that do not have.

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

During this quarter, the number of health facilities providing ART services, with ZPCT support, reached 99. Initially, the total number of sites targeted for ART support by the end of this workplan period was 101. At the request of the Ndola DHO another site (Kaniki clinic) was added, bringing the total target to

102. Three sites (Natuseko in Kabwe, and Tulemane and Senga in Mbala) are being prepared to initiate ART services next quarter.

In addition, 93 of the 99 sites are reporting data independently, while six of the outreach sites are reporting through the supporting static ART sites. Once fully accredited, ART numbers are received and depending on the pace of Medical Council of Zambia, these sites will also be reporting directly.

ZPCT continues to provide technical assistance and mentoring in all health facilities targeted for ART with a focus on quality assurance and quality improvement of services. Expansion of the DBS referral and transportation system and links to PCR facility and the roll out of SmartCare in ART sites continue to be a priority. ZPCT has been actively involved in preparing high volume ART sites with over 500 clients in all the provinces for assessments which has led to accreditation of 23 sites to support the national program spearheaded by the Medical Council of Zambia.

ZPCT continues to refurbish clinical care and ART rooms and provide the necessary medical equipment such as stethoscopes, thermometers, BP machines, diagnostic sets, weighing scales and examination couches.

#### **4.3.3.1 ART Training**

During this quarter the following ART trainings were supported:

- 72 HCWs participated in adult ART/OI trainings. Four separate trainings were conducted in Central, Copperbelt, Luapula and Northern provinces. North Western Province will conduct its training next quarter.
- 48 HCWs were trained in pediatric ART. Two trainings were conducted in the Copperbelt and one in Northern province. Pediatric ART trainings are facilitated by a consultancy organization, the Foundation for Global Health. These trainings will be followed up for on site mentorship by ZPCT staff.
- 62 lay counselors received training in ART Adherence Counseling. Three trainings were conducted; two refresher trainings for participants from all the five supported provinces, and one training for participants in Western Province.

#### **4.3.3.2 ART Services**

At the end of this quarter, three additional sites began providing ART services through outreach, Muchinshi Health Center in Chingola, Mporokoso Urban Health Center in Mporokoso, and Kaniki Clinic in Ndola.

This brings the total number of health facilities providing ART services to 99, of which 46 are static sites and 53 are outreach sites. A total of 7,368 new clients (including 579 children) were initiated on antiretroviral therapy this quarter. Cumulatively, a total of 67,906 clients were receiving antiretroviral therapy at ZPCT supported sites, of these 5,018 were children.

ZPCT continues to focus on the issues outlined below:

- Implementation of SmartCare and mentorship in new ART protocols: ZPCT continues to roll-out the implementation of SmartCare and mentorship in new ART protocols in ZPCT supported facilities. ZPCT staff, through scheduled technical assistance visits, followed-up the implementation of SmartCare which is generally progressing well. By the end of this quarter, all health facilities had started implementing new national ART protocol guidelines.
- Collaboration with home-based care program: ZPCT has continued to provide ART outreach support to three home based care centers supported by the Ndola Catholic Diocese; Chishilano in Ndola, Twatasha (TRAKK) in Kitwe, and Iseni in Chingola. This collaboration continued to expand in terms of client enrolment into care and treatment with 119 clients initiated on ART and 746 clients monitored this quarter.

The implementation of ART outreach services at Mpatamatu Home Based Care has been facing some challenges with transport. The District AIDS Task Force (DATF) vehicle which was to be used for the outreach has been unavailable and as a result, the outreach has not been active or taking place weekly as agreed. An amendment was developed in October, 2008 to

accommodate the use of a vehicle belonging to Mpatamatu HBC and most patients who were on treatment at this facility have been transitioned to the nearby Mpatamatu Section 26 Clinic under DHO which is offering ART through ZPCT support.

- Pediatric HIV/AIDS care and treatment: ZPCT continues to provide technical assistance and mentoring to scale-up pediatric AIDS treatment with continued attention to routine or provider-initiated CT, timely initiation of ART, and cotrimoxazole prophylaxis. To scale up this activity, ZPCT has recruited five pediatric HIV medical officers to specifically strengthen clinical mentorship and uptake in pediatric ART across the provinces. In addition, MoH has adopted the WHO recommendation of initiating HAART in all infants who are less than 12 months with confirmed HIV positive status irrespective of clinical and immunologic status. ZPCT staff also pioneered the implementation of this recommendation in supported ART sites by providing guidelines and on-going mentorship.
- Strengthening of the tracking of HIV positive women who have delivered: In order for babies exposed to HIV to have DBS (DNA PCR) tests done and those who are positive to be appropriately referred to HIV care and treatment, tracking of HIV positive women who have delivered continued during this quarter. Lay counselors also continued referral procedures that assist in linking in-patient children whose results are ready to the ART clinic. For children who may not show up for appointments for DBS results, ASWs, use patient locator forms (from SmartCare) to trace these clients in their respective communities and facilitate their re-engagement into care and treatment.
- Orientation visit to Center of Excellence at UTH, Lusaka: As an additional strategy to expand pediatric HIV/AIDS interventions in the provinces, ZPCT supported PHOs and DHOs, hospital managers and facility in-charges to participate in a three day field visit to the UTH Center of Excellence, in Lusaka. The purpose of the visit was to orient managers and clinicians on how to operationalize comprehensive pediatric HIV care including the implementation of routine CT or provider initiated testing and counseling (PITC) in infants and children. During this quarter, Copperbelt and Northern Provinces benefitted from this program. Participants from North Western, Central, and Luapula Provinces will visit the UTH Center of Excellence next quarter.
- Ready-to-use therapeutic food supplements (RUTFs): ZPCT continues to support the enrolment of eligible infants and children on to the RUTF (also known as Plumpy Nut) program. The program has improved the nutritional status of malnourished and HIV infected children. During this quarter, a total of 284 children were enrolled. At the time of enrolment into the program, PITC is conducted and many of the children who are enrolled have their HIV status determined by the time they start benefiting from this therapeutic food program. Children who test HIV positive are immediately linked to ART programs for care and treatment.

Through the CHAI, ZPCT has sourced and distributed 20 copies of the standard MoH approved RUTF registers, replacing the provisional registers that were being used in facilities.

- Quality assurance/quality improvement: ZPCT continues to focus on quality assurance and quality improvement issues during the technical assistance visits to health facilities. ZPCT encourages the use of QA/QI tools, in collaboration with PHO, DHOs and facility partners. ZPCT's clinical care QA/QI tools which are in line with requirements of existing national documents such as the ART accreditation tool and the ART SOPs have been floated for adoption at national level. Consultations have reached advanced stages and MoH plans to use the SOPs by early 2009 in a pilot training to assess their validity.
- Accreditation of ART sites: ZPCT has continued to support ART sites to meet certain minimum standards so that these sites can officially get accredited by the Medical Council of Zambia. This is being done by ensuring all the seven domains assessed for accreditation are satisfied. This activity is complimented by the administration of QA/QI tools. The Medical Council of Zambia is implementing the accreditation program in phases. Currently, the pilot phase, phases one and two have been done and 23 ZPCT supported sites have been accredited out of 60 sites that have been accredited nationally. The process is on going and other sites are yet to be assessed.
- SOPs for ART, adherence counseling and post exposure prophylaxis (PEP): ZPCT has printed 3000 ART SOPs and together with the MoH held a pilot orientation on the SOPs for HCWs in Luanshya. A national orientation meeting was planned for early 2009 to be followed by roll out orientations and distribution of these materials.

- Clinical seminars: ZPCT continues to promote and support clinical seminars for HCWs to discuss case studies and any new developments in HIV care including any critical clinical or programmatic issues related to the implementation of the HIV/ART program.
- Quarterly review meeting: ZPCT continues to actively participate in provincial review meetings where among other issues ART program performance is reviewed, discussed and the way forward is agreed upon.
- Provision of reference materials: During this quarter, 100 copies of pediatric dosing wheels were sourced from CHAI and delivered to the provincial offices.
- Continuous Medical Education (CME): ZPCT has been liaising with other partners and MoH to introduce a capacity building program at the facility level for staff involved in ART patient care. This quarter, ZPCT participated at the first CME orientation meeting in Ndola.. Implementation of activities will be conducted next quarter. This is expected to contribute significantly to preparing sites for accreditation.

#### 4.3.3.3 Key Issues/Constraints in ART

The following constraints were faced in ART service provision:

- Initiating ART services: ART services have not been initiated in some facilities such as Senga Hills and Tulemane in Mbala and Natuseko in Kabwe. This is due to difficulties with the sample referral system and facilities not having adequate staffing. However, all the three sites are expected to be functional ART sites in January 2009.
- Patient monitoring/tracing: ZPCT continues to support adherence support workers (ASWs) to follow up patients on ART who have missed appointments or defaulted mainly by using bicycles supplied for this purpose. However, this is not always easy in rural districts where the distances between the facility and villages are vast.
- Increasing ART patient load against an established healthcare workforce: The large patient load continues to be a challenge as most facilities are having difficulties coping with the number of patients (especially adults) that are enrolled into care. This is resulting in patients being given longer review dates making defaulter detection difficult. ZPCT continues to support adherence support workers (ASWs) to follow up patients on ART who have missed appointments or defaulted.
- Baseline and monitoring tests: Stock-out of consumables/ reagents, breakdown of laboratory equipment and in some cases lack of qualified laboratory personnel are some of the challenges that are being faced in carrying out baseline tests. ZPCT is working with MSL at both the central and facility levels to improve communication, quantification and timely delivery of commodities. ZPCT is also engaging MSL in discussions in an effort to improve the ordering and procuring of commodities. ZPCT is working with lab equipment vendors (Beckton-Dickinson, Scientific Group and Bio-group) to provide training to facility laboratory personnel and ZPCT lab technical staff to provide them with knowledge and so that they are able to operate and service equipment accordingly.
- Pediatric ART challenges: Implementation of routine CT in the wards and placement of testing corners and lay counselors continues, resulting in the increase in the number of children who access CT.
- DBS (DNS PCR) results: Due to increased turn-around time for some sites, it has been a challenge for some clients to get their DBS results even after appointment dates have been set. To address this issue, ZPCT continues to promote the use of the patient locator forms (from SmartCare) and with consent from care givers, ASWs locate these clients in their communities once results are in, and those who are traced are re-engaged into care and treatment. However, ZPCT will strengthen the referral/transportation mechanism to and from PCR lab and improve on the turn around time as a permanent measure.
- Linking CT and ART: ZPCT is supporting the initiation of ART in the pediatric wards, at the appropriate time. However, where this is not feasible, lay counselors are linking these children to ART clinics after referral procedures have been done. The challenge has been that once patients who were in admission are finally discharged, they were advised to pass through the ART clinic for evaluation for eligibility for ART. However, many patients never turn up at the ART clinic and so they were being lost. Therefore, Initiating ART in the wards (where this becomes necessary) is expected to address this challenge.

