



**Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership
Cooperative Agreement No. 690-A-00-04-00319-00
Quarterly Report for April 1 – June 30, 2008
Submitted by Family Health International (FHI)
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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 Management Teams (DHMTs) to strengthen and expand HIV/AIDS related services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. ZPCT supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral therapy (ART) by implementing technical, program and management strategies to initiate, improve and scale-up prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART.

This quarter, ZPCT supported implementation of HIV/AIDS services in 219 health facilities in 34 districts in the five target provinces, with 218 of these facilities now reporting results. In addition, implementation plans were finalized for an additional two health facilities in Isoka District in Northern Province and Milenge District in Luapula Province.

Many of these facilities began reporting data during this quarter and the rest will start reporting by the end of the workplan period. Key activities and achievements for this reporting period include:

- CT services are ongoing in 217 out of 219 health facilities, with 45,897 individuals receiving CT services in these facilities this quarter.
- PMTCT services were provided in 204 out of 206 planned ZPCT-supported facilities. 32,097 women were provided with PMTCT services (including CT), and 3,222 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. 78,802 individuals received palliative care in 218 out of 219 ZPCT-supported health facilities during this quarter.
- ART services were available in 34 districts supported by ZPCT. A total of 5,892 new clients (including 419 children) were initiated on antiretroviral therapy through 84 (including 39 outreach sites) out of 101 planned ART centers this quarter. One of these sites (St. Dorothy Rural Health Center) reports its results through Solwezi General Hospital and is not included as an independent site in the indicator reporting matrix. By the end of this reporting period, 56,649 individuals were receiving antiretroviral therapy at ZPCT-supported sites and of these, 3,850 were children.
- The following technical training courses were conducted this quarter:
 - 17 HCWs and 57 community volunteers were trained in basic CT through three, two-week courses.
 - 26 HCWs already trained in basic CT, were trained in child counseling through two, one-week courses with funding from the Clinton HIV/AIDS Initiative (CHAI).
 - 27 community volunteers already trained in basic CT were trained in child counseling through two, one-week courses. 15 of these community volunteers were trained with funding from CHAI.
 - 15 HCWs were trained in counseling supervision through a two-week course.
 - 69 HCWs were trained in three, two-week courses in provision of PMTCT services.
 - 23 community volunteers were trained in provision of PMTCT services through a one-week course.
 - 37 HCWs were trained in adherence counseling through two, two-day trainings.
 - 73 community volunteers were trained as adherence support workers (ASWs) through four, ten-day trainings.



- 53 HCWs were trained in pediatric ART and opportunistic infection (OI) management through three, one-week courses.
 - 34 pharmacy and 16 laboratory staff were trained in commodity management.
 - 47 HCWs were trained in dry blood spot (DBS) collection, storage and transport. 30 of these HCWs were trained with funding from CHAI.
 - Three data entry clerks and information officers were trained in SmartCare software use.
 - 39 data entry clerks were trained in data management issues related to ZPCT.
- 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.
 - Six districts across the five provinces have been identified for graduation and plans are being put in place to move this process forward. The districts, which will be graduated by September 30, 2008, are Mkushi (Central Province), Luanshya (Copperbelt Province), Kawambwa and Samfya (Luapula Province, Kasama (Northern Province) and Kabompo (North Western Province).
 - District-wide referral networks are fully functional in 19 districts and are in development in 14 additional districts. Initiation of referral network activities is planned in all ZPCT-supported districts during this workplan period.
 - ZPCT has identified and worked with 38 community groups to implement community purchase orders to enable the groups to conduct mobilization activities in communities surrounding ZPCT-supported facilities. Community mobilization activities are underway in all five ZPCT-supported provinces.
 - ZPCT supported activities in the five target provinces to commemorate national CT day on June 30. Through the mobile CT events supported by ZPCT during national CT day, a total of 2,907 people received CT services (1,402 males, 1,254 females and 251 children).
 - ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the central level. ZPCT actively participates on eight national technical working groups, as well as several ad-hoc implementation groups.

Results for the quarter are summarized in the following table:

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to June 30, 2008)						
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Apr 08 to 30 Jun 08)			Achievements (1 Oct 07 to 30 Jun 08)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 30 Jun 08)
	TARGET	FEMALE	MALE	TOTAL			
CT							
Service outlets providing CT	216						217
Persons trained in CT	680			74	360	53%	1,334
Persons receive CT services	54,000	23,772	22,125	45,897	112,038	207%	274,471
PMTCT							
Service outlets providing PMTCT	199						204
Persons trained in PMTCT	400			69	350	88%	806
Pregnant women provided with PMTCT services, including CT	84,000	32,097		32,097	84,185	100%	201,747
Pregnant women provided with a complete course of ART prophylaxis	15,750	3,222		3,222	8,355	53%	19,035
Basic Health Care and Support							
Service outlets providing clinical palliative care services	216						218
Service outlets providing general HIV-related palliative care	216						218
Persons provided with OI management and/or prophylaxis	66,690	47,594	31,208	78,802	81,716	123%	86,704
Persons provided with general HIV-related palliative care	66,690	47,594	31,208	78,802	81,716	123%	86,704
Persons trained to provide general HIV-related care	200			0	220	110%	883
Treatment							
Service outlets providing ART services	96						84
Health workers trained in ART	200			0	220	110%	883
New clients receiving ART	15,600	3,466	2,426	5,892	17,339	111%	56,958
Total clients receiving ART	51,300	34,087	22,879	56,649	56,649	110%	56,966
Pediatric Treatment							
Health workers trained in pediatric care	150			53	83	55%	447
New pediatric clients receiving ART	1,560	208	211	419	1,239	79%	3,990
Total pediatric clients receiving ART	5,130	1,943	1,907	3,850	3,850	75%	3,850
TB and Care							
TB infected clients receiving CT services	7,000	663	808	1,471	3,745	54%	9,955
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	4,300	453	474	927	3,210	75%	6,725

Services in Health Facilities Receiving ZPCT Support						
Indicator	Achievements (May 1, 2005 to June 30, 2008)					
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Apr 08 to 30 Jun 08)				
Laboratory Infrastructure						
Number of laboratories with capacity to perform 1) HIV tests and 2) CD4 tests and/or lymphocyte tests	41					75
Number of individuals trained in the provision of lab-related activities	60			71	118%	232
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	372,254		179,779	486,091	131%	1,064,205

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

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

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

3. OBJECTIVES

The specific objectives of the ZPCT Partnership are to:

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

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

4. ACTIVITIES AND ACCOMPLISHMENTS FOR THE QUARTER

4.1. Program Management

4.1.1. ZPCT Partners

Management Sciences for Health (MSH), the partner responsible for laboratory and pharmaceutical assistance, continues to provide technical leadership within ZPCT and nationally in these areas. The partner agreement with MSH is currently through September 30, 2008.

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).

CHAZ continues to implement the ZPCT activities and data from facilities are being reported. However, CHAZ is an implementer of ART services under the Global Fund to fight AIDS, TB and Malaria and has been occupied in rolling out the program. ZPCT is therefore facing challenges in working with CHAZ to

address and resolve outstanding implementing issues, in particular, recruitment of health facility staff, data entry clerks, completion of renovations and data issues. ZPCT is following up with CHAZ to discuss and resolve these issues with CHAZ senior management.

Beginning the week of June 23, 2008 Ernst and Young was contracted by FHI to carry out a financial audit on CHAZ. A report of the findings will be sent directly to FHI when the audit is completed next quarter.

Kara Counseling and Training Trust (KCTT) is responsible for training CT counselors and counselor supervisors at ZPCT-supported health facilities at district level. The recent contract with KCTT included three basic CT trainings for HCWs in Copperbelt Province and counseling supervision trainings in Copperbelt and Luapula provinces. KCTT completed the final trainings under the recent contract last quarter and all reports were submitted and finalized. A new contract with KCTT will be developed next quarter for additional CT training activities.

Expanded Church Response (ECR) was working through church communities to increase knowledge and demand for HIV/AIDS services. ECR provided technical support to the church coordinating committees around Makululu and Mahatma Gandhi Health Centers in Kabwe, and around Chibefwe and Chalata Health Centers in Mkushi (Central Province). In Chingola, ECR implemented activities for communities around Chiwempala, Chawama and Kabundi East Clinics. The subagreement with ECR ended on September 30, 2007. As part of the close-out, ZPCT handed over computer equipment to ECR on May 15, 2008.

A call for proposals was developed and advertised to identify another faith-based partner to assist with community mobilization for HIV/AIDS services. 42 proposals were submitted by the March 14, 2008 deadline. A first round of review was done and nine proposals were short-listed for further review, however the quality of these proposals was very poor. A committee was formed to conduct further analysis to determine if any are eligible for selection. After this review and discussion with USAID, ZPCT has decided not to award the subagreement at this time. Community activities with FBOs will continue through the purchase order mechanism at the provincial level.

4.1.2. Facility Support

Recipient Agreements

At the end of this quarter, ZPCT was working with MOH staff to improve HIV/AIDS services in 219 facilities in 34 districts through 50 recipient agreements. ZPCT closed out the recipient agreement with Mungwi District Health Office due to CHAZ's plans to support HIV clinical services at the Mungwi Baptist Rural Health Center as well as operate satellite services to other health centers located in Mungwi district with separate funding.

ZPCT executed ten amendments to add additional equipment and renovations identified as priority to recipient agreements and extended the end date of these agreements. In addition, ZPCT finalized recipient agreements with each of the five Provincial Health Offices to support cross-cutting provincial activities, including equipment, training, supervision and monitoring visits, and facility graduation. Activities under these agreements began this quarter. In addition, ZPCT executed a new recipient agreement extending support to two health facilities in Luwingu District, Northern Province with activities beginning on May 1, 2008. An additional recipient agreement was finalized with Milenge District Health Office in Luapula Province to support HIV/AIDS services at Mulumbi Health Center. Implementation of activities will commence in this facility next quarter.

Renovations and Environmental Site Assessments

ZPCT is supporting renovations at 180 health facilities. Renovations at 67 health facilities are completed. Currently, 113 health facilities have ongoing renovations. Bills of quantities and tender documents have been developed for all health facilities, excluding those that still have issues to be resolved with the DHMTs.

During this quarter, renovations were completed in 22 health facilities. Renovation contracts were signed for 13 health facilities. ZPCT provincial office staff continue to work closely with the DHMTs and facility management in the vendor selection process as well as ongoing monitoring of refurbishments. As renovations are completed, certification of quality and completeness of works is an ongoing follow-up activity by the Infrastructure Support Officers and ZPCT 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. 135 ESAs have been completed to date, of which 49 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, the 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. Contracts will be developed and works will commence next quarter.

Procurement

During this quarter, procurement was initiated for newly identified equipment under recently executed recipient agreements and amendments. This quarter, 54 lockable filing cabinets and 39 room thermometers were procured and delivered to facilities. One hematocrit centrifuge, two bench centrifuges, five chemistry analyzers, three hematology analyzers and 17 computer sets were ordered. This equipment will be received from vendors and delivered to facilities next quarter.

Training

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

A recent communication from the U.S. Embassy outlined the training per diems we are allowed to pay for MOH staff. These per diems are in line with the usual FHI rates. The memo also stated that USG supported programs are not allowed to provide facilitation fees to MOH staff. This has decreased the rate of training since many of the MOH staff are not willing to conduct training without the facilitation allowance. 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 still 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 at the facility. CT and pediatric ART training is still delayed due limited number of national trainers willing to participate without facilitation fees. In addition, ZPCT only has two clinical officers that are qualified as national CT trainers to take on this activity. Additional training activities are planned for next quarter to meet the targets.

This quarter, a Clinical Training Skills of Trainers (CTS) workshop was held for 17 ZPCT staff from April 14-18 2008. The purpose of the workshop was to upgrade the skills of ZPCT technical staff so that they are able to conduct trainings when GRZ consultants are not available.

During this quarter, staff from ZPCT-supported health facilities attended courses in basic CT (17 HCWs), child counseling (26 HCWs), counseling supervision (15 HCWs), PMTCT (69 HCWs), adherence counseling (37 HCWs), pediatric ART/OI (53 HCWs) and ART commodity management (50 HCWs). Three facility M&E staff and data entry clerks were trained in SmartCare software use and 50 data entry clerks were trained in data management.

In addition, ZPCT trained 73 community volunteers in adherence counseling, 57 in basic CT, 27 in child counseling and 23 in PMTCT. ZPCT also trained 47 HCWs in DBS collection, storage and transport, with funding from CHAI.

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

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

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

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

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

Data Entry Clerks (DECs): All DECs are currently hired as FHI employees placed at MOH health facilities through funding included in the recipient agreements. To date, the work of 84 DECs trained and placed by ZPCT at ART facilities has resulted in improved timeliness and quality of HIV/AIDS data at these sites. To further improve data quality, these data entry clerks will assist in the compilation of data from non-ART sites supported by ZPCT once a month.

