



Zambia HIV/AIDS Prevention, Care and Treatment Partnership (ZPCT)

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LIST OF ACRONYMS

ADCH	-	Arthur Davison Children's Hospital
ADR	-	Adverse Drug Reactions
ALT	-	Alanine Aninotransferase
ANC	-	Antenatal Care
ART	-	Antiretroviral Therapy
ARTIS	-	Antiretroviral Therapy (ART) Information System
ARV	-	Antiretroviral
AST	-	Aspartate Aninotransferase
ASWs	-	Adherence Support Workers
AZT	-	Zidovudine
BD	-	Beckton-Dickinson
CD4	-	Cluster of Differentiation (type 4)
CDC	-	Centers for Disease Control
CHAI	-	Clinton Foundation HIV/AIDS Initiative
CHAZ	-	Churches Health Association of Zambia
CIDRZ	-	Centre for Infectious Diseases Research in Zambia
CME	-	Continuous Medical Education
CPOs	-	Community Purchase Orders
CT	-	Counseling and Testing
DATF	-	District AIDS Task Force
DBS	-	Dried Blood Spot
DECs	-	Data Entry Clerks
DHOs	-	District Health Offices
DNA PCR	-	Deoxyribonucleic Acid Polymerase Chain Reaction
EID	-	Early Infant Diagnosis
EMS	-	Express Mail Delivery
ESA	-	Environmental Site Assessment
FHI	-	Family Health International
FP	-	Family Planning
GIS	-	Geographical Information System
GRZ	-	Government of the Republic of Zambia
HAART-	-	Highly Active Antiretroviral Therapy
HCP	-	Health Communications Partnership
HCWs	-	Health Care Workers
IQC	-	International Quality Control
IT	-	Information Technology
JSI	-	John Snow Incorporated
KCTT	-	Kara Counseling and Training Trust
LMIS	-	Laboratory Management Information Systems
MCH	-	Maternal and child health
MCZ	-	Medical Council of Zambia
MIS	-	Management Information System
MoH	-	Ministry of Health
MSH	-	Management Sciences for Health
MSL	-	Medical Stores Limited
NAC	-	National AIDS Council
NFNC	-	National Food and Nutrition Commission
NHC	-	Neighborhood Health Committee
OIs	-	Opportunistic Infections
PCF	-	Palliative Care Forum
PCP	-	Pneumocystis Pneumonia
PCR	-	Polymerase Chain Reaction
PEP	-	Post Exposure Prophylaxis
PEPFAR	-	Presidents Emergency Plan for AIDS Relief
PHO's	-	Provincial Health Offices
PITC	-	Provider Initiated Testing and Counseling
PLHA	-	People Living with HIV and AIDS
PMTCT	-	Prevention of Mother to Child Transmission
PRA	-	Pharmaceutical Regulatory Authority
QA	-	Quality Assurance
QC	-	Quality Control
QI	-	Quality Improvement

RA	-	Recipient Agreement
RHC	-	Rural Health Centre
SCMS	-	Supply Chain Management System
SD NVP		Single Dose Nevirapine
SG	-	Scientific Group
SOP	-	Standard Operating Procedures
TA	-	Technical Assistance
TB	-	Tuberculosis
TOT	-	Training of Trainers
TWG	-	Technical Working Group
USAID	-	United States Agency for International Development
UTH	-	University Teaching Hospital
WAD	-	World AIDS Day
WHO	-	World Health Organization
ZNCC	-	Zambia National Counseling Council
ZPCT	-	Zambia Prevention Care and Treatment Partnership

EXECUTIVE SUMMARY

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

This quarter, ZPCT supported implementation of HIV/AIDS services in 219 health facilities in 35 districts in the five target provinces, with 218 of these facilities now reporting results. A detailed list of all ZPCT supported facilities and the services provided are available in **ANNEX A**.