#### 4.3.4 Clinical Palliative Care

ZPCT is working across all health facilities to strengthen and improve palliative care for PLHA. During this quarter, all 218 reporting health facilities targeted for ZPCT assistance in this area provided clinical palliative care services.

##### 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, 72 HCWs from all the five provinces were trained in ART/OI and 48 in pediatric ART.

##### 4.3.4.2 Clinical Palliative Care Services

Technical assistance in clinical care was provided to ZPCT supported sites in the five provinces. Palliative care strategies and activities are on-going and ZPCT staff working with HCWs in the facilities, relevant DHO and PHO staff and the community continued strengthening the following:

- Reporting of Adverse Drug Reactions (ADR): During the last quarter, ZPCT received feedback from the Pharmaceutical Regulatory Authority (PRA) on the possibility of working together to roll out usage of pharmaco-vigilance registers in health facilities. These registers are used to capture and document all adverse drug reactions and drug toxicities. PRA requested ZPCT to assist with printing of these documents and ZPCT is currently considering this request. In the meantime the clinical care and pharmacy units have continued to sensitize HCWs to document the ADRs.
- Diagnosis and management of opportunistic infections: The mentoring and supervision of HCWs in appropriate diagnosis and management of opportunistic infections continued this quarter, including pediatric HIV/AIDS cases.
- Scale-up cotrimoxazole prophylaxis: ZPCT continues to scale up the implementation of this recommendation, for both adults and children through continued mentorship, during trainings, provision of reference guidelines and ensuring consistent supply and availability of cotrimoxazole in facilities.
- Routine CD4 testing of all HIV positive TB patients: As a national recommendation to strengthen TB-HIV collaboration and improve the management of TB-HIV co-infection, ZPCT continues to work with health facility staff to ensure the routine conduct of CD4 count tests for all TB patients who also have HIV positive status.
- Community activities to increase awareness and benefits of HIV services and ART: ZPCT participated in the Child Health Week and World AIDS Day activities. Clients who had positive results after CT were referred to health facilities for care and treatment after collection of specimen for CD4 count tests.

On a quarterly basis, community HIV/AIDS awareness activities that include messages that encourage the general population to access CT services is being provided in facilities closer to their respective communities.

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

- Referral linkages: ZPCT continues to strengthen the referral system within and between health facilities and other organizations offering health related services. Both the technical staff and the community mobilization/referral officers continue to work closely with HCWs and other cadres involved in the care of HIV clients to improve and strengthen referral systems and mechanisms by ensuring availability of referral documents, adequate documentation and filling of forms and registers, and tracking of clients referred for various HIV/ART related services.
- Drugs for OIs: Cotrimoxazole prophylaxis and full treatment of OIs as well as drugs for treatment of tuberculosis continue to be readily available in most sites. The MoH, through JSI, will ensure that there is an adequate supply of the available essential drugs in all public health facilities once the new drug logistic system is implemented. However, this has been a slow process and not all OI drugs are available, particularly cytotoxic drugs for treatment of Kaposi's

sarcoma and antifungal drugs (fluconazole and amphotericin B) for treatment of fungal meningitis.

#### **4.3.5 Pharmacy Services**

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

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

No pharmacy trainings were conducted this quarter.

##### **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 of clients on ART, including drug regimen, side effects, and drug dispensing dates at 53 sites. This will be expanded to all ART sites to be supported by ZPCT. Ongoing training of pharmacy staff in the use of ARTServ is planned to allow for staff rotation and workload reduction.

Technical assistance visits continue to be conducted to strengthen commodity management information systems in facilities offering ART services. ZPCT staff continue to provide guidance on improving stores management including stock status update, storage space and conditions, timely ordering and collection, aggregation and proper use of commodity consumption data. 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 encourage all facilities offering ART services to adhere to the ordering procedures as defined by the new ARV logistics management system.

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

ZPCT continues to provide technical assistance to address non submission of returns and data, which contribute to shortages of critical supplies and stock-outs. During this quarter, few facilities encountered problems in accessing selected supplies. Measures have been put in place to ensure that affected facilities do not continue to experience these stock-outs which adversely affect service delivery.

The MoH is working in collaboration with CHAI and other partners to mitigate the negative nutritional impact of HIV and AIDS in infants and children by providing nutritional support in the form of RUTF, also known as Plumpy Nut. The Plumpy Nut is being provided nationwide to HIV infected infants and children as a supplement to what is locally available and accessible. Through a well established system by MSL, this food supplement is supplied to the ART sites that have been identified as centers for the RUTF/Plumpy Nut support program. 284 children have been enrolled on the program and the benefits of this nutrition supplement are noted in their therapeutic outcomes as seen in the records of children graduating from this program.

ZPCT continues to coordinate this program in its support areas in ten sites. Records are maintained well and enrollment criteria is being followed. During the quarter, ZPCT staff conducted re-orientation of selected facility staff in the implementation of the program and ensured that all sites receive and display job aides. The guidelines have still not been finalized because MoH and other partners are still reviewing them. In addition, difficulties have been experienced in accessing the supplies from MSL due to discrepancies in the distribution lists submitted by MoH. ZPCT continues to collaborate with MoH and other stakeholders to rectify these issues to ensure uninterrupted supplies to the facilities. The issues around securing adequate funds is still pending and plans to further roll-out the program are still on hold.

##### **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 so that services can be provided according to the guidelines and SOPs. ZPCT facilitates the site specific adaptation of these SOPs in line with GRZ policy. However, dissemination of the new ART guidelines and the need for the inclusion of the new ARV logistics system procedures and forms are dependent on updated Zambia ART pharmacy SOPs. After discussions with the MoH, the review process is underway and has been deferred to be finalized during the first quarter of 2009. There is need for more participation from MoH and the stakeholders in this process. Once complete, the new SOPs will be distributed to all ZPCT static ART sites, and selected outreach ART sites.

The pharmacy services QA/QI tools continue to be administered at ZPCT supported sites. Implementation of the tools plays a key role in monitoring the quality and sustainability of services, as well as building capacity within health facilities and DHOs. These results are shared with the DHOs in order to encourage them to place appropriate staff at affected facilities.

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

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

- Medical Stores Limited (MSL) logistics constraints: Occasional lapses in the transport system at MSL combined with some order delays from the districts continued this quarter. As a result, ZPCT assistance to transport critical supplies to support sites was requested. 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. This has reduced the number of stock outs experienced in some facilities.
- Lack of qualified staff in the facilities: Shortages of trained staff greatly compromise the quality of service delivery in the facilities. Working with DHOs and facilities to implement the transport reimbursement system for staff working extra shifts has greatly improved this situation. This system has also greatly benefited the ART outreach program where pharmacy staff form part of the team that provides outreach services to remote facilities.
- Inadequate supply of commodities: An uninterrupted supply of commodities ensures continued service delivery across all elements of care. ZPCT actively participates in national level forecasting and quantification activities to ensure that the facilities' needs are taken into account.
- Storage space: As ART services expand, there is an increased need for space in pharmacies to store ARVs and other commodities under proper storage conditions. ZPCT continues to assist through the provision of minor refurbishments to facilities, such as adding shelves, lockable cabinets and air conditioners which has helped improve the situation in targeted facilities.
- Equipment maintenance: The availability of fully functional equipment, such as computers and air conditioners, is an important aspect to provision of quality HIV/AIDS services. Breakdown of this equipment, particularly air-conditioners, affects the quality of service delivery. ZPCT continues to repair or replace equipment as needed.

#### **4.3.6 Laboratory Services**

ZPCT is currently strengthening laboratory services in 111 facilities by providing technical assistance, supporting renovations, equipment maintenance, training and procurement of equipment. 85 of these laboratories are now fully operational with an additional 21 performing minimal lab support. Technical assistance is routinely provided to support laboratory needs including additional ART sites (both static and outreach).

PCR Laboratory: The DNA/ PCR laboratory which was developed with the aim of increasing access to early infant diagnosis of HIV is functioning well. The laboratory serves as a referral center for the five ZPCT supported provinces. ZPCT continues to provide technical assistance to focal persons to ensure proper DBS collection, packaging and transportation of the specimens to the testing center; including transporting MSF DBS specimens from Kapiri Mposhi to ADCH PCR laboratory.

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

No trainings were conducted in laboratory services this quarter.

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

ZPCT staff continue to provide technical assistance in laboratory services to all ZPCT supported health facilities throughout the five target provinces. The specimen referral system for CD4 is operating well in most sites for both CT and PMTCT clients resulting in continued increase in the number of ART clients which has significantly increased laboratory workload. Special attention is being paid to performing internal quality control when the materials are available and where materials are not available, facilities are encouraged and mentored to prepare their own quality control materials. Follow up on quality concerns has been made with facility laboratories who are being encouraged to send blind samples to testing corners for purposes of monitoring quality.

ZPCT provincial technical officers continue to provide technical assistance to improve commodity management systems for laboratory services at all ZPCT supported health facilities. Technical assistance in this area focuses on quantification, timely ordering and storage of commodities.

ZPCT continues to provide technical support on the use of the Laboratory Management Information Systems (LMIS), a tool used to record test data of clients on ART and adopted by the MoH, at seven health facilities. The tool is working well and is being regularly modified based on feedback from users.

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. The shortage of staff has persisted and formal reports have been submitted to the Laboratory Specialists office at MoH. These concerns have also been shared with the DHOs and hospital management teams. ZPCT will continue to provide transport reimbursements to partially alleviate this problem.

PCR laboratory: ZPCT staff continued to provide routine technical assistance and mentoring in quality DBS collection, packaging and transportation to district hubs in the ZPCT supported districts.

#### **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, the Zambia ART laboratory SOPs were revised in the second quarter and are not yet in circulation. The review of the SOPs was facilitated by MoH who are also planning for the printing and dissemination of the revised SOPs.