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

4.1.4. Other Program Management Activities

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

- USAID Anniversary (April 25, 2008): ZPCT participated in a half-day event that was hosted at the Taj Pamodzi Hotel where USAID history, projects and achievements and current programs were profiled. The U.S. Ambassador, USAID Mission Director, and the Minister of Health in Zambia spoke briefly and toured the displays that had been put up. ZPCT put together a booth highlight the program's achievements, with posters, a slide show and IEC materials to hand out to guests who visited the booth.
- Program Unit Meeting (May 5 to 7, 2008): A three-day meeting was held for provincial Program Managers, Program Officers, Community Mobilization and Referral Officers and Finance Officers. The first two days focused on program management updates including graduation planning, supported facilities, support required for the community mobilization component and writing success stories. The last day included budget analysis presentations from all five ZPCT provincial offices. Decentralization of provincial offices, the renovation/refurbishment process and recipient agreement issues were also discussed.
- Stock Management Workshop (June 9 to 11, 2008): ZPCT conducted a workshop to orient administrative assistants from the provincial offices on stock management, ethics and legal implications of conduct in an organization, record management and review of current systems.
- National CT Day: ZPCT supported activities in the five target provinces to commemorate national CT day on June 30. National CT day coincided with Zambia's national child health week. To take advantage of this and provide services to children, mobile CT activities were integrated into child health week activities to enable more children to access the mobile CT services. Through the mobile CT events supported by ZPCT during national CT day, a total of 2,907 people received CT services (1,402 males, 1,254 females and 251 children).
- Global Finance and Administrative System Orientation (GFAS): In June 2008, ZPCT transitioned to the New FHI accounting system, GFAS, replacing the MTX system and provide a better platform for efficiency and effectiveness. This new accounting system will be fully operational by July 31, 2008.
- Human Resources: This quarter, ZPCT hired seven additional staff for the provincial offices to support the continuing program expansion. These include three pediatric clinical care officers for Central, Copperbelt, and Northern provinces, a clinical care officer for Luapula Province, two PMTCT/CT officers for North Western and Copperbelt provinces and an infrastructure support officer to be based in Copperbelt Province. The remaining two pediatric clinical care officers will be hired next quarter.

- Decentralization of Provincial Offices: ZPCT continues to monitor activities that will determine the decentralization of provincial offices in selected program, technical and financial areas. All provinces are decentralized for monthly reports. North Western Province was decentralized for community purchase orders this quarter. Luapula and Copperbelt Provinces were decentralized for community purchase orders in previous quarters.
- International Travel: The COP traveled to North Carolina from April 2-17 to attend the FHI Global Leadership meeting. The Director for Technical Support traveled to Bangkok, Thailand from May 3 to 11 to participate in FHI's Global Technical Leadership Meeting. The sessions for this meeting covered most-at-risk populations, malaria, TB, and laboratory services. Participants attending the meeting came from FHI offices in Arlington, the Africa, Asia and Latin America Caribbean region.

The Senior M&E Advisor traveled to Bangkok, Thailand from May 9 to 18 to 2008 to participate in the Global Technical Update Meeting for Strategic Information. The purpose of the meeting was to update and build the capacity of FHI technical officers to carry out quality M&E, HMIS, research/targeted evaluation, surveillance and foster the use of data program design, improvement and implementation, generating research questions from program data .

Three ZPCT staff (Director of Finance, Senior Finance Officer and Associate Grants Officer) traveled to Accra, Ghana to participate in a one-week workshop on Global Finance and Administrative System Orientation. Participation in this training was supported by FHI general and administrative funds.

- Information Technology (IT) Capacity Building and System Maintenance:

ZPCT IT staff continued to provide technical assistance to provincial offices on computer hardware, software, and use of applications. This has become easier with help desk support officers employed to specifically provide IT support in all the five ZPCT provincial offices. The IT staff are not funded by ZPCT, but through FHI HQ. The help desk officers have been traveling to ZPCT supported health facilities in their respective provinces for orientation. This has enabled the officers to resolve many of the outstanding IT related issues in the facilities.

In addition, ZPCT has also been working closely with JSI who have been mandated with the computerization of health facilities in readiness for the rollout of the ARV logistics tool. ZPCT has provided JSI with information such as number of facilities covered by ZPCT, services being offered, levels of computerization and what computer tools are being used.

In May and June 2007, IT had carried out a survey in some ZPCT supported health facilities to determine computer support requirements. During this quarter, the information collected from the survey enabled IT to provide positive recommendations to the MOH and JSI for planning purposes.

4.2. National Level Activities

ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the national level. ZPCT actively participates on eight national technical working groups, as well as several ad-hoc implementation groups. Participation in national meetings and workshops ensures ZPCT input into national activities and enhances continued collaboration with the MOH and other partners. Meetings and workshops attended during this quarter are in the table below:

Date	Technical Area	Meeting/Workshop/Training
April 2, 2008	General	<u>National AIDS Commission Stakeholders Consultative Meeting:</u> Partners presented their activities in support of HIV/AIDS treatment, care and support services.
April 15, 2008	General	<u>Community Health Workers Meeting:</u> The purpose of the meeting, chaired by MOH, was to track how many community health care workers are available across the country, location of work, trainings completed, and the cost and duration of trainings.
April 17, 2008	General	<u>National Nutrition Technical Working Group:</u> ZPCT participated in the MOH meeting with 21 other organizations to develop a terms of reference for the formation of the National Nutrition Technical Working Group. Four subcommittees were formed and an organogram drawn for the TWG drawn. Follow up meetings planned.
April 23, 2008	General	<u>National Sexual Prevention Strategy Meeting held at JHUCCP:</u> The meeting involved partners working on the implementation of sexual prevention

Date	Technical Area	Meeting/Workshop/Training
		projects. Key interventions for sexual prevention included in the draft were reviewed at the meeting
April 29, 2008	General	<u>Review of Integrated Technical Guidelines (ITGs):</u> ZPCT participated in the review of the chapter on HIV and AIDS in the ITGs together with other partners. The document has been sent to MOH for approval and publication.
May 6, 2008	General	<u>USAID/PEPFAR 2009 COP Consultative Meeting:</u> ZPCT participated in the theme group meeting of NAC to discuss impact mitigation by USG agencies.
May 12, 2008	General	<u>Pediatric Communications Strategy:</u> ZPCT participated in the finalization of the draft Zambia National Pediatric HIV/AIDS Communication strategy. The goal of the document is to increase the number of children testing for HIV, receiving treatment, care and support by empowering individuals, families, communities and service providers using effective behavior change communication strategies. The draft document was completed and awaiting adoption by NAC.
May 16, 2008	General	<u>Community-Based TB/HIV Program:</u> The findings of operational research on community TB and ART DOT in Kamanga compound (Lusaka) implemented by JICA and JATA was presented during this meeting.
May 19 to 23, 2008	General	<u>Second International Workshop on HIV Treatment, Pathogenesis and Prevention Research in Resource Poor Settings:</u> Four ZPCT staff attended this workshop in Dakar, Senegal. These staff were sponsored by Abbott Laboratories. This was an international meeting where HIV prevention and treatment global experts discussed the issues, Results from research into new HIV prevention and treatment approaches were shared and discussed extensively.
May 23, 2008	General	<u>Malaria Control Planning Meeting Held at National Malaria Control Center, Chainama Hospital:</u> The meeting called upon a number of partners to develop a malaria operational plan for 2009. Partners pledged their commitment to support the malaria control activities which will feed into the operational plan.
June 20, 2008	General	<u>NAC Mid Term Review:</u> ZPCT attended the launch of the mid-term review exercise for the 2006 – 2010 National AIDS Strategic Framework (NASF).
June 23 to 27, 2008	General	<u>Development of MOH ICT policy:</u> ZPCT participated in the development of MOH ICT policy. The objective was to have stakeholders input in the development of MOH's Information and Communication Technology (ICT) Policy.
June 28, 2008	General	<u>United Nations (UN) Secretary General's Special Envoy for Malaria with Zambia Malaria Partners:</u> The purpose was to discuss Zambia's approach to achieving full coverage of malaria interventions successes and challenges as well as sharing of experiences. The meeting heard that millions of nets had been pledged through the Global Fund and other sources. Areas that were key challenges and needed follow up were release of nets pledged by individuals or organizations, ordering procedures for bed nets, distribution logistics and ensuring proper use of nets (i.e. often nets are used for fishing rather than malaria prevention).
April 17, 2008	CT	<u>HIV CT Sub-Committee Monthly Meeting:</u> The agenda for this HIV CT technical working group meeting focused on planning for the national VCT day, mobile CT guidelines, and the finger prick roll-out.
May 19 and June 12, 2008	CT	<u>National VCT Day Preparatory Meeting:</u> ZPCT staff attended a follow-up meeting at NAC to review progress in preparations for the National VCT Day.
June 26 to 27, 2008	CT	<u>National HIV Test Kits Annual Forecasting and Quantification Meeting:</u> ZPCT attended the two-day meeting held at Blue Nile Lodge in Lusaka. There was representation from the MOH and implementing partners. A trends analysis of consumption of HIV test kits in the country was conducted and submitted consumption and morbidity data was used to update the forecasting and quantification of HIV test kits that was conducted in March this year. Update meetings will be held every quarter.
April 2, 2008	PMTCT	<u>Depo Provera meeting held at JHPIEGO:</u> The purpose of the meeting was to discuss the issue of Depo Provera and the claim that the contraceptive is contaminated with the HIV virus. The Depo Provera manufacturers released a report stating the contraceptive is not contaminated by the HIV virus and is safe to use. The next step is for the MOH to MSL to de-quarantine Depo

Date	Technical Area	Meeting/Workshop/Training
		Provera and resume its use. The meeting suggested having MOH come out to the public formally on the safety of the Depo Provera.
April 14 to 19, 2008	PMTCT	<u>PMTCT Training Workshop in Mongu</u> : ZPCT staff were part of the national PMTCT trainers in the piloting process of the new standardized six-day PMTCT training package in Mongu, Western Province. The purpose was to review the package and look at its suitability. After the review process, the package was to be consolidated and subsequent PMTCT trainings should use the revised training package.
April 28, 2008	PMTCT	<u>PMTCT Training Package Consolidation Meeting at JHPIEGO</u> : ZPCT staff assisted with the review of the revised training package and prepared modules in readiness for printing and use by PMTCT trainers in upcoming trainings.
May 15, 2008	PMTCT	<u>PMTCT Stakeholders Meeting</u> : NAC organized this meeting and invited PMTCT managers and coordinators from different organizations / hospitals. Stakeholders were asked to make presentations on how they had implemented the PMTCT programs in their organizations / hospitals highlighting their achievements, challenges and any relevant recommendations for the way forward. The meeting concluded with a review of the Zambia national pediatric HIV/AIDS communication strategy draft document.
June 27, 2008	PMTCT	<u>PMTCT TWG Meeting at Clinton Foundation</u> . This was the TWG meeting for June 2008.. The pediatric HIV monthly scorecard was discussed. The meeting highlighted the need to integrate the PMTCT national scale up plan with the pediatric ART scale up plan. It was noted that there were no specific national annual targets in relation to pediatric ART activities. The meeting resolved that all the TWG subcommittees would in the future meetings be requested to give brief highlights and updates in their different areas.
April 9, 2008	PMTCT, Laboratory	<u>National DNA PCR Laboratories Working Group Meeting</u> : ZPCT participated in this meeting called by MOH. The main highlights of this meeting was the discussion around the contents for a possible ideal DBS testing bundle for use in the facilities at DBS collection points and for an ideal PCR laboratory consumable bundle for use in the PCR lab. Tools/guidelines were also drafted to help district hub staff track both the movement of specimens and client results. These guidelines would be rolled out nationally once finalized.
June 19, 2008	PMTCT, Laboratory	<u>National DBS - PCR HIV Testing Meeting</u> : ZPCT participated in the discussion on the issues surrounding DBS PCR HIV Testing hosted by CHAI. Experiences were shared between partners on the implementation of the DBS courier network using different vendors. MOH also requested that partners routinely share results from the various laboratories conducting PCR analysis.
June 27, 2008	PMTCT, Laboratory	<u>National DNA PCR Laboratories Working Group Quarterly Meeting</u> : ZPCT hosted at the DNA PCR laboratory at ADCH the first quarterly meeting involving technical staff from all three PCR laboratories in the country. The objective was to strengthen collaboration, review the QA program, data management, the DBS courier system and challenges being faced by the three laboratories.
April 23, 24 and May 27, 2008	ART	<u>Review of Pediatric Training Manual and Mentorship Tools (National Pediatric ART Sub-committee)</u> : ZPCT participated in the on going review of the Pediatric Training Manual and Mentorship Tools. These were finalized during the meetings and have been approved and published by MOH. The tools will be disseminated next quarter.
June 5, 2008	ART	<u>General Nursing Council (GNC) Nurse Prescribing</u> : ZPCT participated in this meeting whose objective was to review and strengthen the concept paper on nurse prescribing. The next step is to review the curriculum documents and discuss implementation of the nursing and midwifery formulary.
June 12, 2008	ART, Pharmacy	<u>Dispensing Tool Presentation and Practicum</u> : At a meeting convened by Catholic Relief Services, ZPCT staff re-oriented health care workers from mission hospitals on the use of the ARTServ Dispensing Tool.
May 27 to 29, 2008	Pharmacy	<u>Essential Drug Forecast and Quantification Meeting</u> : The purpose was to forecast and quantify essential drug data with a focus on drugs to be used in treatment of opportunistic infections for the period June 2008 to May 2009.