Key activities and achievements for this reporting quarter include:

- CT services are ongoing in 218 of the 219 health facilities, with 54,820 individuals receiving CT services in these facilities.
- PMTCT services were provided in 210 facilities. 35,329 women were provided with PMTCT services (including CT), and 5268 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. 97,488 individuals received palliative care through the 218 reporting health facilities.
- ART services were available in 34 districts supported by ZPCT. It is still to be determined if the site in Milenge District will have the capacity to provide ART services in the future. This quarter a total of 6,971 new clients (including 514 children) were initiated on ART through all 103 ART sites of which 46 are static and 57 are outreach sites. Of the 103 ART sites, 95 sites report independently and eight sites report through larger facilities. By the end of this reporting period 73,665 individuals were receiving ART and of these, 1,093 were children.
- The following training courses were conducted this quarter
 - 39 health care workers (HCWs) from 15 districts of Luapula and Northern Provinces were trained in basic CT
 - 22 HCWs already trained in basic CT, were trained in child counseling
 - 29 community volunteers already trained in basic CT were trained in child counseling through two, six days courses
 - 40 HCWs and 13 community volunteers were trained in couple counseling through a two week course
 - Seven HCWs were trained in counseling supervision through a two week course
 - 38 HCWs and were trained in two, six days courses in provision of PMTCT services
 - 20 community volunteers were trained in provision of PMTCT services through a six days course
 - 61 HCWs were trained in pediatric ART and Opportunistic Infection (OI) management through three, one week courses
 - 91 HCWs were trained in ART and OI management through four two week courses
 - 33 HCWs were trained in stigma reduction training of trainers (TOT) through a three day course
 - 68 HCWs and 90 community volunteers were trained in adherence counseling through a two week course
 - 53 HCWs were trained in equipment maintenance use and ART commodity management for laboratory and pharmacy
 - 138 HCWs were trained in dry blood spot (DBS) collection
 - 50 HCWs were trained in Clinical Training Skills (CTS) through in four ten day courses from Central, Northern, Northwestern and Luapula provinces. Out of 50 HCWS trained three were drawn from non ZPCT supported sited in Central province.

A complete list of all trainings conducted this quarter is outlined in **ANNEX B**.

- 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. These 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 these tools are being entered and analyzed using the CSPro software package.
- Seven districts across the five provinces have been graduated. An additional eight districts have been targeted for graduation by the end of this workplan period, if they meet all required standards. ZPCT and the MoH have been working together to monitor the implementation of the QA/QI tools and offer guidance to facility staff on how best they can improve and provide services of good quality.
- District wide referral networks are fully functional in 27 districts and are in various stages of development in the remaining eight districts. Implementation of referral network activities will be completed in the remaining districts by the end of this workplan period.
- 14 community groups were identified to implement community purchase orders (CPOs) to enable groups to conduct mobilization activities in communities surrounding ZPCT supported facilities. Community mobilization activities are ongoing in all five provinces.
- ZPCT continues to provide assistance and leadership on technical and programmatic issues in all key technical areas at the central level and actively participates in eight national technical working groups, as well as in several ad-hoc implementation groups.

The table below shows service statistics and related data through March 31, 2009 from ZPCT supported sites. It is a summary of key indicators for all ZPCT activities from all supported 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 March 31, 2009)						
	Workplan (1 Oct 08 to 30 June 09)	Quarterly Achievements (1 Jan 09 to 31 Mar 09)			Achievements (1 Oct 08 to 31 Mar 09)	Percent Achievement	Cumulative LOP Achievements (1 May 05 to 31 Mar 09)
	TARGET	FEMALE	MALE	TOTAL			
CT							
Service outlets providing CT	220						218
Persons trained in CT	340			150	350	103%	1,976
Persons receive CT services	85,000	28,203	26,617	54,820	107,043	126%	422,196
PMTCT							
Service outlets providing PMTCT	208						210
Persons trained in PMTCT	200			58	210	105%	1,145
Pregnant women provided with PMTCT services, including CT	69,825	35,329		35,329	71,981	103%	308,563
Pregnant women provided with a complete course of ART prophylaxis	7,820	5,268		5,268	10,283	131%	33,593
Basic Health Care and Support							
Service outlets providing clinical palliative care services	220						219
Service outlets providing general HIV-related palliative care	220						219
Persons provided with OI management and/or prophylaxis	103,000	58,676	38,812	97,488	98,812	96%	108,522
Persons provided with general HIV-related palliative care	103,000	58,676	38,812	97,488	98,812	96%	108,522