The Internal Quality Control (IQC) guidelines previously developed are being piloted in sites that have CD4 equipment. The focus areas for the pilot were CD4 and HIV testing. Other areas in the guidelines include IQC for haematology and chemistry analysis. The piloting has been held back due to lack of control materials. However, the supply chain for these quality control materials has now improved and ZPCT plans to pilot the haematology and chemistry guidelines after an evaluation of the initial pilot for CD4 and HIV testing. The draft guidelines have been submitted to MoH awaiting feedback.

PCR laboratory: ZPCT has developed SOPs outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a bio-safety manual, proper use of PCR equipment and criteria for rejection of specimens. These draft documents are currently in use in the laboratory and have been submitted for review by the HIV DNA PCR laboratory subcommittee of the Early Infant Diagnosis TWG. The final step of compiling one set of national guidelines for use in all the laboratories that implement HIV DNA PCR analysis in the country is still pending. The TWG has this activity on its agenda for completion during the first quarter of 2009.

IQC monitoring continues with each test batch. In addition, the PCR laboratory participates in the CDC Proficiency Testing External Quality Assurance Program. Under this program, CDC Atlanta supplies participating laboratories with external control low positive, high positive and negative DBS specimens which are also included in every run with the Roche controls. Ten DBS specimens with

unknown HIV status are also sent with every batch and when tested, the results are submitted back to CDC for evaluation. The third batch of controls and unknown specimens from CDC were received and tested in October 2008, results were sent back to CDC before the deadline via email and postal mail. Feedback from CDC showed 100% success.

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

The specimen referral system which provides support to facilities with limited or no laboratory capacity that ZPCT developed and implemented continues to function well. The system is functional with 111 health facilities referring specimens to 40 facilities with CD4 equipment across 32 districts. ZPCT staff continue to monitor the usefulness and quality, as well as to 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. Specimens for baseline and monitoring investigations, chemistry and hematology analysis, are also being referred.

The referral systems in place have been evaluated in Northern, Copperbelt and Northwest western Provinces. Once analyzed, this will provide information on areas needing improvement and appropriate training. In addition, ZPCT is currently reviewing the DBS specimen referral systems in to identify gaps to strengthen the systems. Needs for training laboratory, PMTCT/MCH, CT and clinical care staff have also been identified. An assessment of the three provinces has been completed and will provide insight into the many challenges and will identify the areas needing improvement

##### PCR laboratory:

The PCR laboratory continues to serve as a referral center for the five ZPCT supported provinces. During this quarter, all five provinces sent in dry blood spot (DBS) specimens for analysis. 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 early infant diagnosis of HIV in children less than 18 months old. Samples are being batched at the district hubs and transported by Express Mail Service (EMS) operated by the Zambia Postal Service to ADCH PCR laboratory in Ndola. Trainings in DBS preparation, packaging and transportation for referral to ADCH for the DNA PCR test have continued to be conducted by CT/PMTCT unit in collaboration with the laboratory and pharmacy technical staff. Further training will be initiated in areas that indicated weakness during the just completed specimen referral evaluation once the report is disseminated by MoH. This will enable the facilitation of a more focused training for the health facility staff participating in DBS collection, packaging and transportation.

ZPCT has a full time laboratory manager to oversee the operation of the PCR laboratory. In addition, there are two full time biomedical scientists working in the laboratory to process and analyze the DBS specimens received from all referring facilities. One of the biomedical technologists was hired by ZPCT and the other has been assigned to the laboratory by ADCH management. The fulltime laboratory staff are assisted by eight MoH staff that were trained by ZPCT in PCR laboratory techniques and work in rotating shifts to assist with the processing and analysis of DBS specimens.

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

ZPCT has also placed two full time data entry clerks to support data management at the PCR laboratory. In addition, ADCH has placed a trained office assistant at the laboratory to ensure that a clean and safe environment is maintained in the laboratory.

The laboratory has seen a significant increase in the total number of DBS specimens received during this quarter. A total of 2773 DBS specimens were received from 176 facilities (37 are non ZPCT supported facilities) in 38 districts (four are non ZPCT supported) in the five provinces. However, of these specimens, only 2556 were tested due to a brief stock-out of PCR reaction tubes and rainin pipette tips in the laboratory. The remainder of the specimens will be tested next quarter.

#### 4.3.6.5 Equipment and Reagents

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

- CD4 count equipment: CD4 equipment is functional in all facilities, with a few challenges:
  - The FACSCount at Serenje District Hospital still has a malfunctioning printer. BD does not have spare printers in the country office and is yet to order one for replacement.
  - The automatic micropipettes for use on the FACSCount at Mporokoso District Hospital developed a fault and the Lusaka BD office could not repair it. ZPCT will procure a replacement pipette next quarter.
  - The FACSCount originally procured for Mungwi District Hospital has successfully been reallocated and installed at Luwingu District Hospital.
  - The FACSCount originally procured for Chiyeke RHC (Chavuma District in North Western Province) has also been successfully reallocated, installed and commissioned at Puta RHC in Chiengi District in Luapula Province. A replacement instrument has been ordered for Chiyeke RHC and this will be placed once the refurbishments at the laboratory are complete.
- Chemistry analyzer:
  - All Humalyzer 2000 instruments procured from Biogroup for the various facilities have successfully been installed. These are for health facilities in Copperbelt (Ipusukilo, Kavu, Bulangililo, New Masala, Twapia and Kawama), Northern (Mpika District Hospital, and North Western (Zambezi District Hospital).
  - The Mpika Cobas Integra which was brought to Biogroup, Lusaka for repairs has since been repaired and reinstalled at the facility.
  - The faulty Humalyser 2000 at Mpika District Hospital and Mbala General Hospital have been successfully repaired after developing faults.
  - The operational problems encountered with the Cobas Integra at Kasama have also been attended to.
- Hematology analyzer:
  - The ABX Micros 60 at Mansa General Hospital was repaired and calibrated and is functional. However, the equipment is old and has been faulty for prolonged periods of time affecting service delivery and the workload is also increasing at the hospital. ZPCT will procure an ABX Pentra 60 to alleviate this.
  - All Sysmex pochH-100i that were procured from Biogroup and waiting installation have been installed at the recipient facilities.

ZPCT continues to support sites to access reagents procured by GRZ and stored at MSL. Currently most reagents are available in sufficient quantities at central level to be accessed by facilities using the national logistic system.

#### PCR equipment and reagents:

All the equipment procured for the PCR laboratory at ADCH, except for the backup equipment, distiller, autoclave and purifier, has been installed and is working well. The equipment will be installed when the ongoing refurbishments of the future development room are completed. However, the Eppendorf Centrifuge developed a fault with the frequency converter and was substituted with the backup instrument. The fault was reported to the manufacturer and a replacement part will be ordered.

All DNA PCR laboratory consumables for use in the laboratory at ADCH have been procured by ZPCT to date. However, Medical Stores Limited (MSL) is now stocking laboratory consumables packaged as the Roche Laboratory Consumables Kit. CHAI procures the test kits and ADCH PCR laboratory has begun accessing these stocks through the national system. The contents of these kits however do not cover the full needs of the laboratory and so ZPCT will continue to supplement. The PCR reagent kits (Roche Amplicor version 1.5) and DBS Collection Kits continue to be procured through the agreement with CHAI, stored at MSL and distributed to the facilities by MSL or with assistance from ZPCT.

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

ZPCT is committed to working with its partners in the provinces, districts, and facilities to ensure an adequate supply of HIV and ART related commodities for provision of services. There are 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 DHOs to central level has improved while a few DHOs continue to be a challenge in selected districts. Stock outs are still being experienced at a few facilities. ZPCT is continuing to work with the DHOs to build capacity at the district level to eliminate the delays. During routine technical assistance visits, problem analysis at the affected site is carried out to identify the root problem and solutions provided by the facility staff themselves so that they appreciate the challenge.
- Lack of qualified staff in the facilities: Shortages of trained staff have continued to compromise the quality of service delivery in the facilities. Although the MoH has embarked on posting laboratory graduates to hospitals and health centers, the challenge remains to be the retention of staff in these facilities. ZPCT continues to work with DHOs and facilities to improve this situation by providing transport reimbursements to staff who work extra shifts. Tulemane Health Centre in Mbala district may have equipment removed from the lab and reallocated because of the unavailability of lab staff.
- Supply of commodities: Overall, there has been a great improvement in the availability of reagents and most facilities are accessing supplies. The Supply Chain Management System (SCMS) project working with the MoH is in the process of planning a roll-out after the evaluation of results from the pilot centers for the new logistics system for laboratory commodities. However, there has been an erratic supply of reagents and PCR consumables from MSL. Orders for both Roche kits and PCR consumable bundles often have to be followed up by telephone to ensure timely delivery. There was a stock out of 250uL pipette tips for two weeks in November, due to unavailability at MSL, which led to a backlog of specimens most of which were tested in December.
- Maintenance of diagnostic equipment: Routine preventive maintenance of diagnostic equipment is an issue and is still not being done even with MoH vendor contracts in place. This results in frequent equipment breakdowns thereby interrupting laboratory testing in the facilities. ZPCT in collaboration with the vendors/suppliers (Biogroup, BD and SG) trained the ZPCT laboratory staff in preventive maintenance to deal with minor faults and only call the engineers for major issues. This has helped to curtail the long turn-around time for equipment maintenance.
- Specimen referral systems: Overall, the specimen referral system is working well, but has continued to occasionally be affected by distances and the development of faults on the CD4, hematology or biochemistry instruments. ZPCT continues to find innovative ways of addressing these gaps, including using DHO vehicles to transport specimens and refer samples to where CD4 instrument is functional.
- DBS specimens: The PCR laboratory is receiving specimens from non-ZPCT supported facilities in the five provinces. ZPCT working with the MoH/CHAI has been training non ZPCT supported sites in DBS preparation, packaging and transportation. Quality of specimens has improved. The challenge is the transportation system and the receipt of samples without requisition forms. Samples without requisition forms also cannot be logged into the PCR laboratory database because of the missing patient information. ZPCT has continued working with the DHOs concerned to provide training and mentorship to these facilities. In addition, there have been delays in collection of DBS packages from hubs due to issues with EMS. Discussions are still ongoing with EMS, the courier service, to resolve this. ZPCT will continue to utilize EMS and switch to Post Courier, the provider identified by the MoH once the amount pre-paid by ZPCT to EMS is depleted.