Date	Technical Area	Meeting/Workshop/Training
		The meeting was called by MOH and facilitated by Supply Chain Management Systems (SCMS) project. A procurement plan for the targeted drugs was developed at this meeting, and it was resolved that this plan and forecast will be reviewed quarterly.
June 18 to 20, 2008	Pharmacy	<u>Pharmacy Symposium on Pediatric HIV/AIDS</u> : ZPCT staff attended a three-day workshop in Livingstone organized by the MOH. This workshop was attended by pharmacists currently providing pediatric ART services in public health institutions and the focus was to share ideas on what is currently on the ground and what the various cooperating partners are doing in the fight against HIV/AIDS for pediatric patients. Progress updates on the implementation of the program at the two centers of excellence in pediatric ART (UTH and Livingstone General Hospital) were given.
April 23, 2008	Palliative Care	<u>Monthly Palliative Care Forum Meeting held at SHARe</u> : A brief presentation was made by CRS on a recent workshop in South Africa on Manual Development for Children's Palliative Care. An International Children's Palliative Care Network (ICPCN) is being formed. In addition, each organization represented at the meeting provided an on their palliative care activities.
May 28, 2008	Palliative Care	<u>Palliative Care Forum</u> : These are regular update meetings from the forum member organizations. Discussions are focused on palliative care, NAC treatment care and support, pediatric diagnosis, nutrition support, and indeed any new development as suggested by partners.
May 22, 2008	Laboratory	<u>National Laboratory Commodity Quarterly Quantification Review Meeting</u> : ZPCT participated in reviewing of the national forecasted quantities of ART laboratory commodities for the third and fourth quarter of 2008. A procurement plan was developed and a few adjustments made to the forecast after a trends analysis was conducted. The meeting was called by MOH and facilitated by SCMS. Representation was from implementing partners.
June 24, 2008	Laboratory	<u>National Laboratory Equipment and Infrastructure Technical Working Group Meeting</u> : ZPCT hosted and chaired the meeting whose focus was to review the MOH list of approved equipment for use in health facilities by level of care, and to review the standards for laboratory infrastructure for the same facilities. A draft equipment list for hematology test profiles was finalized and a resolution made to abide by the MOH standards set out until this review exercise was complete.
June 20, 2008	TB/HIV	<u>MOH Evaluation of TB/HIV reporting debrief</u> : ZPCT attended debrief on the evaluation of the TB/HIV reporting tools at MOH by CDC Lusaka and Atlanta. The findings were based on a survey done in Western, Southern, Eastern and Lusaka Provinces. As follow up, MOH will issue new reporting guidelines/directives.

4.3. Technical Program Areas

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

4.3.1 Counseling and Testing (CT)

CT services were available at 217 out of 219 health facilities during this quarter.

4.3.1.1 CT Training

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

- 17 HCWs from 12 health facilities in North Western Province were trained in basic CT
- 57 lay counselors were trained in basic CT in Central, Copperbelt and Luapula Provinces
- 26 HCWs from 11 districts of Central and North Western Provinces were trained in child counseling

- 27 lay counselors already trained in basic CT were trained to provide counseling to children in Copperbelt and Luapula Provinces
- 15 experienced counselors from eight districts of Northern Province were trained in counseling supervision

During this quarter, 16 experienced lay counselors participated in a mentorship program at the University Teaching Hospital Pediatric Center of Excellence (PCOE). The PCOE has been conducting trainings for provider initiated counseling and testing in collaboration with ZPCT. The mentored lay counselors are expected to provide routine pediatric CT. All 16 mentored lay counselors have been placed in pediatric wards at selected health facilities. Their presence is showing an increase in the provision of CT to children in care.

ZPCT also held a three-day capacity building meeting in May for CT/PMTCT staff to review progress in implementing CT/PMTCT activities, share experiences and challenges, and prepare plans for upcoming quarters.

CT training has been delayed due to a shortage of national trainers willing to participate without facilitation fees. In addition, ZPCT only has two staff who are qualified as national trainers to take on this activity. Over the next quarter additional training is planned in order to meet the training targets.

4.3.1.2 CT Services

ZPCT continued to provide technical assistance to HCWs and lay counselors in ZPCT-supported facilities in the five provinces to strengthen CT services; maintain a high uptake of testing and collection of same-day results and linkage to clinical care for ART. Most of the facilities in all the provinces supported continued to report an uptake of nearly 100% in general CT services with good linkages to care. The training of more lay counselors in HIV testing has also reduced the waiting time for collection of results contributing to greater client satisfaction.

During this period, the technical assistance focused on:

- Provision of CT services on a daily basis: During the quarter under review, ZPCT staff continued to place emphasis on health facilities offering CT services on a daily basis. At newly supported health facilities, the opt-out strategy was being strengthened with the provision of same-day test results and ensuring that all HIV positive clients are referred to ART for initiation of treatment and continued care.
- Strengthening routine counseling and testing of children admitted in care and in the under-five clinics: Routine pediatric CT continued to be strengthened this quarter. 16 lay counselors were placed at children's wards at nine health facilities to supplement the efforts of trained HCWs in providing provider-initiated CT services. ZPCT has continued to provide transport reimbursements to all HCWs and lay counselors doing extra work shifts at facilities providing routine CT for children. With funding from CHAI, ZPCT procured child friendly materials (toys) for CT rooms in the 25 hospitals to support routine CT for children. The materials will be used during therapeutic counseling for children and will be distributed next quarter once the counseling rooms in the pediatric wards are ready. This quarter, a total of 8,172 children were tested and received their results for HIV. The CT services are also extended to the parents or guardians of the children.
- Ongoing monitoring and improvement of documentation: ZPCT staff continued to strengthen the area of documentation of services provided in the registers in the facilities, particularly focusing on newly supported facilities. Particular reference is made to documenting linkage of TB to CT services. A number of facilities are providing routine CT services to TB clients but were either not documenting it or only indicating in the TB register rather than in the integrated VCT/PMTCT register.
- Strengthening referral linkages with FP, STI and TB clinics: Strengthening of these linkages was a focus during technical support visits conducted by ZPCT staff in this quarter. HCWs working in TB, FP and STI clinics continued to be encouraged to ensure that all their clients were offered CT services as a routine. Having VCT/PMTCT integrated registers in TB and STI clinics has enhanced the documentation of the linkages to CT services for TB and STI patients.
- Administration of QA / QI and graduation tools: As part of the ongoing monitoring of quality of services, ZPCT staff continued to administer QA/QI tools. Counselors continued to be encouraged to ensure that they sent test samples regularly to laboratories for QA/QC. In

addition, graduation tools were also administered in facilities targeted for graduation in the different provinces.

- **Mobile CT services:** Conducting mobile CT services remained one of the important areas of focus for ZPCT during this quarter, particularly in support on national CT day. Mobile CT services were provided in 16 districts this quarter, bringing services closer and more accessible to the community. The table below provides a breakdown of the mobile CT activities, including events supported by ZPCT for national CT day.

District	Males Counseled and Tested			Females Counseled and Tested			Children Counseled and Tested		
	Total	# positive	% positive	Total	# positive	% positive	Total	# positive	% positive
Chavuma	152	3	2.0%	90	6	6.7%	20	1	5.0%
Chingola	570	1	0.2%	60	5	8.3%	5	0	0.0%
Chinsali	183	6	3.3%	170	8	4.7%	199	8	4.0%
Kabwe	870	76	8.7%	737	114	15.5%	253	16	6.3%
Kasama	552	34	6.2%	621	52	8.4%	120	0	0.0%
Kasempa	16	1	6.3%	77	6	7.8%	0	0	N/A
Luanshya	12	2	16.7%	11	2	18.2%	353	15	4.2%
Mbala	59	2	3.4%	38	6	15.8%	2	0	0.0%
Mkushi	152	5	3.3%	180	14	7.8%	63	1	1.6%
Mpika	167	7	4.2%	157	14	8.9%	0	0	N/A
Mporokoso	173	9	5.2%	47	8	17.0%	0	0	N/A
Mpulungu	173	15	8.7%	111	34	30.6%	3	2	66.7%
Nakonde	502	26	5.2%	571	46	8.1%	780	62	7.9%
Nchelenge	244	1	0.4%	125	4	3.2%	23	0	0.0%
Ndola	312	35	11.2%	306	32	10.5%	1	0	0.0%
Solwezi	105	2	1.9%	119	7	5.9%	73	0	0.0%
TOTALS	4242	225	5.3%	3420	358	10.5%	1895	105	5.6%

4.3.1.3 Key Issues/Constraints in CT

- Ongoing provision of routine CT to children: Additional follow-up is required to ensure that children in wards and under-five clinics are provided with CT services along with referrals to follow-up care. Newly trained child counselors will continue to be monitored to ensure provision of quality services.
- Need to reorganize data collection for the uptake indicator for TB/HIV services: Collecting accurate data for the proportion of TB clients who are counseled and tested within the context of TB has remained a challenge. It is still difficult to isolate only clients with unknown HIV status from the total TB clients who are tested in the TB facility registers. This has resulted in an incorrect proportion calculation as the denominator used – total TB clients counseled and tested - includes those with a known HIV status.
- Shortages and interruptions in the supply of HIV test kits continues to affect CT services negatively particularly at newly supported facilities. ZPCT staff continue to work closely with facility staff to ensure that test kits are ordered on time.
- Human resource shortages continue to be a challenge, especially with the expansion of entry points for CT to TB, STI, FP and children's services. ZPCT will continue to train more lay counselors to complement the efforts of HCWs and also providing transport re-imburements to staff doing extra work shifts to provide CT services.
- Inadequate space for CT has continued to be an issue especially with the integration of CT into other service areas such as children's wards. Some children's wards do not have adequate space for CT services. ZPCT is addressing this issue with limited infrastructural refurbishments and continues to engage DHMTs and hospital managements in order to address the space problems.

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

During this quarter, 204 of the 206 health facilities targeted for ZPCT assistance in this area provided PMTCT services.

4.3.2.1 PMTCT Training

This quarter, ZPCT supported three trainings in basic PMTCT for 69 HCWs from 15 districts and 46 facilities across Central, Copperbelt and Luapula provinces.

- 23 lay counselors from eight districts and 16 facilities of Northern Province were trained in PMTCT. These community counselors have been placed in the health facilities to supplement the efforts of the HCWs in providing PMTCT services.

In addition, as reported in the CT section, ZPCT held a three-day meeting for CT/PMTCT staff during the quarter under review.

4.3.2.2 PMTCT Services

During this quarter, ZPCT continued to record a very high PMTCT uptake in all supported facilities. The “opt-out” strategy continued to be operationalized in line with the WHO recommendations and the Zambia national protocol guidelines. As part of providing comprehensive PMTCT services, ZPCT continued to incorporate the four main strategies of PMTCT, which are primary prevention, family planning, preventing vertical transmission, and care and treatment. During this quarter, ZPCT focused more on the third and fourth strategies - prevention of MTCT through the use of ARVs, safer delivery practices, infant feeding, counseling, support and care, treatment and provision of support for mothers living with HIV, their infants and families.

The WHO three tiered approach has been emphasized in order to provide a more efficacious ARVs for PMTCT for full ART or dual therapy. HAART is being offered to all HIV positive pregnant women who are identified as eligible and the initiation is from the ART sites. Those women not yet eligible for HAART are being offered short course prophylaxis. The absolute minimum being offered to HIV positive pregnant women has remained single dose nevirapine. The current sample referral system facilitates laboratory assessments for CD4 count.

During this quarter, technical assistance in PMTCT emphasized the following areas / issues:

- Strengthening the giving of same-day results: ZPCT continued to promote “same-day HIV test results” in all facilities. Some facilities have also been able to collect CD4 count blood samples on the same day of testing to lessen the inconvenience of having to ask the HIV positive ANC mothers to return to the facility at a later date for assessment of CD4 count. However, this has been difficult in most facilities due to transport and distance problems.
- Strengthening provision of more efficacious regimens for PMTCT: Nevirapine is being given on first contact at antenatal clinics. For HIV positive women, blood is drawn for CD4 estimation for initiation of ART if eligible. For women who are not yet eligible, short-course ARV prophylaxis is provided in line with the WHO three tiered approach. Dual therapy (AZT and NVP) is provided from the MCH in facilities able to do the hemoglobin estimations. Where facilities lack capacity to perform hemoglobin tests, ZPCT has procured Hemocue hemoglobinometers for use in estimating hemoglobin tests, required for initiation of AZT. ZPCT is also mentoring HCWs in using the PMTCT protocol guidelines on the use of a combination of AZT and 3TC (Combivir) during labor. Access to HAART is available through the ART centers for those that qualify for it.
- Ongoing monitoring of mother-baby follow-up, as part of pediatric HIV efforts: New facilities were provided with tracking tools to enable them to follow-up on mother-baby pairs. ZPCT continued to emphasize that all HIV exposed babies be initiated on cotrimoxazole at six weeks in under-five clinics for prevention of opportunistic infections that are responsible for high morbidity and mortality in HIV infected children. During this period 1,762 HIV exposed children were provided with cotrimoxazole prophylaxis. In addition, DBS is being collected at six weeks or soon after in all facilities where they have staff trained in DBS to ensure early infant diagnosis of HIV through doing the HIV DNA PCR testing. ZPCT continued to provide HCWs with training in DBS sample collection, packaging and transportation. Mentoring of trained HCWs on quality of DBS samples collected is ongoing.
- Linkage of PMTCT to Family Planning (FP): PMTCT FP referrals is routine in most facilities. However, facility staff that were not linking FP to PMTCT were continuously being encouraged to do so. FP is the cornerstone of the second strategy for PMTCT – preventing unintended pregnancies among HIV positive women. This includes promoting linkages to family planning services through family planning counseling in the ANC period and provision of the dual protection method (condoms plus a hormonal contraceptive) of FP at the appropriate time after

delivery. All women of child bearing age seeking FP and CT are being linked to family planning services within PMTCT, as well as women who are not pregnant attending CT services. In addition, clients accessing FP services are offered CT services and informed of MTCT and PMTCT services.