Services in Health Facilities Receiving ZPCT Support							
Indicator	Achievements (May 1, 2005 to March 31, 2009)						
	Workplan (1 Oct 08 to 30 June 09)	Quarterly Achievements (1 Jan 09 to 31 Mar 09)					
Persons trained to provide general HIV- related care	250		152	272	109%		1,823
Treatment							
Service outlets providing ART services	101						95
Health workers trained in ART	250		152	272	109%		1,823
New clients receiving ART	14,000	4,197	2,774	6,971	13,760	98%	76,832
Total clients receiving ART	69,000	44,212	29,453	73,665	73,665	107%	73,665
Pediatric Treatment							
Health workers trained in pediatric care	90		61	109	121%		660
New pediatric clients receiving ART	1,104	252	262	514	1,093	99%	5,532
Total pediatric clients receiving ART	4,700	2,481	2,612	5,093	5,093	108%	5,093
TB and HIV services							
TB infected clients receiving CT services	3,395	681	806	1,487	3,044	90%	14,446
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	2,819	551	711	1,262	2,311	82%	10,088
Laboratory Infrastructure							
Number of laboratories with capacity to perform 1) HIV tests and 2) CD4 tests and/or lymphocyte tests	51						81
Number of individuals trained in the provision of lab-related activities	110			43	39%		334
Number of tests performed at USG-supported laboratories during the reporting period: 1) HIV testing, 2) TB diagnostics, 3) syphilis testing, and 4) HIV disease monitoring	456,536		206,658	407,731	89%		1,657,101

1. INTRODUCTION

The Zambia Prevention, Care and Treatment Partnership (ZPCT) works with the Ministry of Health (MoH), the Provincial Health Offices (PHOs), and District Health Office (DHOs) to strengthen and expand HIV/AIDS clinical services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. ZPCT supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral treatment (ART), by implementing program and management strategies to initiate, improve and scale up

prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART programs in all ZPCT supported districts in these five provinces. ZPCT collaborates with the PHOs and DHOs to strengthen service delivery at public sector facilities and to strengthen networks for referral between these and other public sector health services and communities. ZPCT also collaborates actively with other donor agencies and partner organizations to build on, rather than duplicate, HIV/AIDS programming.

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

All activities and related monitoring and evaluation processes and indicators are designed to meet USAID and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) requirements and to be compatible with established government health management information systems (HMIS).

2. 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 are met within the framework of the GRZ plan for scale up of ART programs and in full partnership with the MoH at all levels.

3. ACTIVITIES AND ACCOMPLISHMENTS FOR THE QUARTER

3.1. Program Management

3.1.1. ZPCT Partners

Management Sciences for Health (MSH) is the partner responsible for laboratory and pharmaceutical assistance to provide technical leadership within ZPCT and nationally, in these areas.

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

The CHAZ program officer conducted monitoring and support visits to six of the seven facilities this quarter including; St. Kalemba, St. Paul's, Mambilima, Lubwe, Chilubula, and Luwi to monitor implementation progress on planned activities. Refurbishment works at Chilubula have been completed while St. Kalemba works will be completed in the next quarter. Procurement and distribution of equipment and furniture was completed in all the seven supported facilities.

CHAZ continues to implement ZPCT activities through an amendment to the existing recipient agreement through July 31, 2009. CHAZ is also a principle recipient for HIV services through the Global Fund to Fight AIDS, TB and Malaria and are also rolling out their ART program. ZPCT and CHAZ continue to discuss and resolve overlapping implementation issues.

Kara Counseling and Training Trust (KCTT) is responsible for training CT counselors and counselor supervisors at ZPCT supported health facilities at the district level. The contract between KCTT and ZPCT came to an end on March 31, 2009. KCTT completed the final counselor supervision trainings under this contract, and all reports were submitted.

3.1.2. Facility Support

Recipient agreements

This quarter, 39 District Health Office (DHO) recipient agreements were closed due to the upcoming transition and close out of ZPCT. Essential key activities for the DHOs have been incorporated into the five PHO agreements which were amended in March. In addition to these, seven recipient agreements with the general hospitals also remain open. These remaining agreements will run through July 31, 2009.

Renovations and environmental site assessments (ESAs)

ZPCT is supporting renovations at 180 health facilities across the 35 districts with 149 health facility renovations completed. Currently, 31 health facilities have ongoing renovations. Bills of quantities and tender documents have been developed for all health facilities. The remaining works in these facilities will be completed by end of July, 2009.

During this quarter, ten health facility renovation contracts were signed and renovations were completed in 49 health facilities. ZPCT continues to work closely with the DHOs and facility management in the vendor selection process as well as ongoing monitoring of refurbishments. As renovations are completed, certification of quality and completeness of works is an ongoing follow-up activity in collaboration with the relevant Provincial Buildings Engineer and Ministry of Works and Supply GRZ employees.