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

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

Monitoring and evaluation modules were conducted as a part of technical trainings during this quarter. The M&E modules which cover record keeping and reporting for respective technical areas were offered to 182 participants undergoing technical trainings in CT, PMTCT and ART from ZPCT supported health facilities. Of these, 72 were trained in ART and clinical care, 38 were

trained in CT and 72 were trained in PMTCT modules. In addition, a five day training in M&E HIV/AIDS programs was conducted. The purpose of this meeting was to provide health information officers from Central, Luapula and Northern provinces with the necessary skills and 14 district health information officers were trained.

#### 4.3.7.2 Technical Assistance in M&E

The strategic information unit continues to provide technical support to the MoH aimed at strengthening systems or infrastructure for M&E HIV/AIDS programs. As a result, the unit has conducted a SmartCare data quality control pilot exercise in order to test the ZPCT SmartCare Data Quality Report (DQR) module at Kabwe Mine Hospital and Pollen Clinic. This module was designed to identify any variances between the ARTIS register and the computerized SmartCare reports. Following the exercise, ZPCT M&E team documented the procedure for the upgrading of SmartCare version 3.2 to version four and steps towards commissioning the use of SmartCare reports at support sites. The guidelines will be used to speed up the commissioning process in all ZPCT supported provinces next quarter.

As part of SmartCare System Management, the unit procured stationery (forms) for all ZPCT sites to last up to March 2009 and continued providing technical support to data entry clerks on data management and collection.

ZPCT is collaborating with other partners to integrate the ARV dispensing tool into SmartCare. Currently, work is progressing well and systems analysis has already been conducted. Discussions on how the architecture of the two systems (ARTIS and SmartCare) should look like and best options on how they can be integrated are ongoing.

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

The migration of data into SmartCare system is yet to be concluded. Currently 17 (18 percent) of 94 facilities have not completed the data migration process whereas 11 (12 percent) out of 94 facilities have partially completed the process. The major challenge to completion of data migration has been severe power cuts or lack of power at the affected facilities. As a result, none of the ZPCT supported sites have started using the report generation tool on SmartCare to report monthly service statistics. This is due to considerable errors observed in the data generated when the tool is applied. However, ZPCT M&E unit has, in collaboration with the SmartCare programmers developed a data quality assurance tool which will be used to identify and correct errors within the database.

#### 4.3.7.4 ZPCT Indicators/Results

The following table shows service statistics and related data through December 30, 2008 from ZPCT supported sites. It is a summary of key indicators for all ZPCT activities from all facilities. The training statistics for health care workers and lay counselors who directly provide services in all the program areas are also presented.

Services in Health Facilities Receiving ZPCT Support						
Indicator	Achievements (May 1, 2005 to December 31, 2008)					Cumulative LOP Achievements (1 May 05 to 31 Dec 08)
	Workplan (1 Oct 08 to 31 May 09)	Quarterly Achievements (1 Oct 08 to 31 Dec 08)			Achievements (1 Oct 08 to 31 May 09)	
	TARGET	FEMALE	MALE	TOTAL		
<b>CT</b>						
Service outlets providing CT	220					217
Persons trained in CT	340			200	200	59%
Persons receive CT services	85,000	27,436	24,683	52,119	52,119	61%
<b>PMTCT</b>						

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to December 31, 2008)						
	Workplan (1 Oct 08 to 31 May 09)	Quarterly Achievements (1 Oct 08 to 31 Dec 08)					
Service outlets providing PMTCT	208						208
Persons trained in PMTCT	200			152	152	76%	1,094
Pregnant women provided with PMTCT services, including CT	69,825	36,587		36,587	36,587	52%	273,169
Pregnant women provided with a complete course of ART prophylaxis	7,820	5,006		5,006	5,006	64%	28,316
<b>Basic Health Care and Support</b>							
Service outlets providing clinical palliative care services	220						218
Service outlets providing general HIV-related palliative care	220						218
Persons provided with OI management and/or prophylaxis	103,000	54,074	35,546	89,620	89,620	87%	99,464
Persons provided with general HIV-related palliative care	103,000	54,074	35,546	89,620	89,620	87%	99,464
Persons trained to provide general HIV- related care	250			120	120	48%	1,675
<b>Treatment</b>							
Service outlets providing ART services	101						93
Health workers trained in ART	250			120	120	48%	1,076
New clients receiving ART	14,000	4,013	2,776	6,789	6,789	48%	69,861
Total clients receiving ART	69,000	40,657	27,249	67,906	67,906	98%	67,906
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	90			48	48	53%	599
New pediatric clients receiving ART	1,104	279	300	579	579	52%	5,018
Total pediatric clients receiving ART	4,700	2,330	2,404	4,734	4,734	101%	4,734
<b>Other Services</b>							
TB infected clients receiving CT services	3,395	709	848	1,557	1,557	46%	12,959
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	2,819	498	556	1,054	1,054	37%	8,831
<b>Laboratory Infrastructure</b>							
Number of laboratories with capacity to perform 1) HIV tests and 2) CD4 tests and/or lymphocyte tests	51						81

Services in Health Facilities Receiving ZPCT Support						
Indicator	Achievements (May 1, 2005 to December 31, 2008)					
	Workplan (1 Oct 08 to 31 May 09)	Quarterly Achievements (1 Oct 08 to 31 Dec 08)				
Number of individuals trained in the provision of lab-related activities	110			0	0%	291
Number of tests performed at USG-supported laboratories during the reporting period: 1) HIV testing, 2) TB diagnostics, 3) syphilis testing, and 4) HIV disease monitoring	456,536		202,030	202,030	44%	1,451,396

#### 4.4. Community Mobilization and Referral Networks

During this reporting period, ZPCT provincial staff participated in meetings at the district level to prepare for World AIDS Day (WAD) activities where ZPCT staff participated in marches held in Lusaka, Kabwe, Kasama, Ndola, Mansa and Solwezi. ZPCT supported community mobilization activities and mobile CT services prior to and during the WAD celebrations in the following districts: Chinsali, Isoka, Kabompo, Solwezi, Ndola, Kalulushi, Kabwe, and Samfya districts. During the main WAD celebrations, ZPCT Kasama Office was awarded a certificate of recognition and appreciation by the Isoka District AIDS Task Force for their contribution to the fight against HIV/AIDS.

Also during this reporting period, the Child Health Week was observed and ZPCT provincial staff used this opportunity to emphasize the importance of male involvement, pediatric CT and pediatric ART services. Provincial staff worked with community groups that had received information on PMTCT, HIV/AIDS clinical care and management through CPO orientations and trainings with district partners such as the DHO and Health Communication Partnership.

A total of 2,411 adults and 634 children were counseled, tested and received their results on the same day. 201 adults and 18 children tested positive and were referred for CD4 count assessment.

##### 4.4.1. Working with Local Community Groups

During this quarter, ZPCT worked with community groups in the catchment areas surrounding health facilities supported by ZPCT to create awareness of HIV/AIDS clinical care services being provided. Community groups were encouraged to motivate community members to access CT and PMTCT services at facilities within their communities as an important entry point for care and treatment.

Through CPOs, ZPCT also collaborated with health facility staff and community groups to conduct mobilization for HIV/AIDS services.

During the reporting period, ZPCT executed 19 CPOs with community groups as follows:

Province	District	Facility	Group
Copperbelt	Ndola	Kaloko Clinic	New Masala Theatre
		Dola Hill Clinic	Dola Hill Youth Friendly
	Kalulushi	Chibuluma Clinic	Chibuluma Tuisakamane Peers
	Mufulira	Mokambo	Mokambo Pempuleni Adherence Support
Central	Kabwe	Natuseko	Natuseko NHC
		Railway Surgery	KATECH Entertainment
		Mukobeko	Mukobeko NHC
	Chibombo	Chisamba	Chisamba Youth Guide
Luapula	Samfya	Samfya Stage II Clinic	Samfya HBC
	Nchelenge	Kafutuma RHC	Bumi Bwesu Youth Centre
	Kawambwa	Mushota RHC	Mushota NZP+
Northern	Kasama	Chilubula RHC	Buyantashi Community Mobilisation Group
	Mbala	Tulemane Clinic	Peer Women Educators

Province	District	Facility	Group
Copperbelt	Ndola	Kaloko Clinic	New Masala Theatre
		Dola Hill Clinic	Dola Hill Youth Friendly
	Kalulushi	Chibuluma Clinic	Chibuluma Tuisakamane Peers
	Mufulira	Mokambo	Mokambo Pempuleni Adherence Support
	Isoka	Kasoka Clinic	Kasoka Theatre Club
	Chinsali	Chinsali Urban Clinic	Chinsali Muombo HBC
North - Western	Nakonde	Nakonde HC	St. Mary's HBC
	Solwezi	St. Dorothy RHC	St. Dorothy NHC
	Kabompo	Kasamba RHC	Kasamba Care & Prevention Team
	Kasempa	Kasempa Urban Clinic	Kasempa Theatre Group

#### 4.4.2. Community Volunteers

During this quarter, 70 lay counselors were trained in basic CT from Central, Copperbelt Luapula, and Northern Provinces through four trainings. This brings the total number of lay counselors trained to 492. In addition, four lay counselors were trained as counselor supervisors in Luapula province to improve the supervision of the lay counsellors. ZPCT also trained 62 adherence support workers (ASWs) from 36 facilities in all five provinces this quarter bringing the total number of ASWs trained to 431. The placement will be completed for all trained ASWs next quarter.

ZPCT conducted two community volunteer seminars in Copperbelt and Northern Provinces. The purpose of the two-day seminar for the community cadres (lay counselors, PMTCT volunteers, adherence support workers) was to allow sharing of experiences, best practices, achievements, and challenges among the volunteers and the facilities, as well as to provide technical updates in their related areas of work. Central, Luapula and North Western Provinces will conduct similar seminars next quarter.

#### 4.4.3. Stigma Reduction

During this quarter ZPCT staff facilitated a stigma reduction workshop held in Mpika for participants selected from the ZPCT supported districts in Northern Province. Nine HCWs from Kasama, Mpika, Chinsali, Isoka, Nakonde, Mporokoso, Mbala, and Mpulungu districts were trained as trainers in stigma reduction. These trainers will in turn train other health workers, PLHA and community groups in their facilities and communities to conduct exercises to increase awareness on the negative effects of stigma, contribute to stigma reduction at the facility and community setting that will lead to increased uptake of services. Participants were selected by respective DHOs and the training was based on the regional anti-stigma tool kit.