4.3.2.3 Key Issues/Constraints in PMTCT

- Challenges in assessing CD4 count for HIV positive women: Some facilities had difficulties this quarter assessing CD4 count for HIV positive ANC mothers due to problems with the CD4 sample referral system. Initiation of PMTCT mothers on HAART was still low in some of the districts due partly to poor referral system for CD4 count and other investigations. ZPCT is addressing the issue through provision of motorbikes to some of the ZPCT supported and affected districts to strengthen the CD4 count sample referral system.
- Uncollected DBS results by patients coming from distant places: During the period under review, it was noted that some children would be discharged from the wards before their DBS results were back from the Ndola DNA PCR lab. After their discharge, tracking the children was difficult resulting in some uncollected DBS results. The current DBS requisition form has no provision for an address which can be used to track the children after discharge. In order to address the matter, ZPCT is working at other alternatives such as the use of the SmartCare locator form to be used for children follow up and/or sending the DBS results to the nearest health centers.
- Lack of microcuvettes for Hemocues: During the period, some facilities did not have microcuvettes to enable them to do hemoglobin assessments on HIV positive pregnant mothers. ZPCT procured microcuvettes which are currently being distributed to the facilities and oriented facility staff on the use of the Hemocues.
- Routine rotation/relocation of trained PMTCT providers from labor wards/MCHs to other wards in some health facilities affect the continued provision of quality and efficient services. This is a human resource challenge. ZPCT continued to engage DHMTs and hospital management to ensure that there are some permanent staff providing PMTCT services. The issue needs ongoing follow up. In addition, to address the staff shortages, ZPCT is working with DHMTs to continue providing limited support for transport reimbursements for off-duty facility staff who work extra shifts to provide services as well as shifting certain specific tasks to other cadres where this is allowed and possible.

4.3.3 Antiretroviral Therapy (ART)

During this quarter, 84 of the 101 health facilities targeted for ZPCT assistance in this area provided ART services.

ZPCT continued providing technical assistance and mentoring at 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 is actively involved in preparing high volume ART sites with over 500 clients in all the provinces for assessments which will lead to accreditation of 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

ZPCT conducted the following trainings this quarter:

- 53 HCWs from 17 health facilities in Copperbelt Province were trained in pediatric ART. This training will be followed-up by on-site mentorship by ZPCT staff.
- 73 community volunteers were trained in ART adherence counseling. These volunteers will be placed within 27 ART sites to work as adherence support workers (ASWs).
- 37 HCWs from 24 health facilities in Copperbelt, North Western and Northern Provinces were trained in two-day courses in ART adherence counseling.

Pediatric ART training has been delayed due to a shortage of national trainers willing to participate without facilitation fees. Over the next quarter additional training is planned in order to meet the training targets.

A three-day meeting was held from May 6 to 8 for 15 ZPCT clinical staff. The meeting provided an opportunity for staff to review implementation of activities, receive technical updates and discuss challenges and action points.

ZPCT staff training - From March 30 to April 27, 2008 two ZPCT staff participated in the advanced ART training in Kampala, Uganda at the Infectious Diseases Institute (Kampala). Technical updates and lessons learned from this meeting were shared with other staff during the quarterly update meeting for the clinical care team.

4.3.3.2 ART Services

At the end of this quarter, ten additional sites began providing ART services: Ngungu Health Center in Kabwe, Kansenshi Prison, New Masala Clinics in Ndola, Kawama Clinic in Kitwe, Lumpuma and Shimukunami Clinics in Lufwanyama, Chembe Clinic in Mansa, Mwenda Clinic in Mwense, Kabole Clinic in Chienge and Luwingu District Hospital in Luwingu.

In addition, Solwezi Urban Clinic began reporting ART data directly. St. Dorothy Health Center continues to report their results through Solwezi General Hospital while awaiting the assessment for ART accreditation team which will be lead by the PHO during the next quarter. This brings the total number of health facilities providing ART services to 84, of which 39 are outreach sites, across 34 districts. A total of 5,892 new clients (including 419 children) were initiated on antiretroviral therapy this quarter. A total of 56,649 individuals were receiving antiretroviral therapy at ZPCT-supported sites; of these 3,850 were children.

ZPCT continues to focus on the issues outlined below:

- Implementation of SmartCare and mentorship in new ART Protocols: ZPCT continued 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. This is generally going very well. 48 of the 84 facilities have started implementing the new ART protocols for initiating new clients on treatment.
- Collaboration with Home-Based Care program: ZPCT has continued to support ART outreach to three home-based care centers operated by the Ndola Catholic Diocese; Chishilano in Ndola, Twatasha (TRAKK) in Kitwe, and Iseni in Chingola. Stable patients are transitioned or transferred-out from Iseni to nearby health centers in Chingola. A new ZPCT-supported site in Kitwe, Kawama Clinic started ART services in the last quarter within the locality of TRAKK, and it has started addressing the issue of distance for those stable patients being transferred out of the home-based care setting. The collaboration for the support of these HBC sites is in the process of being transitioned from ZPCT to CHAZ during the course of the year.

This collaboration continued to expand in terms of client enrolment into care and treatment with 105 clients initiated on ART and 1,088 clients were monitored this quarter.

The MOU between ZPCT and the Mpatamatu Home-Based Care Program in Luanshya District to support ART outreach services remains active. However, the District AIDS Task Force (DATF) vehicle which was to be used for the outreach has been unavailable and as a result, the outreach is not taking place weekly as agreed. ZPCT will review this arrangement and if necessary, refer all clients to Mpatamatu Clinic which will begin providing ART services next quarter.

- Progress on pediatric HIV/AIDS care and treatment: ZPCT continued to provide technical assistance and mentoring to scale-up pediatric AIDS treatment, with attention to routine or provider-initiated CT, timely initiation of ART, and cotrimoxazole prophylaxis. 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. Three of four of these MOs who are already working started duties in the last quarter. Linkages with PMTCT services continued to be strengthened by ensuring HIV positive pregnant women who are eligible for treatment benefit from ART. In addition, HIV positive women who have delivered are being tracked to ensure their babies have the DBS (DNA PCR) test and those who are positive linked to HIV care and treatment.
- Pediatric preceptor program: With funding from CHAI, ZPCT hired consultants from Tropical Diseases Research Center (TDRC) and Arthur Davison Children's Hospital (ADCH) to

- implement a preceptor program in pediatric HIV care. The objective of this program was to provide on-the-job, practical intensive hands-on mentorship to HCWs. These consultants were experienced, practicing pediatricians/medical doctors. This quarter, an additional 30 HCWs participated in the program. A consolidated report was compiled and disseminated to the partners and other stakeholders.
- Ready-to-use therapeutic food supplements (RUTFs): ZPCT has continued to support the RUTF (also known as Plumpy Nut) program in ten selected high volume pediatric sites. This activity is in collaboration with CHAI and the MOH. CHAI supports the procurement of the Plumpy Nut, ZPCT coordinates the implementation and MOH provides the institutional and human resource support. RUTF is given to malnourished as well as children on ART. ZPCT is supporting this activity at ten sites. The program has not expanded to other sites due to limited procurement of RUTF at national level.
 - Quality assurance/quality improvement: ZPCT continues to focus on quality assurance and quality improvement issues during the technical assistance visits to health facilities. ZPCT ensures the use of QA/QI tools, in collaboration with PHO, DHMT, and facility partners. ZPCT has since revised the QA/QI tools for ART to be in line with requirements of existing national documents such as the ART accreditation tool and the National ART Standard Operating Procedures (ART SOPs). Ultimately, implementation of these tools should assist to improve quality of care for patients as facility staff will be able to identify gaps in the services they provide after administering the QA/QI tools.
 - SOPs for ART, adherence counseling and post exposure prophylaxis (PEP): MOH and ZPCT have finally come up with quantities of SOPs required nationally and printing arrangements have reached an advanced stage and will be done in next quarter. MOH and ZPCT will jointly plan on the distribution and orientation of HCWs on the use of these resource/reference materials. ZPCT will support the printing of the SOPs for the five supported provinces.
 - Continued support to 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.
 - Provision of reference materials: ZPCT distributed the pediatric HIV/AIDS reference book produced by ANECCA to ZPCT-supported sites during the quarter. ZPCT provided 100 ART clinicians during the quarter with the job aid, 'Creatinine Clearance Slide Ruler', to assist in estimating creatinine clearance, an important laboratory test and requirement for HIV patients initiating treatment on new first line ARV regimens.
 - Continuous Medical Education (CME): ZPCT in the last quarter 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. The training package is ready and MOH is yet to give consent and approval for roll out of the program which will be done in phases. This will contribute significantly to prepare sites for accreditation.

4.3.3.3 Key Issues/Constraints in ART

The following constraints were faced in ART service provision:

- Patient monitoring: ZPCT continues to support adherence support workers (ASWs) to follow up patients on ART who have missed appointments or defaulted. 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: Most facilities are beginning to experience a situation where the available staff 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. This situation makes it difficult to detect defaulters.
- Implementation of new ART protocols: ZPCT continues to systematically roll out the implementation of new drug protocols. However, this exercise has been met with some difficulties in certain facilities where biochemistry lab equipment necessary to give baseline and monitoring of creatinine, a key test for using the new protocol drugs is not functional. This has sometimes resulted in delay to implement or temporal suspension of this activity.
- Pediatric ART challenges: It has been noted that initiation of ART on the ward which is desirable to minimize loss of children who test positive during routine CT has had its challenges. Some facilities are unwilling to implement this strategy because staff in the wards are either not trained in ART or find ARV commodity management on the ward cumbersome.

They insist and prefer the initiation of therapy for children in the ART clinic at the outpatient department. For respective facilities, this will be handled on a case by case basis.

- Uncollected DBS results: In a number of instances it has been noticed that infants who had DBS test done on the ward and were discharged do not come back for the results. It has been quite a challenge to trace children who are positive and have them enrolled into care. ZPCT is trying to improve the tracing of these children in a few facilities on a trial basis using the SmartCare patient locator form together with the lab form as these capture more information on the guardian and directions to the home.

4.3.4 Clinical Palliative Care

ZPCT is working with staff across all health facilities to strengthen and improve palliative care for PLHA. During this quarter, 218 of the 219 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, 53 HCWs from 17 health facilities in Copperbelt Province were trained in pediatric ART.

4.3.4.2 Clinical Palliative Care Services

ZPCT staff provided technical assistance in clinical care 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 and relevant DHMT and PHO staff and the community continued strengthening the following:

- Reporting of adverse drug reactions: During the last quarter, ZPCT staff attended an orientation conducted by the Pharmaceutical Regulatory Authority (PRA) on the operations and usage of pharmaco-vigilance registers in health facilities. These registers are used to capture and document all adverse drug reactions and drug toxicities. ZPCT is currently awaiting feedback from PRA to suggestions on how to assist with the roll-out of these registers in order to standardize reporting of adverse drug reactions.
- Mentoring and supervision of HCWs in appropriate diagnosis and management of opportunistic infections including pediatric HIV/AIDS cases.
- Scale-up cotrimoxazole prophylaxis for both adults and children.
- Routine CD4 testing of all HIV positive TB patients to facilitate entry into clinical care and ART as required. Integrated VCT and PMTCT (IVP) registers will need to be revised to be able to record CD4 count data for TB clients who have undergone CT, alongside the HIV testing results.
- Routine CD4 for all pregnant mothers who are HIV positive, and referrals to ART clinics those eligible for full HAART.
- Community activities to increase awareness and benefits of HIV services and ART. These activities include messages through drama meant for the general population in public places like markets and also targeted where HBC programs have on record families or households that are affected by the HIV/AIDS and these are encouraged to go through CT.

4.3.4.3 Key Issues/Constraints in Clinical Palliative Care

- Referral linkages: ZPCT continues to strengthen 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 service.
- Drugs for OIs: Cotrimoxazole for both 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 the 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 continued to provide support for pharmacy services at all 219 ZPCT-supported health facilities. Ongoing activities include the provision of basic pharmacy equipment, furniture, and renovations to enhance pharmaceutical service delivery, training and technical assistance.

4.3.5.1 Pharmacy Training

This quarter, ZPCT trained 16 laboratory and 34 pharmacy health facility staff from Copperbelt and North Western Provinces in commodity management for both pharmaceutical and laboratory commodities.

4.3.5.2 Technical Assistance in Pharmacy

ZPCT continues to provide technical support on the use of the updated ARTServ Dispensing Tool, a tool used by pharmacy staff to record data on clients on ART, including drug regimen, side effects, and drug dispensing dates at 52 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 provided 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 ensure that all facilities adhere to the ordering procedures as defined by the new ARV logistics management system.

Technical assistance visits were also focused on mentoring facility staff 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. However, this has greatly improved this quarter.

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, otherwise known as Plumpy Nut. These RUTF are 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. ZPCT is working to coordinate this program in its support areas.

ZPCT identified ten pilot sites in which to implement this program. After an assessment of the pilot implementation of the Ready to Use Therapeutic Food (RUTF) program in six facilities (Arthur Davison Children's Hospital, Kitwe Central Hospital, Nchanga North Hospital, Thomson Hospital, Kabwe General Hospital and Mahatma Gandhi Memorial Clinic) in five districts it was found that the program has taken off well in most sites with implementation approaches differing depending on the availability of a hospital nutritionist. Records are maintained well and enrollment criteria is being followed. The next steps include the re-orientation of selected facility staff in the implementation of the program, ensuring that all sites receive and display the job aides, and the finalization of the guidelines with MOH and other partners.

4.3.5.3 Guidelines and SOPs

ZPCT continues to distribute and promote the use of the Zambia ART Pharmacy SOPs to the facilities, and focuses on providing technical assistance to sites to ensure that work is being done according to the guidelines and SOPs. ZPCT facilitates the site-specific adaptation of these SOPs in line with GRZ policy. However, in line with the launch and dissemination of the new ART guidelines and the need for the inclusion of the new ARV logistics system procedures and forms, the Zambia ART Pharmacy SOPs need to be updated. After discussions with the MOH, the review process is underway and will be completed next quarter. 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 continually monitoring the quality and sustainability of services, as well as building capacity within health facilities and DHMTs. A recurrent issue confirmed by the QA/QI tool is the critical shortage of qualified pharmacy staff in various health facility pharmacies. These results are shared with the DHMTs in the hope that they would move to place appropriate staff at the 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 to ensure an adequate supply of HIV-related commodities for provision of services. The following are challenges faced in meeting this goal.

- Medical Stores Limited logistics constraints: Occasional lapses in the transport system at MSL combined with some order delays from the districts continued in this quarter and led to requests for ZPCT assistance to transport critical supplies to support sites. However, this is only possible when there is pre-arranged travel to these destination sites. ZPCT is constantly working with facility staff to ensure that orders are submitted according to the delivery schedule requirements that MSL has issued.
- Lack of qualified staff in the facilities: Shortages of trained staff greatly compromise the quality of service delivery in the facilities. Working with DHMTs and facilities to implement the transport reimbursement system for staff working extra shifts has greatly improved this situation. This system has also greatly benefited the ART outreach program where pharmacy staff form part of the team that provide outreach services to remote facilities.
- Inadequate supply of commodities: An uninterrupted supply of commodities ensures continued service delivery across all elements of care. During this quarter, there has been great improvement in the national level supply chain for ARVs and selected OI drugs which is assisted by ZPCT's training, and technical assistance at the facility level. Adequate stock levels of ARVs and OI drugs have been maintained at the facilities with the exception of pediatric and topical antifungal formulations due to stock-outs at MSL. Stock levels of cotrimoxazole preparations were low during the quarter and there is talk of an anticipated global shortage due to unavailability of a key ingredient. ZPCT also actively participates in national level forecasting and quantification activities to ensure that the facilities' needs are taken into account.
- Storage space: As ART services expand, there is an increased need for space in pharmacies to store ARVs and other commodities under proper storage conditions. ZPCT continues to assist through the provision of minor refurbishments to facilities, such as adding shelves, 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 is continuing to repair or replace this equipment if needed, but is working with the MOH on instituting equipment maintenance contracts with the vendors of this equipment.

4.3.6 Laboratory Services

ZPCT is currently strengthening laboratory services in 111 facilities by providing technical assistance, supporting renovations and procurement of equipment. Technical assistance is routinely provided to support laboratory needs including additional ART sites (both static and outreach).

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

The placement of the two full-time data entry clerks has contributed to the high quality of data management currently prevailing at the PCR laboratory.

4.3.6.1 Laboratory Services Training

ZPCT conducted three training workshops this quarter for its laboratory services personnel in the operation and periodic preventive maintenance of equipment for six ZPCT laboratory staff. The trainings are focused on equipping ZPCT laboratory staff with the capacity to attend to minor equipment faults and break-downs at the facilities in an attempt to cut down on the turn-around time for equipment repairs. Major equipment faults however will still be attended to by the vendors.

In addition, 16 laboratory staff were jointly trained with 34 pharmacy health facility staff from Copperbelt and North Western Provinces in commodity management for both pharmaceutical and laboratory commodities.

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 all 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, some facilities prepare their own quality control materials.

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, ordering and storage of commodities.

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

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

PCR Laboratory: ZPCT staff continued to provide routine technical assistance and mentoring in quality DBS collection, packaging and transportation to District hubs in the 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 this quarter and these should be in circulation next quarter after final review and approval by the MOH. This was facilitated by the Ministry of Health.

The Internal Quality Control (IQC) guidelines previously developed are being piloted in sites with CD4 equipment. Once this document is finalized and will soon be submitted to MOH for approval..

PCR Laboratory: ZPCT has developed SOPs outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a biosafety manual, proper use of PCR equipment and criteria for rejection of specimens. These are draft documents currently in use in the laboratory. These documents are now pending review by the PCR laboratory subcommittee for comparison with the other two PCR laboratories in the country with the hope of compiling one set of national guidelines for use in all the laboratories.

IQC monitoring continues to be run with each test batch. In addition, the PCR laboratory has enrolled 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 second batch of controls and unknown specimens from CDC were received and tested in June, and results were sent back to CDC before the deadline via email and postal mail. Feedback from CDC showed a 100% success in the first batch of tests performed in the last quarter. Results for the second batch are being awaited.

4.3.6.4 Specimen Referral System

The specimen referral system to provide off-site support to facilities with limited or no laboratory capacity that ZPCT developed and implemented continues to function well. The system is functional with 98 health facilities referring specimens to 39 facilities with CD4 equipment across 26 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.

PCR Laboratory:

The PCR laboratory continues to serve as a referral center for the five ZPCT-supported provinces. During this quarter, all the five target provinces have 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 level hub and transported by Express Mail Service (EMS) operated by the Zambia Postal Service to ADCH PCR Laboratory in Ndola.

A total of 1,688 DBS specimens were received this quarter from 110 facilities in 32 districts in the five provinces. 1,584 specimens were tested and these include the backlog from last quarter. The remainder of the specimens will be tested in the following reporting period.

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 Kasama General Hospital developed multiple faults again and required serious attention in terms of repairs according to the vendor. The instrument was brought to Lusaka BD office for repair. In May the Mungwi FACSCount was installed at the hospital in the interim as we await either fixing of their FACSCount or indeed transitioning to the FACSCalibur which is already at the facility. Constraints over the FACSCalibur have been the unavailability of controls at MSL.
 - The FACSCalibur procured for Ndola Central Hospital last quarter could not be successfully installed as the vendor sent the instrument without the appropriate software to facilitate commissioning and ultimate commencement of use. However, the software arrived in Johannesburg and will be installed before the end of July.
 - The FACSCount at Mufumbwe has not been working for the last few weeks of the reporting period.. BD has tried to speak to the users but is not getting a true picture of the fault. The ZPCT Provincial Laboratory Officer backstopping North-Western Province from Ndola will travel to Mufumbwe during the third week of July to assess the equipment and identify the fault.

- Chemistry analyzer: Eight Humalyzer 2000 instruments procured from Biogroup for the various facilities are yet to be installed. These are for health facilities in Copperbelt (Ipusukilo, Kavuu, Bulangililo, New Masala, Twapia and Kawama), Northern (Mpika District Hospital, and North Western (Zambezi District Hospital)

The Olympus 400 equipment at Kitwe Central, Ndola Central and Arthur Davison Children's Hospitals were cleaned and serviced by the vendor. Spare electrodes and filter systems have been ordered and paid for and are expected to arrive by next quarter. These will help towards improving the functionality of the water purification systems that feed into these instruments.

- Hematology analyzer:
 - The keypad, keyboard and fuses were replaced on the ABX Micros 60 at Liteta District Hospital and the machine is working well.
 - The ABX Micros 60 at Nakonde Rural Health Center has a faulty UPS which needs to be replaced. This was ordered through our procurement unit. The sample holder was also replaced and the equipment serviced.
 - The Pentra 60 at Kitwe Central Hospital was serviced and the mother board was replaced. The Ndola Central Hospital Pentra 60 had the photometer replaced. Both pieces of equipment are now functioning well.
 - The Pentra 60 at ADCH needs to have the drainer sensors replaced. The vendor will source and replace next quarter.
 - The Micros 60 at Mufumbwe, Mwinilunga and Solwezi General Hospital were routinely serviced. A new laboratory graduate was trained on how to use the analyzer.
 - Seven Sysmex pochH-100i were procured from Biogroup but not installed due to unfinished refurbishments of laboratories at the time equipments were received. The vendor will be contacted to install the equipment. The equipment are for six health facilities in Copperbelt Province (Ipusukilo, Kavuu, Bulangililo, New Masala, Twapia and Kawama) and Mbala Urban Clinic in Northern Province.

Other pieces of equipment pending installation include centrifuges for Kawama and Ipusukilo Clinics in Copperbelt Province.

ZPCT supported sites access reagents procured by GRZ and stored at MSL. All reagents are available in sufficient quantities except for the hematology and biochemistry controls. These supplies continue to be inconsistent since they arrive at the sites with only a few days / weeks before their expiry date. Generally, control material is produced with a very short shelf life – sometimes as little as three months. ZPCT facilitates the prompt delivery of these commodities using either courier services or scheduled ZPCT visits to the provinces. The Sysmex PochH-100i controls have continued to be supplied through CDC and delivered to the target facilities using the same mechanism.

PCR equipment and reagents:

All the equipment procured for the PCR laboratory at ADCH, except for the recently acquired backup equipment (Fisher micro-centrifuge and Biorad Thermocycler), has been installed and is working well. The distiller, autoclave and purifier are also pending installation. The Micro Plate Reader is now connected to a desktop computer in the Amplification and Detection Area which collects readings of all PCR runs performed and stores them in a database.

The biosafety cabinets are due for service and decontamination and arrangements have been made for the activity to take place next quarter.

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. These kits are procured by Clinton HIV/AIDS Initiative (CHAI) and ADCH PCR Laboratory will begin 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 where MSL is unable to distribute for one reason or another.

4.3.6.6 Key Issues/Constraints in Laboratory Services

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

- Late submission of aggregated data: Submission of aggregated data on HIV-related commodities (e.g. HIV rapid test kits) from DHMTs to central level has improved while a few DHMTs continue to be a challenge especially in Luapula Province due to the presence of UNICEF PMTCT increased demand. Stock outs have reduced but are still experienced at a few facilities. ZPCT is continuing to work with DHMTs to build capacity at the district level to eliminate the delays. A problem analysis at the site will be 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 these graduates in these facilities. ZPCT continues to work with DHMTs and facilities to improve this situation by providing transport reimbursements to staff who work extra shifts.
- Supply of commodities: 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.
- Maintenance of diagnostic equipment: Routine preventive maintenance of diagnostic equipment is an issue and is not being done even with MOH vendor contracts in place. This results in frequent equipment breakdowns 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 should help to curtail the long turn-around time for equipment maintenance. BD and SG have planned to increase their work force by engaging a third engineer to augment the efforts of the existing staff.
- Specimen referral systems: Overall, the specimen referral system is working well, but has occasionally been affected by distances and the development of faults of the CD4, hematology or biochemistry equipment. ZPCT continues to find innovative ways of addressing these gaps, including using DHMT vehicles to transport specimens and refer samples to where CD4 equipment is functional.
- DBS specimens: The PCR laboratory has started receiving specimens from non-ZPCT supported facilities 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 is working with the DHMTs concerned to provide training and mentoring to these facilities. In addition, there have been delays in collection of DBS packages from hubs due to issues with EMS. Discussions are ongoing with EMS, the courier service, to resolve this. ZPCT will 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

A one-day module on M&E topics was included as part of the CT and PMTCT trainings conducted this quarter. These trainings involved the use of the various data collection tools (registers and related forms) for each technical area. Details of these trainings are as follows:

- The M&E module was presented as part of the basic CT trainings for 57 lay counselors and 17 HCWs.
- 69 HCWs from 46 ZPCT supported facilities were trained in PMTCT reporting as part of the PMTCT trainings across all five target provinces.

In Northern Province, three staff from Mpulungu Health Centre were trained in SmartCare forms and software use at beginning of April 2008.

ZPCT conducted a two-day training on data management to build the capacity of 39 data entry staff from 27 facilities in Copperbelt Province.

4.3.7.2 Technical Assistance in M&E

The deployment of the SmartCare system continued during the quarter under review. Over 88% of the backlogged client records have been entered into the SmartCare computer database across the supported facilities in the five provinces. In Nchelenge District, Luapula Province, health facilities are continuing to use the FUCHIA software, developed by Médecins Sans Frontières while the transition to SmartCare is planned for the next quarter. ZPCT works the cooperating partners and MOH to continue implementing SmartCare system in ZPCT supported sites and provides support to sites that are still using ARTIS and are yet to convert to SmartCare. ZPCT continues to provide technical assistance to DHMTs and health facilities in the area of data management and QA/QC for information systems such as SmartCare and PCR through mentorship, in collaboration with the respective PHO/DHMT staff. The focus of the site visits included conducting SmartCare quality assurance and quality control checks, reviewing and correcting data entry problems and updating the ARV dispensing tool in the pharmacies. The SmartCare software data quality control in collaboration with CDC (as the software developers) has continued to ensure that quality reports are generated from the software. ZPCT continues to provide data and guidance for quarterly feedback meetings with PHOs and DHMTs.