#### 4.4.4. Referral Network

ZPCT provincial staff continue to collaborate with District Health Offices to strengthen existing referral networks and to establish networks in districts where they do not exist. A total of 27 referral networks have been established and eight are in the process of development. During the reporting period, Kabwe referral network continued data inputting in the established database to monitor and report on referral activities. ZPCT will continue to monitor and review the functionality of the Kabwe referral network database and determine whether it can be adapted for use by other networks.

During this quarter, Mkushi District (Central Province) and Mufumbwe District (North Western Province) held referral network review meetings to determine the progress that has been made since the networks were formally established in their respective districts. The network members reviewed the referral systems in place and identified ways to strengthen activities such as provision of feedback. ZPCT continues to support referral review meetings in all five provinces through the DHO in order to strengthen the coordinating unit's role in resource mobilization for the functionality of the networks.

In Central, Copperbelt and Northern Provinces, Neighborhood Health Committees (NHC) continue to work with health facilities to refer clients as part of their routine community-based activities. However, the distance between the facility and district that NHCs represent is a challenge. It may not be feasible to have all the NHCS represented at the district level referral network.

In Kasama, health facilities have continued using the district referral network form for internal facility referrals. At the ART clinics where the DECs are placed, there has been an improvement in the documentation of referral of clients from PMTCT to ART. This has resulted in the strengthening of the intra/internal referrals and monitoring of HIV-infected pregnant women accessing the ART clinic.

In Mansa, the district wide referral network and the facility based referral network established at Chembe RHC have continued collaborating within their areas of operation. The network members have been referring clients for the required services and are receiving constructive feedback. The Mansa district wide referral network has continued receiving support from network members such as stationery, printing of referral tools, transport, meeting venue including snacks and drinks for all meetings.

Traditional Healers Practitioners Association of Zambia (THPAZ) Mansa branch involvement is still critical in enhancing community partnership with traditional healers within the network.

The table below illustrates the status of referral networks in each of the ZPCT supported districts:

Province	# Functional Networks	# in Process of Completion
Central	3 (Kabwe, Mkushi, Serenje)	1 (Chibombo)
Copperbelt	6 (Ndola, Chingola, Kitwe, Mufulira, Kalulushi, Luanshya)	2 (Chililabombwe, Lufwanyama)
Luapula	4 (Kawambwa, Mansa, Mwense, Samfya)	3 (Nchelenge, Chienge, Milenge)
Northern	8 (Kasama, Nakonde, Mpulungu, Isoka, Mpika, Mporokoso, Mbala, Chinsali)	1 (Luwingu)
North Western	6 (Kabompo, Zambezi, Mwinilunga, Solwezi, Mufumbwe, Chavuma)	1 (Kasempa)
<b>Total</b>	<b>27</b>	<b>8</b>

#### 4.4.5. Key Issues/Constraints for Community Mobilization and Referral Networks

The following challenges related to community mobilization and referral networks were encountered this quarter:

- **Retention of lay counselors:** Lay counselor's retention continues to be a challenge because some move to other organizations due to monetary incentives. 36 counselors across the five supported provinces have left. However, ZPCT continues to train more lay counselors to cover the gaps in HIV CT services.
- **Large referral networks:** Kabwe district referral network continues to grow and coordination among members for provision of feedback and collection of monthly reports remains a challenge. The established referral network database is being used by members to input their referral activities reports. ZPCT is working to refine the referral network database to be able to generate reports.
- **Fear of disclosure of status:** Couples' fear to disclose their HIV status still remains a challenge in some communities. It is difficult to target HIV exposed children for pediatric CT in cases where HIV status disclosure by the women to their spouses has not been done, and consent has not been sought from the parents. ZPCT continues to encourage PMTCT service providers to promote male involvement in PMTCT services through its community mobilization activities which include the involvement of local/traditional leaders and community organizations using community purchase orders.

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

During this quarter ZPCT continues to undertake essential QA/QI activities including strengthening, streamlining and refining the QA/QI process. The QA/QI tools and data entry and corresponding analysis application software in CPro (Census and Survey Data Processing Software) for PMTCT/CT, laboratory and pharmacy services that were revised last quarter were successfully implemented in all five provinces. This has improved the quality of information obtained from ZPCT supported sites therefore strengthening the QA/QI process.

Graduation tools for all technical areas were updated. This was done to improve the efficiency and effectiveness of tracking the graduation process based on evidence collected through the tools. The revised graduation tools are planned for use in the next quarter.

Selected technical officers representing each province and technical area were trained in CPro use, SPSS and MS Excel. These skills will enable them to act as focal persons in their provinces to assist in data analysis and interpretation during the QA/QI process.

#### **4.5.1 Administration of QA/QI Tools**

ART/Clinical care tools: During this quarter ART/clinical care QA tools were administered in 57 ZPCT supported ART sites. These tools include the ART facility checklist and ART provider tools. Central to the provision of quality HIV/ ART clinical care, critical laboratory tests are required. These are biochemistry tests - kidney function tests (creatinine), liver function tests (ALT, AST) and hemoglobin. These tests are conducted at baseline for ART eligibility assessment and also for on-going patient monitoring. In addition, CD4 levels for immunological monitoring of patients at baseline and repeated at least every six months in line with Zambia National ART Guidelines must be done. ZPCT provides technical assistance to enable these national standards to be adhered to.

Some quality problems common to the five ZPCT supported provinces affecting the quality of ART clinical care services provided experienced this quarter are: difficulty in conducting routine laboratory tests including immunological monitoring on all ART clients and routine screening of all HIV positive patients for TB co-infection; establishment of active QA/QI committees; and ART clinical review meetings in health facilities needs to be encouraged to improve the quality of ART/ clinical services provided.

In order to address these challenges, there is a need to strengthen commodity and equipment management under laboratory services in collaboration with health facility management and DHOs. Continued ZPCT supported mentorship, supervision and training of HCWs are needed as key corrective actions aimed at addressing these challenges.

PMTCT/CT: ZPCT continues to administer the CT/PMTCT QA tools: facility checklist, CT provider tool, PMTCT provider tool and counselor reflection form. This quarter, 119 ZPCT supported health facilities administered the tools. The CT/PMTCT facility tool was used to assess general aspects of CT/ PMTCT 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 receive services, while the counselor reflection tool was administered as a self-reflection tool to identify areas of weakness.

However, there are challenges in provision of good quality PMTCT/CT services such as inadequate PMTCT staff and stock-outs of HIV test kits in some health facilities. Counselor supervision and ensuring routine quality control checks on ten percent of all blood samples tested for HIV also remain a challenge.

Key areas identified for improvement in the next quarter include continued collaboration with DHOs on conducting frequent counselor supervision and building capacity of more health care workers in PMTCT service provision and the importance of quality control for HIV testing.

Laboratory infrastructure: Laboratory QA tools were administered in 62 ZPCT supported health facility laboratories. These tools assess the availability of essential job guides such as SOPs, laboratory safety and space, availability and maintenance of the lab equipment, quality control and sample referral systems. The tools also assess lab record management and general lab management activities.

Irregular servicing and maintenance of laboratory equipment continues to be a challenge in providing quality services. As a result, laboratory equipment needed for critical tests was breaking down in some health facilities. Laboratory staff not regularly conducting or recording quality control

procedures on samples, an unavailability of laboratory safety equipment and accident and ethics manuals are other challenges to service quality. Key remedial actions include collaboration with DHO and vendors of laboratory equipment to institute regular and timely maintenance and repair of equipment; and mentorship of laboratory staff on quality control procedures.

Pharmacy: Pharmacy QA tools were administered in 53 ZPCT supported health facility pharmacies. These were the pharmacy bulk store tool, dispensing and medication tool and pharmacy records tool. The tools assess the quality of the pharmacy room and space, commodity storage and management, pharmacy record management, dispensing procedures, counseling and records.

There are some challenges in providing quality pharmacy services including lack of ADR reporting forms and ADR committees in some health facilities, lack of functioning air conditioners in some pharmacy bulk stores, unavailability of counseling checklists including pediatric ARVs, lack of pharmacy records update and lack of charts to track product expiry dates. To mitigate these challenges ZPCT is taking up the necessary steps needed to strengthen commodity management and national logistics for ARVs and other HIV-related medicines.

Monitoring and Evaluation (M&E): The M&E QA tool was administered in 123 ZPCT supported sites. It assesses the quality and process of record management for ART and clinical care, CT and PMTCT services. Due to the technical support of ZPCT M&E officers in health facilities, management of HIV related data and registers for HIV services have generally been up to standard. Inadequate availability of lockable cabinets for patient files remains a problem in some health facilities. ZPCT has continued to provide lockable cabinets to supported facilities that need them.

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

As part of its sustainability plans, ZPCT developed a graduation plan for ZPCT supported districts in order to provide good quality services in the absence of intensive external support. During this quarter, ZPCT staff updated the graduation and sustainability plan by clarifying guidelines on the graduation process and adding the post graduation period. The graduation plan aims to transition supervision and technical assistance of districts implementing high-quality HIV/AIDS services from ZPCT to GRZ support without compromising service delivery or quality.

ZPCT's technical strategies and QA/QI tools are used as the basis for assessing service quality in the targeted facilities. Graduation tools have been developed and are being used to establish comprehensive graduation plans by the provinces. However, since facilities eligible for graduation must maintain and sustain an acceptable standard in all technical areas for a period between three to six months before graduation and with the expansion to additional health facilities in the districts planned for graduation, the process has slowed down.

Following the slowing of the graduation process last quarter, this quarter demonstrated an improvement in tracking the progress of targeted districts. This progress was measured using graduation tools several times in the quarter. However, meeting the graduation targets in a timely manner continued to be a challenge. Technical obstacles include inadequate HCW staffing, clinical care limitations, laboratory service and sample referral system constraints. Seven districts were targeted for graduation by the end of December 2008 but only two have been graduated namely Luanshya (Copperbelt Province) and Samfya (Luapula Province). ZPCT will continue to work with PHOs and DHOs in order to graduate the remaining districts targeted for graduation.

Luapula Province: Samfya District was graduated in November 2008. Kawambwa was targeted for December 2008 but did not meet the graduation criteria. However, the quality of HIV services has greatly improved through ZPCT technical assistance this quarter. Areas requiring further support in Kawambwa District before it is ready for graduation are dry blood spot program for PMTCT/CT and commodities supply for laboratory services.

Northern Province: Kasama, Nakonde, Mpika and Chinsali Districts had been targeted for graduation. Despite the significant improvements in service quality through intensive technical support, targeted districts did not score appropriately for graduation therefore no district could be graduated this quarter. District graduation is, however, planned for the next quarter. Key graduation constraints that cut across all targeted districts were mainly inadequate laboratory and pharmacy staff in several health facilities, laboratory testing and sample referral challenges, and pharmacy commodity management constraints.

Copperbelt Province: Luanshya District was graduated in November 2008. Kalulushi District has attained high graduation scores indicating its readiness for graduation next quarter.

North Western Province: Kabompo and Mufumbwe districts were targeted for graduation. Key constraints to prevent these districts from attaining the required high graduation scores were, Kabompo District requires strengthening in HCW staffing levels and Mufumbwe District lacks dedicated laboratory and ART clinical staff.

Central Province: Mkushi and Serenje districts are targeted to be graduated next quarter. Continued lack of a laboratory/pharmacy provincial technical officer was a challenge and inability to maximize technical assistance in these areas had negative implications on the targeted districts. Other key graduation constraints in Mkushi were low staffing numbers, poor turn around time for laboratory specimen referrals, and laboratory sample quality control not being conducted. In Serenje, constraints were lack of required laboratory equipment for basic tests and insufficient staff trained in pharmaceutical management. Both districts also experienced shortages in PMTCT/ CT staff.

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

In addition to the constraints outlined in the previous sections, key challenges faced in the QA/QI system are as follows;

- Establishment of national QA system for HIV services: Reinforcement of the National QA/QI system is still in its infancy stage. In addition to this is the gap in a QA/QI system specifically for HIV services. Although ZPCT is collaborating with MoH and HSSP to develop this system, challenges on the ground include the lack of QA committees and adequate feedback systems for quality improvement at facility, district and provincial level.
- Graduation and sustainability process: The challenge in meeting goals set to graduate targeted ZPCT supported districts in line with graduation plans continues. Factors that have slowed this process are, lengthy time required to engage DHOs, PHOs and health facility staff to plan and implement the graduation process, health facilities being able to maintain quality HIV services due to frequent staff movement and untimely response by relevant higher authorities. Despite an outline of principles on managing the post graduation period in the ZPCT graduation and sustainability plan, implementation will continue to be a challenge in the districts that have been graduated. This is due to absence of a model to use in weaning these districts off technical and programmatic support.

#### **4.6. Training**

As part of the site preparation that ZPCT conducted jointly with the PHOs, DHOs and facilities, training needs were determined for each facility. Training for facilities is planned and participants are selected in consultation with the PHOs, DHOs, 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 allowed to pay for MoH staff. These per diems are in line with the FHI rates. The memo also stated that USG supported programs are not allowed to provide facilitation fees to MoH staff. This has decreased the participation in trainings since many of the MoH staff are not willing to conduct training without the facilitation fees. In attempts to address this challenging issue, ZPCT put out a call for private consultants and consulting agencies to conduct training in the areas of CT, PMTCT, ART/OI and clinical care. The challenge faced is finding non-GRZ individual consultants and agencies

Some of the training targets are being met using ZPCT clinical officers who are qualified as national trainers. Using ZPCT staff as trainers has delayed implementation of training activities due to the amount of time they can spend mentoring staff in the facility. Additional training activities are planned for next quarter to meet the targets.

During this quarter, staff from ZPCT supported health facilities attended courses in basic CT (38 HCWs), child counseling (15 HCWs), counseling supervision (23 HCWs), PMTCT (72 HCWs), pediatric ART/OI (48 HCWs). Fourteen M&E staff and data entry clerks were trained in SmartCare software use and in addition, ZPCT trained 70 community volunteers in basic CT, 38 in child counseling and 80 in PMTCT.

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

## 5. ONGOING CHALLENGES

### ➤ **Human resources**

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

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

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

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

Although there have been improvements in supplies of HIV test kits, reagents, ARVs and other commodities, there are occasional interruptions to service provision due to erratic supplies. This situation is particularly challenging because there are so many points in the supply chain where a breakdown can occur. ZPCT works with staff in the facilities, and with the MoH, USAID/JSI/DELIVER and Supply Chain Management System (SCMS) at both the national and facility levels, on quantification, record keeping, ordering and commodity management.

### ➤ **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. However, the job aids provided are insufficient and not always available in the facilities because HCWs take them home.

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

The MoH, both at the national and provincial level, is not willing for implementing partners 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. Data entry clerks are hired through the recipient agreements based on MoH salary and benefit schemes. 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 at the facilities 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 DHOs 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

A summary of the plans for next quarter is given in the table below. Besides the activities listed in the table below, ZPCT will continue to partner with MoH and other partner organizations at the provincial and district levels and with staff and management in the supported facilities.

Technical Area	Planned Activity
General	➤ Continue to provide human resource support to Lusaka and all provincial offices with a focus on strengthening performance management systems and staff motivation.
	➤ Complete the renovations planned for under the amended recipient agreements.
	➤ Complete procurement of pending equipment and furniture for health facilities as specified through the RA.
	➤ Continue to support PHO recipient agreements and support implementation of activities under these recipient agreements.
	➤ Close recipient agreements ending on March 31, 2008.
	➤ Complete implementation of rural refurbishment for staff housing in Northern and North Western provinces.
	➤ Complete the ZPCT supported community volunteers seminars (lay counselors, adherence support workers and PMTCT volunteers) in Central Copperbelt and North Western provinces.
	➤ Strengthen the referral network system including integrating the review of referral data during PHO and DHO supervisory visits.
	➤ Conduct regular program support visits to monitor program activities in all the five provinces.
	➤ Collaborate with CHAZ on implementation and reporting of project activities and provide support and monitoring to assure quality.
	➤ Conduct a transition/close-out meeting with provincial staff.
	CT
➤ Provide TA and mentoring to health facilities (each facility visited at least quarterly).	
➤ Continue supporting the implementation of routine HIV counseling to strengthen CT within existing TB, STI and FP services in all facilities.	
➤ Complete establishment of testing corners in all CT rooms in new facilities.	
➤ Continue to strengthen the implementation of routine CT in pediatric wards at 25 targeted hospitals and the under five clinics in ten other facilities.	
➤ Continue to strengthen QA/QI implementation for CT in the existing sites and initiate in the recently added sites.	
➤ Support mobile CTs in the five supported provinces in order to bring CT services closer to the rural populations.	
➤ Participate in NAC CT Technical Working Group.	
➤ Train 149 HCWs and community cadres in various CT trainings.	
➤ Continue to provide mentorship to facility staff in CT/PMTCT services provision, with attention paid to facilities with weak performing indicators.	
PMTCT	➤ Lusaka staff will continue supporting the provincial offices with TA and capacity development.
	➤ Provide ongoing facility staff mentoring.
	➤ Continue to initiate and strengthen mother-baby follow up, including initiation of cotrimoxazole at six weeks.
	➤ Strengthen provision of more efficacious ARV regimens for PMTCT in order to reduce the use of SD NVP and strengthen the linkages to ART services.
	➤ Complete procurement and distribution of 71 hemocue machines to respective facilities so that HB estimations and administration of AZT to HIV positive mothers can be facilitated.
	➤ Strengthen CD4 sample referral.
	➤ Continue to strengthen the linkages for PMTCT and family planning services among ANC mothers during the postnatal period especially for HIV infected mothers.
	➤ Strengthen the implementation of QA/QI systems for PMTCT services.
	➤ Pilot the use of the NVP infant dose pouch in ten selected ZPCT supported facilities
	➤ Participate in the MoH PMTCT and Pediatric National Working Technical Group and the DBS/PCR stakeholders' committee.
➤ Hold one PMTCT/CT technical capacity building meeting with provincial staff.	
➤ Train 25 HCWs from Copperbelt Province in PMTCT.	

Technical Area	Planned Activity
	<ul style="list-style-type: none"> <li>➤ Train 140 HCWs from across four provinces (except Northern province) in DBS collection handling and storage.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Operationalise DBS sample collection in sites which have not yet started collection and sending DBS samples to Ndola PCR laboratory.</li> </ul>
PMTCT/ Laboratory	<ul style="list-style-type: none"> <li>➤ Implement and monitor the DBS courier network. Ensure the functionality of the PCR laboratory for early infant diagnosis.</li> <li>➤ Complete trainings of HCWs in dry blood spot collection, sample handling, storage and transportation and operationalize implementation of early infant diagnosis using PCR technology at additional health facilities.</li> <li>➤ Strengthen sample referral system for CD4 analysis to enhance provision of more efficacious ARVs for PMTCT.</li> <li>➤ Continue to follow up on review of SOP outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a bio-safety manual, proper use of PCR equipment and criteria for rejection of specimens by PCR laboratory subcommittee for comparison with the other two PCR laboratories in the country.</li> <li>➤ Conduct training in DBS collection, transportation and documentation for Solwezi.</li> </ul>
Laboratory	<ul style="list-style-type: none"> <li>➤ Develop schedules for ZPCT staff to conduct periodic routine maintenance on laboratory equipment based on trainings conducted in previous quarters.</li> <li>➤ Conduct trainings in ART commodity management for laboratory staff at ZPCT supported facilities.</li> <li>➤ Conduct trainings in equipment use and maintenance for users at ZPCT supported facilities.</li> <li>➤ Complete procurement and placement of 11 FACSCounts for CD4 analysis to increase the number of referral laboratories from 40 to 51.</li> <li>➤ Develop indicators and tools for monitoring the sample referral and transportation system and IQC usage and conduct an evaluation of the system.</li> <li>➤ Continue to monitor the use of the automated systems in laboratories at ART sites to enhance the process of accurate management of data such as patient information, test profiles, inventory management (the laboratory MIS).</li> <li>➤ Conduct a technical review and update meeting with provincial pharmacy &amp; laboratory officers and Lusaka office staff.</li> <li>➤ Continue to participate in the national quantification exercises for laboratory commodities and HIV test kits to ensure that ZPCT facilities are included in the national commodity procurement plans.</li> <li>➤ Continue to participate in the National Laboratory Services Strengthening Committee to ensure that ZPCT's laboratory strategic approach is in line with the national objectives for laboratory services in Zambia.</li> <li>➤ Three trainings on equipment use and maintenance is scheduled next quarter will be conducted by Beckton Dickinson, Scientific Group and Biogroup in Ndola.</li> </ul>
ART	<ul style="list-style-type: none"> <li>➤ Provide technical assistance and mentorship to scale-up pediatric ART.</li> <li>➤ Print and distribute the revised SOPs for ART, post-exposure prophylaxis and adherence when approved by the MoH.</li> <li>➤ Support initiation of ART services to all newly expanded sites.</li> <li>➤ Implement fast-tracking of reactive (positive) DBS results from ADCH to the provinces to provide follow-up care and treatment to children.</li> <li>➤ Orient HCWs in ZPCT supported sites to start generating SmartCare clinical reports to assist in reviewing and improving the quality of patient care.</li> <li>➤ Continue providing on-going technical assistance and mentorship to scale up pediatric ART.</li> <li>➤ Distribute the MoH approved SOPs for ART, post-exposure prophylaxis and adherence.</li> <li>➤ Orient HCWs on the national SOPs for ART, adherence counseling and PEP.</li> <li>➤ Administer QA/QI tools in collaboration with health facility staff, DHO and PHO.</li> <li>➤ Implement the facility based Continuing Medical Education (CME) program in ART sites with MoH and other partners.</li> <li>➤ Provide technical assistance and mentoring on new national ART protocol guidelines and SmartCare system.</li> <li>➤ Ensure children eligible for ART are provided with appropriate treatment, including cotrimoxazole prophylaxis.</li> <li>➤ Strengthen the established comprehensive care centre for the family at Arthur Davison Children's Hospital and replicate this model in other high volume hospitals.</li> </ul>