4.3.7.3 Key Issues/Constraints in M&E

The implementation of the automated SmartCare system was slowed in a number of facilities due to constant power cuts. The power problem still remains as the power utility company is yet to resolve this nation-wide problem. The delay by the MOH to grant ZPCT access to patient-level data electronically has delayed the commissioning of SmartCare as the reporting tool at sites where the migration has been completed. The patient level access is necessary to provide a basis to reconcile the electronic reports with those from the paper-based ARTIS currently in use

4.3.7.4 ZPCT Indicators/Results

The following table shows service statistics and related data through June 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 June 30, 2008)						
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Apr 08 to 30 Jun 08)			Achievements (1 Oct 07 to 30 Jun 08)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 30 Jun 08)
	TARGET	FEMALE	MALE	TOTAL			
CT							
Service outlets providing CT	216						217
Persons trained in CT	680			74	360	53%	1,334
Persons receive CT services	54,000	23,772	22,125	45,897	112,038	207%	274,471
PMTCT							
Service outlets providing PMTCT	199						204
Persons trained in PMTCT	400			69	350	88%	806
Pregnant women provided with PMTCT services, including CT	84,000	32,097		32,097	84,185	100%	201,747
Pregnant women provided with a complete course of ART prophylaxis	15,750	3,222		3,222	8,355	53%	19,035
Basic Health Care and Support							
Service outlets providing clinical palliative care services	216						218
Service outlets providing general HIV-related palliative care	216						218
Persons provided with OI management and/or prophylaxis	66,690	47,594	31,208	78,802	81,716	123%	86,704
Persons provided with general HIV-related palliative care	66,690	47,594	31,208	78,802	81,716	123%	86,704
Persons trained to provide general HIV- related care	200			0	220	110%	883
Treatment							
Service outlets providing ART services	96						84
Health workers trained in ART	200			0	220	110%	883
New clients receiving ART	15,600	3,466	2,426	5,892	17,339	111%	56,958
Total clients receiving ART	51,300	34,087	22,879	56,649	56,649	110%	56,966
Pediatric Treatment							
Health workers trained in pediatric care	150			53	83	55%	447
New pediatric clients receiving ART	1,560	208	211	419	1,239	79%	3,990
Total pediatric clients receiving ART	5,130	1,943	1,907	3,850	3,850	75%	3,850
TB and Care							
TB infected clients receiving CT services	7,000	663	808	1,471	3,745	54%	9,955
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	4,300	453	474	927	3,210	75%	6,725

Services in Health Facilities Receiving ZPCT Support						
Indicator	Achievements (May 1, 2005 to June 30, 2008)					
	Workplan (1 Oct 07 to 30 Sep 08)	Quarterly Achievements (1 Apr 08 to 30 Jun 08)				
Laboratory Infrastructure						
Number of laboratories with capacity to perform 1) HIV tests and 2) CD4 tests and/or lymphocyte tests	41					75
Number of individuals trained in the provision of lab-related activities	60			71	118%	232
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	372,254		179,779	486,091	131%	1,064,205

4.4. Community Mobilization and Developing Referral Networks

4.4.1 Working with Local Community Groups

ZPCT is working with community groups in the catchment areas for the health facilities to create awareness of HIV/AIDS clinical services with emphasis being placed on motivating community members to access CT and PMTCT services at the facilities within their communities as an important entry point for care and treatment. In order to increase access by community members to comprehensive HIV care and support services and also facilitating a systematic and formal linking of HIV/AIDS related services, ZPCT has facilitated the development of referral networks. In this way, community members benefit from the services available at the health facilities.

During the reporting period, ZPCT staff collaborated with health facility staff and community groups to conduct mobilization for HIV/AIDS services. The following 38 community purchase orders (CPOs) were implanted this quarter with funding from ZPCT:

Province	District	Facility	Group
Copperbelt	Ndola	Mushili Clinic	Mushili NHC
	Ndola	Dona Hill Clinic	Dola Youth Friendly
	Ndola	Kaniki Clinic	Kaniki Youth Friendly
	Ndola	Lubuto Clinic	Mushili NHC
	Ndola	Chipulukusu Clinic	Chipulukusu NHC
	Ndola	Kawama Clinic	Kawama NHC
	Ndola	New Masala Clinic	New Masala Theater Group
	Ndola	Mushili Clinic	Mushili NHC
	Ndola	Chipulukusu Clinic	Chipulukusu NHC
	Luanshya	Mpatamatu Clinic	Mpatamatu Home-based Care
	Luanshya	Mpatamatu Clinic	Mwaiseni Home-based Care
	Chingola	Muchinshi Clinic	Muchinshi Youth Friendly Corner
	Central	Kabwe	Mukobeko
Kabwe		Kawama	Kawama NHC
Kabwe		Bwacha	Bwacha Breastfeeding Group
Kabwe		Ngungu	Ngungu Breastfeeding Group
Kabwe		Katondo	Katondo NHC
Kabwe		Chowa	Chowa Home-based Care
Kabwe		Railway and Kasanda	Katech Entertainment
Luapula	Kawambwa	Mushota RHC	Mushota NZP+
	Samfya	Lubwe Mission Hospital	Lubwe Home-based Care
	Mansa	Mansa Central Clinic	Central Clinic NHC
	Nchelenge	Kabuta RHC	Bumi Bwesu Youth Center
	Kawambwa	Mushota RHC	Mushota NZP+
Northern	Kasama	Location Clinic	St. John's HBC, NOHEP Youth Friendly Center & Kasama Youth Theatre
		Kasama Urban Clinic	Kasama Youth Theater
		Chilubula RHC	Buyantanshi Community Mobilization Group
	Mpulungu	Mpulungu HC	Chazipa Theater Group
	Nakonde	Mwenzu RHC	Mwenzu Nutrition Group
		Chilolwa RHC	Chilolwa HBC & Youth Friendly Corner
		Waitwika RHC	Lolanji Drama Group
		Nakonde HC	St. Mary's HBC
	Chinsali	Chinsali Hospital/Urban Clinic	St. St. John's Community Center & Maluba HBC
	Isoka	Kasoka Clinic	Ambassadors HBC, Society for Women Against AIDS in Zambia, NZP+, Isoka Widows
	Mbala	Mbala Urban Clinic	Mbala House in Distress
North - Western	Solwezi	Mapunga RHC	Mapunga NHC
	Kabompo	Kabompo District Hospital	Mount Carmel HBC
	Chavuma	Chiyeke Health Center	Chavuma HBC (supported M-CT)

4.4.2 Community Volunteers

During the reporting period, 57 lay counselors were trained in basic CT from Copperbelt, Luapula and Central Provinces in three trainings. Most of them have already been certified and placed in the health facilities. The efforts of these lay counselors in supplementing the efforts of HCWs in the facilities have already shown results as seen from the increase in the number of community members counseled and tested. The number of clients counseled and tested for HIV increased by over 10,000 this quarter since last quarter.

ZPCT also trained 73 adherence support workers (ASWs) in adherence counseling. The 73 trained ASWs came from 27 facilities across three provinces namely North Western, Northern and Copperbelt. Soon after training, ASWs are placed in the community to provide adherence support to clients who have requested for such services and for clients who have missed their appointments at the facilities. The neighborhood health committees (NHC) or any other group involved in community sensitization at the facility have been working hand in hand with the ASWs. When the NHC notices that there is poor adherence or clients are not responding to ART they have been informing the ASWs who make client follow up in the community. After each client follow up in the community the ASWs fill in some forms to indicate what they have done in the community. Their work schedule in a week includes spending two working days at the facility and one day in the community.

4.4.3 Referral Network Development

ZPCT provincial staff continues to collaborate with District Health Offices to strengthen existing referral networks and to establish networks in districts where they are non-existent. During the reporting period, ZPCT supported the Kabwe referral network to establish a database that will make it easier to monitor reporting of referral activities. The Kabwe referral network will review the functioning the database and its use to improve reporting systems in the next quarter. This database may be adapted for use by other referral networks.

In Central, Copperbelt and Northern Provinces, NHCs continues to work with health facilities on referral of clients as part of their routine community-based activities. Depending on the distance between the facility and district that NHCs represent, it may not be feasible to have all the NHCS represented at the district level referral network.

In Kasama, health facilities are using the district referral network referral form for internal facility referrals. At the ART clinics, the ZPCT supported data entry clerks have continued to collect referral feedback slips and maintain the outgoing and incoming referral registers. This initiative has been introduced in Mporokoso and Isoka districts. In order to improve the number of HIV-infected pregnant women accessing the ART clinic, even though they are “formally” referred with a network referral form, DEC in collaboration with MCH staff at Kasama General Hospital have introduced a CD4 checklist for a referred clients which indirect tracks clients between MCH and ART service points.

In Mansa, the facility-based referral network established at Chembe RHC is operational. The network members have been referring clients from the community to the facility using the Mansa district-wide referral forms. The facility is documenting all referrals made by the community. Pavern Foundation continues to be one of the partners that is actively involved in supporting the Mansa referral network with required materials including; stationery, printing of referral tools, transport, meeting venue including snacks and drinks for all meetings.

The Mansa referral coordinating committee has recognised the need for the involvement of the Traditional Healers Practitioners Association of Zambia (THAPAZ) Mansa branch, which was not part of the district-wide referral network. The referral network stakeholders have started the dialogue with the provincial and community level practitioners to link clients to referral systems, and learn to make effective use of the expanded network. The stakeholders discussed the training of THAPAZ practitioners in referral system to ensure clients receive better services including HIV blood tests, and facilitating the referral of clients with communicable diseases such as TB and STI that can easily be recognised by traditional healers.

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

Province	# Functional Networks	# in Process of Development	To Be Developed
Central	2 (Kabwe, Mkushi)	2 (Serenje, Chibombo)	0
Copperbelt	5 (Ndola, Chingola, Kitwe, Mufulira, Kalulushi)	3 (Luanshya, Chililabombwe, Lufwanyama)	0
Luapula	4 (Kawambwa, Mansa, Mwense, Samfya)	2 (Nchelenge, Chienge)	0
Northern	3 (Kasama, Nakonde, Mpulungu)	5 (Mpika, Mporokoso, Mbala, Chinsali, Isoka)	1 (Luwingu)
North Western	5 (Kabompo, Zambezi, Mwinilunga, Mufumbwe, Chavuma)	2 (Kasempa and Solwezi)	0
Total	19	14	1

4.4.4 Key Issues/Constraints for Community Mobilization and Referral Networks

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

- Retention of lay counselors: Lay counselors working in ZPCT supported facilities have become competent counselors with the training, practice and supervision. Although these counselors are volunteers, it is clear that they would prefer incentives and a salary if possible. Retention of lay counselors has continued to be challenge as they continue to move to organizations providing monetary incentives. ZPCT continues to train more lay counselors to cover the gaps in HIV CT services.
- Large referral networks: Kabwe district referral network has continued to grow and coordination among members for provision of feedback and collection of monthly reports remains a challenge. The establishment of a referral network database that will help members to monitor reporting of referral activities. The network members will discuss other alternative strategies to improve provision of feedback among members.
- Fear of disclosure of status: In some communities, sensitizing children and their families for referral to services was a challenge because of the fear amongst couples to disclose their HIV status. 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. In addition, parents would sometimes not be found in their homes to give consent. Community purchase orders addressing this issue will be developed next quarter.
- Newly trained counselors: Some new sites in North Western province could not conduct their community mobilization activities during the period because the counselors had just been trained and were still doing their practicum.

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

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

4.5.1 Administration of QA/QI Tools

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

There has been a significant improvement in the number of sites that were supervised following training of more counselor supervisors in the last quarter. The increased mentorship by ZPCT technical staff has been instrumental in sensitizing trained counselor supervisors on their roles and responsibilities. Human resource shortages and staff attrition continue to be a major challenge in sustaining quality gains made in supported facilities. Although a national strategy for quality assurance for CT, based on FHI tools, has been developed, there has been little progress made in operationalizing it. This has been a challenge especially in efforts to implement external QA for HIV testing. ZPCT will continue to engage partners to reinforce the message on the importance of QA for HIV testing and develop practical approaches to institutionalize the national quality assurance strategy for CT services. Other key areas identified for improvement in the next quarter include, ensuring a constant and consistent supply of HIV test kits, strengthening internal and external linkages between routine CT services in the pediatric wards and under five clinics, family planning services and male involvement.

- ART/CC Tools: During this quarter, the ART/CC tools comprising of the ART/CC essential elements checklist, ART facility checklist and ART provider questionnaire was administered in 48 of the 62 ZPCT-supported ART sites established with COP06 funding. The tools have been instrumental in assessing standards in initiating and prescribing ART, monitoring clients and referral practices. Through clinical meetings and increased supervision, provincial staff were able to ensure that all ART sites had functional post-exposure prophylaxis (PEP) programs and were using the correct ARV regimens for PEP cases. However a key issue noted was the lack of a consistent supply of reagents from MSL to conduct liver enzyme (AST, ALT) and renal function (creatinine) tests. Lack of these baseline investigations delayed the administration of the new national ART protocol in affected facilities. Other key issues noted were, stock outs of pediatric ARV suspensions (AZT, D4T), cotrimoxazole suspension and antifungal drugs due to stocks outs at MSL and the presence of untrained pharmacy personnel in the affected facilities.

In order to address these challenges, ZPCT staff will conduct commodity management trainings for newly posted staff, support facilities to order adequate ARVs, strengthen stock management and liaise more frequently with the ARV commodity technical officer at medical store on the availability of ARVs and OI drugs at medical store.

- Pharmacy Tools: The pharmacy tools used by ZPCT are based on the standard operating procedures used at the national level, developed by MSH under RPM Plus. In this quarter, the pharmacy ARV bulk store tool, dispensing and medication counseling process tool and ART pharmacy records tool were administered in 37 of the 62 ZPCT-supported ART pharmacies established with COP06 funding. This set of tools form a cardinal component of assessing and monitoring the quality of ART commodity management. More specifically, the tools were used to assess the general appearance and organization of the ARV bulk store and dispensing areas. In addition, the tools assess the adherence to the national standard operating procedures for pharmacy. The majority of sites continue to have well organized ARV store rooms and dispensing areas. Sites have been supplied with thermometers and temperature tracking charts for monitoring purposes. Weakness identified for improvement included lack of a system for reporting adverse reactions. ZPCT is currently working with MoH to develop a standard approach to reporting adverse reactions to the Pharmacy Regulatory authority.
- Laboratory Tools: The laboratory QA/QI tool used by ZPCT is based on the standard operating procedures used at the national level, developed by MSH under RPM Plus. The health center and hospital laboratories QA/QI tool was administered in 50 of the 65 ZPCT-supported laboratories established with COP06 funding. Some of the key areas assessed were health and safety, equipment and reagents management and use of internal and external quality assurance procedures. Some of the issues identified as areas of weakness include broken down laboratory equipment, lack of regular servicing of lab equipment, laboratories not performing internal quality control runs with each test batch and also lack an external quality assurance system, shortages of

trained staff, erratic supply of FACSCount and serum creatine reagents and EDTA containers by MSL. ZPCT provincial teams will continue to work with the Lusaka office to purchase and supply new commodities not already part of the MOH procurement system, such as supplies for the PCR lab and for anemia testing with the Haemocue equipment. ZPCT provincial staff will liaise with DHMTs and PHO to set up an external QA system by using provincial labs as reference labs for district hospitals and health laboratories. Service agreements with suppliers of the lab equipment have been reached and facilities will be linked with the supplier for prompt repair of any broken down equipment.