Technical Area	Planned Activity
	<ul style="list-style-type: none"> <li>➤ Work with partners to organize the 3rd ART Update Seminar.</li> <li>➤ Facilitate participation of 35 HCWs from ZPCT supported ART sites in the ART update seminar.</li> <li>➤ Support initiation of ART services to the remaining five of the expanded sites.</li> <li>➤ Working with pharm/lab unit to implement fast-tracking of reactive (positive) DBS results from ADCH to the provinces to provide follow-up care and treatment to children.</li> </ul>
ART, Pharmacy	<ul style="list-style-type: none"> <li>➤ Continue updating the ARV dispensing tool at ART sites where it is already installed, and install in new ART sites once computer sets are delivered.</li> <li>➤ Monitor the implementation of the RUTF (Plumpy Nut) program and continue to work with MoH on the completion of the national guidelines. Once these are finalized, they will be disseminated to all ZPCT supported facilities implementing the program.</li> <li>➤ Conduct trainings in ART Commodity Management for pharmacy staff at ZPCT supported facilities.</li> <li>➤ Facilitate the printing of Adverse Drug Reaction reporting forms in support of the implementation of the pharmaco-vigilance program at ART centers.</li> <li>➤ Roll out the usage of pharmaco-vigilance registers to standardize reporting of adverse drug reactions.</li> <li>➤ Monitor the implementation of the ARV logistic system in all ZPCT sites.</li> <li>➤ Participate in the national evaluation of the PMTCT Drug Logistics System and collaborate with stakeholders in the re-design and roll-out of the new system.</li> <li>➤ Contribute to the development of the National HIV/AIDS Commodities Security (HACS) strategic plan together with other implementing partners and the MoH.</li> </ul>
TB/HIV	<ul style="list-style-type: none"> <li>➤ Integrate and strengthen the TB/HIV links through opt-out provider-initiated HIV and CD4 testing for all HIV positive TB patients.</li> </ul>
Community mobilization and Referral Network	<ul style="list-style-type: none"> <li>➤ Implement at least 11 CPOs and conduct at least 15 mobile CT activities in all five provinces.</li> <li>➤ Conduct ten stigma orientations for facility staff, clients visiting the facilities and community members, as well as 1 stigma TOT for health care workers.</li> <li>➤ Hold community technical/program capacity building meeting with community mobilization &amp; referral officers.</li> <li>➤ Complete documentation of ZPCT Kabwe experience in initiating and strengthening district based referral networks, including analysis of referral data.</li> <li>➤ All provinces to initiate development of referral network in the remaining eight districts.</li> <li>➤ Conduct two day community cadre seminars in the remaining three ZPCT supported provinces.</li> </ul>
M&E	<ul style="list-style-type: none"> <li>➤ Conduct full M&amp;E training for targeted districts for health information staff at the district level and selected hospitals.</li> <li>➤ Conduct site visits to provide data management support and ensure data is collected.</li> <li>➤ Collaborate with MoH and partners to implement and support SmartCare in ART sites.</li> <li>➤ Provide TA on data management and QA/QC for information systems such as SmartCare, ARV dispensing tool, Lab MIS and PCR.</li> <li>➤ Conduct ZPCT M&amp;E technical update meeting.</li> <li>➤ Implement a geographical information system (GIS) for use in data management, analysis and presentation.</li> <li>➤ Design facility profile data collection template and collect facility profile data from ZPCT supported sites.</li> <li>➤ Procure SmartCare forms for ZPCT supported health facilities.</li> </ul>
QA/QI Procurement	<ul style="list-style-type: none"> <li>➤ Review Client Exit Interview tools.</li> <li>➤ Administer client exit interviews for ART, pharmacy and CT services. Analyze their results and plan appropriate actions to improve quality based on their findings.</li> <li>➤ Continue to provide technical assistance to the provinces on the systematic and regular use of all QA/QI and graduation plans.</li> <li>➤ Collect and analyze QA/QI data collected to identify support needs for sites performing poorly.</li> <li>➤ Support ZPCT supported ART sites in attaining national accreditation status from the MCZ/ MoH and track ART site progress towards achieving accreditation.</li> <li>➤ Continue to support the revision and dissemination of national guidelines and SOPs for all technical areas.</li> </ul>

Technical Area	Planned Activity
	➤ Follow up SmartCare QA/QI indicators/ reports with CDC.
	➤ Strengthen procedures to ensure that collected data is analyzed, documented and disseminated on a quarterly basis.
	➤ Strengthen feedback and evaluation mechanisms to ensure that QA/QI goals are accomplished and concurrent with standard outcomes.
	➤ Continue to work closely with MoH to institutionalize and develop a National QA/QI system for HIV/AIDS services.
	➤ Continue to provide technical support and move the plan forward for district graduation in each of the five ZPCT supported provinces.
	➤ Develop simple update/ orientation packages for QA & graduation for ZPCT and MoH staff.
	➤ Collaborate with MoH in conducting QC of finger prick test for HIV testing in ZPCT supported sites.
	➤ Collaborate with other stakeholders to create a forum for exchanging information on best practices and other innovative ideas in QA/QI.

# Attachment A: ZPCT Facilities

## Central Province

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

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

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

## Copperbelt Province: ZPCT supported Services

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

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
	48. ZNS Clinic	◆ <sup>1</sup>		◆		◆		◆		❖
Luanshya	49. Thompson District Hospital		◆		◆	◆		◆	◆ <sup>3</sup>	
	50. Roan General Hospital		◆		◆	◆		◆	◆	◆
	51. Mikomfwa HC				◆		◆	◆		◆
	52. Mpatamatu Sec 26 Urban Clinic		◆ <sup>1</sup>		◆		◆	◆	◆	◆
Mufulira	53. Kamuchanga District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	54. Ronald Ross General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	55. Clinic 3 Mine Clinic			◆			◆	◆		◆
	56. Kansunwa HC			◆			◆	◆		◆
	57. Clinic 5 Clinic				◆	◆		◆		◆
	58. Mokambo Clinic				◆	◆		◆		◆
Kalulushi	59. Kalulushi Government Clinic	◆			◆	◆		◆	◆ <sup>3</sup>	
	60. Chambishi HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
	61. Chibuluma Clinic				◆	◆		◆		❖
Chililabombwe	62. Kakoso District HC	◆		◆		◆		◆	◆ <sup>3</sup>	
	63. Lubengele Urban Clinic		◆ <sup>1</sup>	◆		◆		◆	❖	◆
Lufwanyama	64. Mushingashi RHC			◆		◆		◆		◆
	65. Lumpuma RHC	◆ <sup>1</sup>		◆		◆		◆		◆
	66. Shimukunami RHC	◆ <sup>1</sup>		◆		◆		◆	◆	◆
<b>Totals</b>		<b>22</b>	<b>15</b>	<b>42</b>	<b>23</b>	<b>58</b>	<b>8</b>	<b>66</b>	<b>32 active 5 planned</b>	<b>35 active 23 planned</b>

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

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

### Luapula Province: ZPCT supported Services

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

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
	49. Lupososhi RHC						◆	◆		◆
	50. Mubende RHC				◆		◆	◆		◆
	51. Mukonshi RHC				◆		◆	◆		◆
	52. Mununshi RHC						◆	◆		◆
	53. Mupeta RHC						◆	◆		◆
	54. Musangu RHC				◆	◆		◆		◆
	55. Mutipula RHC						◆	◆		◆
	56. Mwenda RHC		◆		◆	◆		◆	◆	◆
Nchelenge	57. Nchelenge RHC	◆		◆		◆		◆		◆
	58. Kashikishi RHC	◆		◆		◆		◆	◆	◆
	59. Chabilikila RHC	◆		◆		◆		◆		◆
	60. Kabuta RHC	◆		◆		◆		◆	◆	◆
	61. Kafutuma RHC	◆		◆		◆		◆		◆
	62. Kambwali RHC	◆		◆		◆		◆		◆
	63. Kanyembo RHC	◆		◆		◆		◆	◆	◆
	64. Chisenga RHC		◆ <sup>1</sup>	◆		◆		◆		◆
	65. Kilwa RHC		◆ <sup>1</sup>	◆		◆		◆		◆
	66. St. Paul's Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>	
Samfya	67. Lubwe Mission Hospital (CHAZ)	◆		◆		◆		◆	◆ <sup>3</sup>	
	68. Samfya Stage 2 Clinic		◆ <sup>1</sup>		◆	◆		◆	◆	◆
Totals		12	10	15	45	30	38	68	13 active 5 planned	24 active 35 planned

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

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

## North Western Province: ZPCT supported Services

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

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

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

## Northern Province: ZPCT supported Services

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Kasama	1. Kasama General Hospital	◆			◆		◆	◆	◆ <sup>3</sup>	
	2. Kasama UHC				◆	◆		◆	◆	◆
	3. Location UHC		◆ <sup>1</sup>		◆		◆	◆	◆	◆
	4. Chilubula Mission RHC (CHAZ)		◆	◆		◆		◆	◆ <sup>3</sup>	
	5. Lukupa RHC				◆		◆	◆	❖ <sup>2</sup>	◆
Nakonde	6. Nakonde RHC		◆		◆	◆		◆	◆ <sup>3</sup>	
	7. Chilolwa RHC				◆		◆	◆		◆
	8. Waitwika RHC				◆		◆	◆		◆
	9. Mwenzo RHC				◆		◆	◆	❖ <sup>2</sup>	◆
Mpika	10. Mpika District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	11. Mpika HC			◆			◆	◆		◆
	12. Mpepo RHC				◆	◆		◆	❖ <sup>2</sup>	❖
Chinsali	13. Chinsali District Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	14. Chinsali HC				◆		◆	◆		◆
Mbala	15. Mbala General Hospital	◆			◆	◆		◆	◆ <sup>3</sup>	
	16. Mbala UHC				◆		◆	◆	◆	◆
	17. Tulemane UHC		❖ <sup>1</sup>		◆	◆		◆	◆	◆
	18. Senga Hills RHC	❖ <sup>1</sup>		◆		◆		◆		❖
Mpulungu	19. Mpulungu HC		◆ <sup>1</sup>		◆	◆		◆	◆	◆
Isoka	20. Isoka District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	21. Isoka UHC			◆		◆		◆	❖	❖
	22. Muyombe	◆			◆	◆			❖	
Mporokoso	23. Mporokoso District Hospital	◆		◆		◆		◆	◆ <sup>3</sup>	
	24. Mporokoso UHC	◆ <sup>1</sup>		◆		◆		◆	❖	❖
Luwingu	25. Luwingu District Hospital	◆		◆		◆		◆	◆	
	26. Namukolo Clinic			◆			❖	◆		❖
<b>Totals</b>		<b>9</b>	<b>5</b>	<b>11</b>	<b>16</b>	<b>16</b>	<b>11</b>	<b>27</b>	<b>14 active 6 planned</b>	<b>14 active 5 planned</b>

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

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

**Attachment B: ZPCT Training Courses**  
**October 1 to December 31, 2008**

**Table 1: Basic Counseling and Testing (CT) for HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic CT*	17/11/08 to 28/11/08	North Western	Chavuma	1	1
			Kabompo	1	3
			Kasempa	1	6
			Mufumbwe	2	3
			Mwinilunga	1	2
			Solwezi	1	1
			Zambezi	2	3
Basic CT*	08/12/08 to 20/12/08	Copperbelt	Kitwe	15	15
			Mufulira	1	1
			Chingola	3	3
			<b>Total</b>	<b>28</b>	<b>38</b>

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

**Table 2: Counseling and Testing (CT) for Community Volunteers**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT for Lay Counselors	06/10/08 to 17/10/08	Luapula	Chienge	2	2
			Mwense	3	4
			Kawambwa	1	2
			Nchelenge	5	7
			Mansa	5	5
CT for Lay Counselors	06/10/08 to 17/10/08	Northern	Chinsali	1	3
			Mpika	1	1
			Mbala	2	4
			Isoka	1	1
			Kasama	2	3
			Nakonde	3	3
CT for Lay Counselors	03/11/08 to 14/11/08	Central	Mkushi	3	3
			Kabwe	7	7
			Chibombo	3	3
			Serenje	3	4
CT for Lay Counselors	03/11/08 to 14/11/08	Copperbelt	Kitwe	12	15
			Chingola	2	3
			<b>Total</b>	<b>56</b>	<b>70</b>

**Table 3: Basic Child counseling for lay**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling	13/10/08 to 18/10/08	Central	Mkushi	1	1
			Kabwe	4	5
			Chibombo	4	5
			Serenje	4	4
Basic Child Counseling	03/11/08 To 08/11/08	Northern	Mbala	3	3
			Isoka	2	2
			Kasama	2	2
			Nakonde	4	4
			Luingu	1	2
			Mpulungu	1	1

Basic Child Counseling	08/12/08 To 13/12/08	North Western	Chavuma Kabompo Mufumbwe Mwinilunga Zambezi	1 2 1 3 2	1 2 1 3 2
			<b>Total</b>	<b>35</b>	<b>38</b>

**Table 4: Basic Child Counseling for HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling	10/11/08 To 15/11/08	Copperbelt	Kitwe Ndola	5 10	5 10
			<b>Total</b>	<b>15</b>	<b>15</b>

**Table 5: Couple Counseling HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Couple Counseling HCWs	01/12/08 to 19/12/08	Luapula	Chienge Mwense Kawambwa Nchelenge	2 4 3 5	2 4 5 5
			<b>Total</b>	<b>14</b>	<b>16</b>

**Table 6: Counseling Supervision**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Counseling Supervision	13/10/08 to 24/10/08	Luapula	Chienge Mwense Kawambwa Nchelenge Mansa	2 3 2 2 2	2 3 2 2 3
Counseling Supervision	10/11/08 To 21/11/08	Central	Mkushi Kabwe Chibombo Serenje	1 7 2 1	1 7 2 1
			<b>Total</b>	<b>22</b>	<b>23</b>

**Table 7: Prevention of Mother-to-Child Transmission (PMTCT)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT*	17/11/08 to 23/11/08	Northern	Chinsali Mpika Mbala Isoka Kasama Nakonde Luwingu Mporokoso	1 1 3 2 5 3 1 1	2 1 4 4 5 3 3 2
PMTCT*	17/11/08 to 23/12/08	Copperbelt	Kalulushi Chingola Chililabombwe	1 2 2	2 2 2

			Mufulira	4	5
			Kitwe	8	9
			Ndola	1	5
PMTCT*	08/1208 to 14/12/08	Central	Chibombo	3	3
			Kabwe	9	11
			Mkushi	2	4
			Serenje	2	5
			<b>Total</b>	<b>51</b>	<b>72</b>

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

**Table 8: Prevention of Mother-to-Child Transmission (PMTCT) for Community Volunteers**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT for Lay Counselors	20/10/08 to 25/10/08	Copperbelt	Kalulushi	2	4
			Chingola	2	4
			Mufulira	2	4
			Kitwe	3	6
			Ndola	3	7
PMTCT for Lay Counselors	03/11/08 to 08/11/08	North Western	Chavuma	1	1
			Kabompo	2	2
			Kasempa	2	2
			Mufumbwe	2	3
			Mwinilunga	1	2
			Solwezi	4	5
Zambezi	4	4			
PMTCT for Lay Counselors	17/11/08 to 22/11/08	Central	Kabwe	9	9
			Mkushi	2	2
			Chibombo	2	4
			Serenje	3	3
PMTCT for Lay Counselors	17/11/08 to 22/11/08	Luapula	Chiengi	1	2
			Mwense	3	4
			Kawambwa	3	4
			Nchelenge	2	2
			Samfya	1	1
			Mansa	5	5
			<b>Total</b>	<b>59</b>	<b>80</b>

**Table 9: ART/OIs Pediatrics**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs Pediatrics	17/11/08 to 21/11/08	Copperbelt	Chililabombwe	1	1
			Chingola	2	2
			Kalulushi	1	1
			Kitwe	4	5
			Mufulira	2	4
ART/OIs Pediatrics	08/12/08 to 12/12/08	Copperbelt	Chingola	1	1
			Luanshya	3	5
			Ndola	6	11
			Mufulira	2	2
ART/OIs Pediatrics	08/1208 to 12/12/08	Northern	Chinsali	1	1
			Mpika	1	1
			Mbala	1	2
			Isoka	2	2
			Kasama	2	3
			Nakonde	1	1
			Luwingu	1	2
			Mpulungu	1	1
			Mporokoso	2	3
			<b>Total</b>	<b>34</b>	<b>48</b>

**Table 10: ART/OIs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs*	03/11/08 to 15/12/08	Copperbelt	Chililabombwe	1	1
			Chingola	4	4
			Kalulushi	2	2
			Kitwe	7	7
			Mufulira	3	3
			Ndola	4	4
ART/OIs*	17/11/08 to 29/11/08	Northern	Chinsali	1	1
			Mbala	3	4
			Isoka	2	3
			Kasama	2	3
			Nakonde	1	1
			Luwingu	1	2
ART/OIs*	08/12/08 to 19/12-08	Central	Chibombo	2	3
ART/OIs*	07/12/08 to 20/12/08	Luapula	Kabwe	9	11
			Mkushi	1	2
			Serenje	2	3
			Chiengi	2	3
ART/OIs*	07/12/08 to 20/12/08	Luapula	Nchelenge	3	3
			Mansa	5	6
			Samfya	2	2
			Mwense	3	3
			Kawambwa	1	1
			<b>Total</b>	<b>61</b>	<b>72</b>

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

**Table 11: Stigma Reduction Training of Trainers (TOT) for HCWs**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Stigma Reduction TOT	15/12/08 to 18/12/08	Northern	Chinsali	1	1
			Mpika	1	1
			Mbala	2	2
			Kasama	2	2
			Mpulungu	1	1
			Mporokoso	1	1
			Luwingu	1	1
			<b>Total</b>	<b>9</b>	<b>9</b>

**Table 12: Adherence Counseling for Adherence Support Workers**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Support Workers	29/09/08 To 10/10/08	Copperbelt Luapula North Western	Chingola	3	3
			Kalulushi	1	1
			Kitwe	3	4
			Luanshya	2	2
			Mufulira	2	2
			Ndola	2	4
			Samfya	1	1
			Kabompo	1	1
			Mufumbwe	1	1
			Mwinilunga	1	1
			Solwezi	2	3
Adherence Support Workers	06/10/08 to	Central Copperbelt	Kabwe	3	8
			Chibombo	1	2

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	17/10/08	Luapula Northern	Ndola Mansa Samfya Kasama Luwingu Mbala	2 1 1 1 1 1	5 1 1 2 2 1
Adherence Support Workers	09/12/08 to 19/12/08	North Western	Chavuma Kabompo Kasempa Mufumbwe Mwinilunga Solwezi Zambezi	1 1 1 1 1 4 1	3 2 2 2 1 5 2
			Total	<b>40</b>	<b>62</b>

**Table 13: Monitoring and Evaluation of HIV/AIDS**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Monitoring and Evaluation of HIV/AIDS	15/12/08 to 18/12/08	Luapula Northern Central	Chiengi	1	1
			Nchelenge	1	1
			Mansa	1	1
			Samfya	1	1
			Mwense	1	1
			Kawambwa	1	1
			Chinsali	1	1
			Mpika	1	1
			Mbala	1	1
			Luwingu	1	1
			Mpulungu	1	1
			Isoka	1	1
			Serenje	1	1
			Chibombo	1	1
		<b>Total</b>	<b>14</b>	<b>14</b>	