- **M&E Tool:** The M&E facility checklist was administered in 97 out of the 218 ZPCT-supported health facilities established with COP06 funds. The tool was used to check for the availability of ART/CC, CT and PMTCT registers and the consistency of data collected.

In general, all data capturing tools were found to be correctly updated and well kept. This was mainly attributed to regular data audits that ensure that ZPCT summation form entries are matching with data from MOH monthly forms. However, there continues to be a shortage of M&E job aids in the facilities to guide facility staff on the data management in all technical areas. ZPCT will ensure that M&E job aids are reproduced and supplied in affected facilities.

4.5.2 Facility Graduation Sustainability Plan

As part of its sustainability plans, ZPCT developed a graduation plan for ZPCT-supported districts to continue to provide good quality services in the absence of intensive external support. 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 will be used as the basis for assessing service quality in the targeted facilities. Graduation tools have been developed and are being used to establish comprehensive graduation plans by the provinces. However, since facilities eligible for graduation must maintain and sustain an acceptable standard in CT, PMTCT, clinical care, ART, pharmacy and laboratory services for a period not less than three to six months before graduation, and with the expansion to additional health facilities in the districts planned for graduation, the process has slowed down.

Taking these developments into consideration, each province aims to graduate at least one district by September 30, 2008. The districts identified for graduation by the end of September, 2008 are The districts are Mkushi (Central Province), Luanshya (Copperbelt Province), Kawambwa and Samfya (Luapula Province, Kasama (Northern Province) and Kabompo (North Western Province). Additional districts will be graduated in the next work plan period. ZPCT will continue to provide financial assistance to graduated facilities to enable the provision of CT, PMTCT, clinical care and ART services with minimal supervision and technical assistance from ZPCT provincial and Lusaka offices.

4.5.3 Key Issues/ Constraints in QA/QI

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

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

could be made in the delivery of care. At subsequent workshops/meetings, technical staff will facilitate productive discussions with peers to help them analyze the results of the data collected.

5. ONGOING CHALLENGES

➤ **Human resources**

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

➤ **Training and support for HCWs**

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

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

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

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

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

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

The MOH, both at the national and provincial level, is 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. In the next quarter, data entry clerks will be hired through the recipient agreements under one-year contracts based on MOH salaries and benefits. The long term status of the data entry clerk positions is being discussed with the MOH.

➤ **Sustainability and quality of services**

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

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

6. PLANS FOR THE NEXT QUARTER

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

Technical Area	Planned Activity
General	➤ Continue to provide human resource support to Lusaka and all provincial offices with a focus on strengthening performance management systems and staff motivation.
	➤ Complete recruitment of 21 vacant positions.
	➤ Complete amendments for 34 recipient agreements that end on or before September 30, 2008.
	➤ Procure additional equipment and furniture for health facilities as identified through amendments.
	➤ Continue to support PHO recipient agreements and support implementation of activities under these recipient agreements.
	➤ Continue to carry out renovations under the new and amended recipient agreements.
	➤ Monitor and support implementation of rural refurbishment for staff housing in Northern and North Western provinces.
	➤ Pilot seminars for ZPCT-supported community volunteers (lay counselors, adherence support workers and PMTCT lay counselors) in Central Copperbelt and North Western provinces.
	➤ Continue with implementation of stigma reduction activities, including training of facility staff to support implementation of stigma reduction exercises at ZPCT-supported health facilities.
	➤ Strengthen the referral system including integrating the review of referral data during PHO and DHMT supervisory visits.
	➤ Conduct internal program review meetings in each of the five provinces.
	➤ Monitor and assist ZPCT provincial offices to be decentralized in selected program, technical and financial areas.
	➤ 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.
	➤ Develop workplan and budget for period beginning October 2008.
	➤ Develop transition/close-out plan by first week of November 2008
CT	➤ Support quality mobile CT activities in all the five ZPCT supported provinces to ensure that CT services are brought to people closer to where they live.
	➤ Implement strategy to monitor and assure quality of mobile CT services.
	➤ Strengthen the provision of CT services to children in care by initiating routine CT for children in additional health facilities and hospitals that have not yet started providing these services across the five ZPCT supported provinces.
	➤ Conduct additional child counseling trainings for both community cadres and health care workers to strengthen routine CT for children.
	➤ Complete refurbishment of CT rooms for children, including distribution of child-friendly materials, with support from CHAI.
	➤ Strengthen routine CT services within the existing TB & STI services in all facilities.
	➤ Continue to mentor facility staff in "opt-out" procedures especially in the newly supported facilities.
	➤ Strengthen linkages to ART, family planning and other services in the facilities.
CT, PMTCT	➤ Provide mentorship to facility staffs in CT/PMTCT quality services provision, with attention paid to facilities with weak performing indicators and new facilities.
	➤ Develop targeted community mobilization activities to increase the numbers of children referred for HIV CT and male involvement in PMTCT.
	➤ Facilitate the roll-out of the national HIV test kits logistics system in the ZPCT supported sites.
PMTCT	➤ Strengthen the provision of more efficacious regimens for PMTCT in all ZPCT supported PMTCT sites.
	➤ Continue to strengthen mother-baby follow-up in the facilities within the MCH structures and ensure that DBS collection and initiation of cotrimoxazole prophylaxis are being done for all HIV exposed babies at six weeks.
	➤ Ensure that the all staff in the ZPCT-supported facilities are oriented to the new

Technical Area	Planned Activity
	<p>under-five cards. Distribute cards to all facilities where staff have undergone orientation in collaboration with the MOH.</p> <p>➤ Continue to strengthen the linkage of PMTCT to family planning and ART services.</p>
PMTCT, Laboratory	<p>➤ Implement and monitor the DBS courier network; in addition, ensure the functionality of the PCR laboratory for early infant diagnosis.</p> <p>➤ 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.</p> <p>➤ Strengthen sample referral system for CD4 analysis to enhance provision of more efficacious ARVs for PMTCT.</p> <p>➤ Continue to follow up on review of SOP outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a biosafety manual, proper use of PCR equipment and criteria for rejection of specimens by PCR laboratory subcommittee for comparison with the other two PCR laboratories in the country.</p>
Laboratory	<p>➤ Develop schedules for ZPCT staff to conduct periodic routine maintenance on laboratory equipment, based on equipment maintenance trainings conducted in previous quarters.</p> <p>➤ Conduct trainings in equipment use and maintenance for users at ZPCT-supported facilities.</p> <p>➤ Review feedback from the users of the Laboratory Management Information System and develop the roll-out plan.</p> <p>➤ Participate in the national quantification exercises for laboratory commodities and HIV test kits to ensure that ZPCT facilities are included in the national commodities' procurement plans.</p> <p>➤ 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.</p>
ART	<p>➤ Provide technical assistance and mentorship to scale-up pediatric ART.</p> <p>➤ Print and distribute the revised SOPs for ART, post-exposure prophylaxis and adherence when approved by the MOH.</p> <p>➤ Support initiation of ART services to all newly expanded sites.</p> <p>➤ Implement fast-tracking of reactive (positive) DBS results from ADCH to the provinces to provide follow-up care and treatment to children.</p> <p>➤ Orient HCWs in ZPCT-supported sites to start generating SmartCare clinical reports (<i>late pharmacy pick-up report, non-standard regimens report, ART failure report and CD4 monitoring report</i>) to assist in review and improvement of quality of care of patients.</p>
ART, Pharmacy	<p>➤ Continue updating the ARV dispensing tool at ART sites where it is already installed, and install in all new ZPCT-supported ART sites once computer sets are delivered.</p> <p>➤ Monitor the implementation of the RUTF (PlumpyNut) 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.</p> <p>➤ Roll-out the usage of pharmaco-vigilance registers to standardize reporting of adverse drug reactions.</p> <p>➤ Monitor the implementation of the ARV logistic system in all ZPCT sites.</p> <p>➤ Participate in the national quantification exercises for ARVs and OI drugs to ensure that ZPCT facilities are included in the national commodities' procurement plans.</p> <p>➤ Contribute to the development of the National HIV/AIDS Commodities Security (HACS) strategic plan together with other implementing partners and the MOH.</p>
TB/HIV	<p>➤ Integrate and strengthen the TB/HIV links through opt-out provider-initiated HIV testing and CD4 testing for all HIV positive TB patients to ensure effective management of co-infections through early and appropriate referral to ART.</p>
M&E	<p>➤ Train DEC's in the interpretation of indicators involving basic Clinical Care terminologies.</p> <p>➤ Conduct a SmartCare QA/QC for aggregated data from all ZPCT supported health facilities.</p> <p>➤ Conduct the semi-annual data audits in all provinces to ensure reliability of data reported and amend reports as needed.</p> <p>➤ Implement a geographical information system (GIS) for use in data management, analysis and presentation.</p> <p>➤ Conduct full M&E training for targeted districts for health information staff at the district level and selected hospitals</p>

Technical Area	Planned Activity
	<ul style="list-style-type: none"> ➤ Hold ZPCT M&E technical update meeting. ➤ Design facility profile data collection template and collect facility profile data from the ZPCT-supported sites. ➤ Identify and assess ZPCT-supported health facilities which will need additional computers and/or DECs as patient load increases.
QA/QI	<ul style="list-style-type: none"> ➤ Administer client exit interviews for ART, pharmacy, and CT services, analyze their results and plan appropriate actions to improve quality based on their findings ➤ Collate and analyze QA/QI data collected to identify support needs for “poor performing” sites. ➤ Identify, encourage, support “high-performing ART sites” to get national accreditation status from the Medical Council of Zambia. ➤ Continue to support the revision and dissemination of national and SOPs for the laboratory, pharmacy, ART, PMTCT and CT services. ➤ Continue to provide technical assistance to the provinces on the systematic and regular use of all QA/QI and graduation plans. ➤ Strengthen procedures to ensure that collected data is analyzed, documented and disseminated on the quarterly basis to determine progress towards achieving benchmarks. ➤ Strengthen feedback mechanisms between provincial offices and supported facilities with the aim of fostering team work and partnerships in implementing a systematic QA/QI system. ➤ Continue to work closely with MOH focal person to institutionalize and develop a National QA/QI system for HIV/AIDS services.
	<ul style="list-style-type: none"> ➤ Six districts across the five provinces have been identified for graduation and plans are being put in place to move this process forward. The districts, which will be graduated by September 30, 2008, are Mkushi (Central Province), Luanshya (Copperbelt Province), Kawambwa and Samfya (Luapula Province, Kasama (Northern Province) and Kabompo (North Western Province).
Procurement	<ul style="list-style-type: none"> ➤ Deliver the ten vehicles for the five provincial field offices ➤ Procure additional motorbikes for DHMTs and health facilities for specimen referral and M&E

**Attachment A: Status of ZPCT-Supported Services and Facilities
as of June 30, 2008**

Summary of Active Sites

Province	ART		PMTCT	CT	CC	Lab
	ART Static	ART Outreach				
Central	6	6	34	34	34	16
Copperbelt	10	23	63	66	66	35
Luapula	16	5	56	66	66	24
North Western	5	3	24	25	25	9
Northern	9	2	27	26	27	14
TOTALS	46	39	204	217	218	98
Total Planned	48	53	206	219	219	111

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

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

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Luanshya	49. Thompson District Hospital		◆		◆	◆		◆	◆ ³	
	50. Roan General Hospital		◆		◆	◆		◆	◆	◆
	51. Mikomfwa HC				◆		◆	◆		◆
	52. Mpatamatu Sec 26 Urban Clinic		❖ ¹		◆		◆	◆	◆	◆
Mufulira	53. Kamuchanga District Hospital	◆		◆		◆		◆	◆ ³	
	54. Ronald Ross General Hospital	◆			◆	◆		◆	◆ ³	
	55. Clinic 3 Mine Clinic			◆			◆	◆		◆
	56. Kansunwa HC			◆			◆	◆		◆
	57. Clinic 5 Clinic			◆		◆		◆		◆
	58. Mokambo Clinic			◆		◆		◆		❖
Kalulushi	59. Kalulushi Government Clinic	◆			◆	◆		◆	◆ ³	
	60. Chambishi HC		◆ ¹		◆	◆		◆	◆	◆
	61. Chibuluma Clinic				◆	◆		◆		❖
Chililabombwe	62. Kakoso District HC	◆		◆		◆		◆	◆ ³	
	63. Lubengele Urban Clinic		◆ ¹	◆		◆		◆	❖	❖
Lufwanyama	64. Mushingashi RHC			◆		◆		◆		❖
	65. Lumpuma RHC	◆ ¹		◆		◆		◆		❖
	66. Shimukunami RHC	◆ ¹		◆		◆		◆	❖	❖
Totals		21	16	42	23	58	8	66	30 active 7 planned	35 active 23 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

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	◆		◆		◆		◆	◆ ³		
	4. Mbereshi Hospital		◆	◆		◆		◆	◆ ³		
	5. Kawambwa HC			◆		◆		◆	◆	◆	
	6. Mushota RHC				◆		◆	◆	◆	◆	
<i>Mansa</i>	7. Mansa General Hospital	◆		◆		◆		◆	◆ ³		
	8. Senama HC		◆ ¹		◆		◆	◆	◆ ³		
	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. Ndoaba RHC				◆		◆	◆		◆	
	32. Nsonga RHC				◆		◆	◆		◆	
	33. Paul Mambilima RHC				◆		◆	◆		◆	
	<i>Mwense</i>	34. Mambilima HC (CHAZ)		◆ ¹		◆	◆		◆	◆	◆
		35. Mwense HC		◆ ¹		◆	◆		◆	◆ ³	
		36. Chibondo RHC						◆	◆		◆
		37. Chipili RHC				◆		◆	◆		◆
		38. Chisheta RHC						◆	◆		◆
		39. Kalundu RHC						◆	◆		◆
40. Kaoma Makasa RHC							◆	◆		◆	
41. Kapamba RHC					◆		◆	◆		◆	
42. Kashiba RHC					◆	◆		◆		◆	
43. Katuta kampemba RHC					◆		◆	◆		◆	
44. Kawama RHC					◆		◆	◆		◆	
45. Lubunda RHC					◆		◆	◆		◆	
46. Lukwesa RHC					◆		◆	◆		◆	
47. Luminu RHC							◆	◆		◆	
48. Lupososhi RHC							◆	◆		◆	
49. Mubende RHC							◆	◆		◆	

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
	50. Mukonshi RHC						◆	◆		❖
	51. Mununshi RHC						◆	◆		❖
	52. Mupeta RHC						◆	◆		❖
	53. Musangu RHC				◆	◆		◆	❖ ²	❖
	54. Mutipula RHC						◆	◆		❖
	55. Mwenda RHC		◆		◆	◆		◆	◆	◆
Nchelenge	56. Nchelenge RHC	◆		◆		◆		◆		◆
	57. Kashikishi RHC	◆		◆		◆		◆	❖	◆
	58. Chabilikila RHC	◆		◆		◆		◆		◆
	59. Kabuta RHC	◆		◆		◆		◆	❖	◆
	60. Kafutuma RHC	◆		◆		◆		◆		◆
	61. Kambwali RHC	◆		◆		◆		◆	❖	◆
	62. Kanyembo RHC	◆		◆		◆		◆	❖	◆
	63. Chisenga RHC		◆ ¹	◆		◆		◆		◆
	64. Kilwa RHC		◆ ¹	◆		◆		◆		◆
	65. St. Paul's Hospital (CHAZ)	◆		◆		◆		◆	◆ ³	
Samfya	66. Lubwe Mission Hospital (CHAZ)	◆		◆		◆		◆	◆ ³	
	67. Samfya Stage 2 Clinic		◆ ¹		◆	◆		◆	◆	◆
Totals		12	10	15	41	29	38	68	16 active 6 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			
<i>Solwezi</i>	1. Solwezi General Hospital	◆		◆		◆		◆	◆ ³	
	2. Solwezi UHC		◆ ¹		◆	◆		◆	◆ ³	
	3. Mapunga RHC				◆		◆	◆	◆	◆
	4. St. Dorothy RHC		◆ ¹		◆		◆	◆	◆	◆
	5. Mutanda HC			◆		◆		◆		◆
	6. Meheba D RHC				◆	◆		◆	◆	◆
	7. Mumena RHC				◆	◆		◆	◆	◆
<i>Kabompo</i>	8. Kabompo District Hospital		◆	◆		◆		◆	◆ ³	
	9. St. Kalembe RHC (CHAZ)		◆ ¹		◆	◆		◆	◆	◆
	10. Mumbeji RHC				◆	◆		◆		◆
	11. Kasamba RHC				◆		◆	◆		◆
<i>Zambezi</i>	12. Zambezi District Hospital		◆		◆	◆		◆	◆ ³	
	13. Zambezi UHC						◆	◆		◆
	14. Mize HC				◆	◆		◆		◆
	15. Chitokoloki Mission Hospital (CHAZ)		◆	◆		◆		◆	◆ ³	
<i>Mwinilunga</i>	16. Mwinilunga District Hospital	◆		◆		◆		◆	◆ ³	
	17. Kanyihampa HC			◆			◆	◆		◆
	18. Luwi Mission Hospital (CHAZ)		◆	◆		◆		◆	◆	◆
	19. Ikelenge RHC				◆		◆	◆		◆
	20. Lwawu RHC				◆	◆		◆		◆
<i>Mufumbwe</i>	21. Mufumbwe District Hospital		◆ ¹	◆		◆		◆	◆ ³	
	22. Matushi RHC				◆		◆	◆		◆
<i>Chavuma</i>	23. Chiyeke RHC		◆		◆		◆	◆	◆	◆
<i>Kasempa</i>	24. Kasempa Urban Clinic		◆ ¹		◆	◆		◆	◆	◆
	25. Nselauke RHC				◆			◆		◆
Totals		2	10	8	16	18	7	25	12 active 2 planned	9 active 10 planned

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

<p>◆ Services have started</p> <p>◆ Services are planned, but not yet started</p> <p>*New facilities are indicated in red.</p>	<p>1 = Outreach ART Site</p> <p>2 = Facility has a laboratory but not yet functional</p> <p>3 = Referral laboratory for CD4</p>
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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	◆			◆		◆	◆	◆ ³	
	2. Kasama UHC				◆	◆		◆	◆	◆
	3. Location UHC		◆ ¹		◆		◆	◆	◆	◆
	4. Chilubula Mission RHC (CHAZ)		◆	◆		◆		◆	◆ ³	
	5. Lukupa RHC				◆		◆	◆	◆	◆
	6. Tazara UHC				◆	◆		◆		◆
Nakonde	7. Nakonde RHC		◆		◆	◆		◆	◆ ³	
	8. Chilolwa RHC				◆		◆	◆		◆
	9. Waitwika RHC				◆		◆	◆		◆
	10. Mwenzo RHC				◆		◆	◆	❖ ²	◆
Mpika	11. Mpika District Hospital	◆		◆		◆		◆	◆ ³	
	12. Mpika HC			◆			◆	◆	◆	◆
	13. Tazara Railway Clinic			◆			◆	◆		◆
	14. Mpepo RHC				◆	◆		◆	❖ ²	❖
Chinsali	15. Chinsali District Hospital	◆			◆	◆		◆	◆ ³	
	16. Chinsali HC				◆		◆	◆		◆
Mbala	17. Mbala General Hospital	◆			◆	◆		◆	◆ ³	
	18. Mbala UHC				◆		◆	◆		◆
	19. Tulemane UHC		❖ ¹		◆	◆		◆	◆	◆
	20. Senga Hills RHC	❖ ¹		◆		◆		◆		❖
Mpulungu	21. Mpulungu HC		◆ ¹		◆	◆		◆	◆	◆
Isoka	22. Isoka District Hospital	◆		◆		◆		◆	◆ ³	
	23. Isoka UHC			◆		◆		◆	❖	❖
Mporokoso	24. Mporokoso District Hospital	◆		◆		◆		◆	◆ ³	
	25. Mporokoso UHC	❖ ¹		◆		◆		◆	❖	❖
Luwingu	26. Luwingu District Hospital	◆		◆		◆		◆	❖	
	27. Namukolo Clinic			◆			❖	◆		❖
Totals		9	5	11	16	16	11	27	14 active 5 planned	14 active 5 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

**Attachment B: ZPCT Training Courses
April 1 to June 30, 2008**

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT*	4/21/08 to 5/3/08	North Western	Kasempa	1	2
			Zambezi	2	3
			Solwezi	4	4
			Mwinilunga	2	3
			Kabompo	2	2
			Chavuma	1	3
		Total	12	17	

*The training included a module on monitoring and evaluation.

Table 2: Basic Counseling and Testing (CT) for Lay Counselors

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT for Lay Counselors*	4/14/08 to 4/27/08	Central	Chibombo	3	4
			Kabwe	7	8
			Mkushi	2	2
			Serenje	3	3
CT for Lay Counselors*	4/20/08 to 5/4/08	Luapula	Mansa	10	10
			Mwense	10	10
CT for Lay Counselors*	5/19/08 to 5/31/08	Copperbelt	Kalulushi	1	2
			Ndola	19	18
		Total	55	57	

*The training included a module on monitoring and evaluation.

Table 3: Basic Child Counseling for HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling*	4/21/08 to 4/26/08	Central	Serenje	2	2
			Mkushi	3	3
			Kabwe	4	4
			Chibombo	3	3
Basic Child Counseling*	5/12/08 to 5/17/08	North Western	Chavuma	1	1
			Kabompo	1	1
			Kasempa	4	4
			Mufumbwe	1	1
			Mwinilunga	1	1
			Solwezi	4	4
			Zambezi	2	2
		Total	26	26	

* These trainings were conducted with funds from Clinton Foundation

Table 4: Basic Child Counseling for Lay Counselors

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling*	4/14/08 to 4/19/08	Copperbelt	Mufulira	1	2
			Kitwe	2	4
			Chingola	2	2
			Ndola	2	5
			Luanshya	1	2
Basic Child Counseling	6/16/08 to 6/21/08	Luapula	Mansa	3	6
			Mwense	2	2
			Kawambwa	2	3
			Samfya	1	1
		Total	16	27	

* These trainings were conducted with funds from Clinton Foundation

Table 5: Counseling Supervision for HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Counseling Supervision	6/9/08 to 6/20/08	Northern	Kasama	3	4
			Mbala	1	3
			Mporokoso	1	1
			Isoka	2	2
			Chinsali	1	1
			Mpulungu	1	1
			Nakonde	1	1
			Luwingu	1	2
		Total	11	15	

Table 6: Prevention of Mother-to-Child Transmission (PMTCT) for HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT*	4/21/08 to 5/3/08	Copperbelt	Chililabombwe	2	3
			Chingola	3	5
			Kitwe	9	11
			Mufulira	1	1
			Ndola	1	2
PMTCT*	5/19/08 to 5/23/08	Central	Kabwe	10	13
			Mkushi	1	1
			Chibombo	3	5
			Serenje	2	3
PMTCT*	6/1/08 to 6/7/08	Luapula	Chiengi	2	4
			Kawambwa	3	5
			Mansa	4	5
			Mwense	2	3
			Nchelenge	1	3
			Samfya	2	5
		Total	46	69	

*The training included a module on monitoring and evaluation.

Table 7: Prevention of Mother-to-Child Transmission (PMTCT) for Lay Counselors

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT	5/18/08 to 5/24/08	Northern	Isoka	2	5
			Kasama	3	4
			Luwingu	1	3
			Mbala	4	4
			Mpika	1	2
			Chinsali	1	1
			Mporokoso	2	2
			Mpulungu	1	2
		Total	15	23	

Table 8: Adherence Counseling for HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Counseling HCWs	3/31/08 to 4/1/08	Central	Chibombo	2	3
			Kabwe	4	8
			Mkushi	2	3
			Serenje	3	4
Adherence Counseling HCWs	4/7/08 to 4/9/08	Luapula	Chiengi	2	3
			Mansa	5	7
			Mwense	2	4
			Nchelenge	4	5
		Total	24	37	

Table 9: Adherence Counseling for Adherence Support Workers (ASWs)

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Support Workers	4/22/08 to 5/2/08	North Western	Chavuma	1	2
			Kasempa	1	2
			Zambezi	1	4
Adherence Support Workers	6/1/08 to 6/13/08	Copperbelt	Kitwe	3	8
			Luanshya	2	3
			Ndola	4	12
Adherence Support Workers	6/1/08 to 6/14/08	Northern	Isoka	1	5
			Mbala	1	4
			Mpika	2	4
			Mporokoso	1	5
			Kasama	1	2
Adherence Support Workers	6/15/08 to 6/26/08	Copperbelt	Chililabombwe	2	6
			Chingola	2	5
			Kitwe	5	11
			Total	27	73

Table 10: Pediatric ART/OIs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Pediatric ART /OIs	4/7/08 to 4/11/08	Copperbelt	Kitwe	7	21
Pediatric ART /OIs	4/28/08 to 5/2/08	Copperbelt	Luanshya	1	3
Pediatric ART /OIs	6/23/08 to 6/27/08	Copperbelt	Chililabombwe	2	3
			Chingola	2	7
			Ndola	5	19
			Total	17	53

Table 11: Laboratory/Pharmacy

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART Commodity Management B	3/31/08 to 4/3/08	Copperbelt Northwestern	Mufulira	1	2
			Kitwe	4	4
			Chingola	2	2
			Luanshya	2	4
			Kalulushi	1	1
			Ndola	4	4
			Solwezi	2	3
			Mwinilunga	1	2
			Zambezi	1	1
			Mufulira	1	1
			Kabompo	1	1
ART Commodity Management B	5/12/08 to 5/15/08	Copperbelt	Chiliabombwe	2	3
			Kalulushi	3	4
			Kitwe	15	18
			Total	40	50

Table 12: Dry Blood Spot (DBS) Collection*

Training Course	Dates	Province/District		Number of Facilities	Number Trained
DBS*	4/29/08	Central	Kabwe	11	17
DBS*	6/10/08	Northern	Mbala	1	3
DBS*	6/10/08	Northern	Mpulungu	1	3
DBS*	6/12/08	Northern	Mporokoso	1	7
DBS	6/19/08	Northern	Kasama	1	8
DBS	6/27/08	Luapula	Kawambwa	3	7
DBS	6/27/08	Northern	Mpika	1	2
			Total	19	47

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

Table 13: Smart Care Software for M&E Staff and Data Entry Clerks

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Smart Care Software	3/31/08 to 4/1/08	Northern	Mpulungu	1	3
DECs Orientation in Data Management	10-11/6/06	Copperbelt	Chingola	3	5
			Chililabombwe	1	1
			Kalulushi	2	2
			Luanshya	3	4
			Mufulira	2	3
			Kitwe	8	10
			Ndola	8	14
			Total	28	42