ESAs continue to be carried out in facilities undergoing renovations funded by ZPCT, as per USAID guidelines. 158 ESAs have been completed to date and ten of these were completed this quarter.

Rural refurbishment

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

ZPCT, in collaboration with the relevant PHOs, first carried out an assessment to identify the houses for this program. Contractors were jointly selected following the provincial and ZPCT bidding tender and selection processes. 20 contracts were signed and works commenced in 11 facilities in Northern Province and ten in North Western Province. Currently, 48 housing structures out of 52 are being renovated. Of these 48 housing structures, 27 have been completed to date, 12 in Northern Province and 15 in North Western Province. The remaining houses will be completed by July 2009.

Procurement

During this quarter, 14 UPS, five printers, seven computers, one microscope, 66 lockable file cabinets, four adult scales and one stop watch were ordered and delivered. In addition, three motorbikes, 40 fire extinguishers, one distiller, two delivery beds, six examination couches, eight storage cabinets, 16 haemocues and six RPR shakers were ordered and will be delivered to respective facilities once received.

3.1.3. Strategies to Supplement Human Resources at ZPCT supported Facilities

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

HCWs in the facilities: ZPCT continues to work with DHOs and facilities to implement a transport cost reimbursement plan. 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. This initiative is closely monitored to determine its effectiveness and feasibility and to ensure that health facility staff adhere to the policy and procedures.

Lay counselors, PMTCT volunteers and Adherence Support Workers (ASWs): Lay counselors, PMTCT volunteers and ASWs are trained and placed in facilities to relieve some of the burden on HCWs and to improve services and the well being of PLHA.

Data entry clerks (DECs): DECs are hired as FHI employees but following MoH grading levels, and placed at health facilities through funding included in the recipient agreements. To date, 104 DECs have been trained and placed at the ART facilities, in collaboration with the DHOs. This has resulted in improved timeliness and quality of HIV/AIDS data at these sites. To further improve data quality, the DECs assist in the compilation of data from non-ART sites as well.

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

3.1.4. Other Program Management Activities

This quarter, the following program management activities took place:

- Program management/finance workshop: A three-day meeting from February 16 - 18 was held for Provincial Program Managers, Senior Finance Officers, Senior Program Officers and Program Officers. The purpose of the meeting was to review programmatic and financial status of the program, outline procedures to complete remaining activities, analyze spending patterns, work on the PHO amendments and discuss the transition/closeout plan for ZPCT. .
- Human resources: This quarter ZPCT hired 22 staff, they were , Provincial Program Manager and a Clinical Care Officer for Northern Province, a Human Resource Assistant for Lusaka, an Assistant Finance Officer for Luapula Province, four drivers for Kabwe, Solwezi and Ndola and 14 DEC's (four Copperbelt, three Central Province, two Kasama, two Mansa and three Solwezi).
- Staff development: 39 staff were trained this quarter in the following courses:
 - a) Phase II of the accelerated professional development program for 14 technical staff: This is an on-going training program for selected technical staff. The second phase of this training took place in February 2009 and the topics covered were advanced SPSS, research methods, basic biostatistics/ ethics and presentation skills.
 - b) Leadership workshop: Three program staff and seven finance and administrative staff attended a leadership workshop in Lusaka, conducted by the British Council. Topics covered included assumptions of great leadership, communication and chaos, introduction to appreciative inquiry, the art of questioning and facilitating change.
 - c) Project management: Four finance and administrative staff attended training in this area. Contents of this training were project identification and analysis, project appraisal and assessment, financial management and appraisal.
 - d) Online training (eSCART) in antiretroviral therapy: Ten technical staff were enrolled for this three-month ART correspondence course offered by the Institute of Tropical Medicine, Antwerp Belgium.
 - e) Records management course: One finance and administration staff was enrolled for a six-month course in records management.
- Decentralization of provincial offices: ZPCT senior management continue to monitor the provincial offices as they decentralize aspects of program management, technical and financial services. All provinces are decentralized for monthly reports, community purchase orders and hiring of local support staff.
- Information technology (IT) capacity building and system maintenance: The IT team of help desk support officers in the five ZPCT provincial offices and three IT officers in Lusaka provide technical assistance on computer hardware, software, and use of applications. IT staff are funded through FHI G&A.

IT team assisted the M&E unit with upgrading the SmartCare software and will continue to assist to complete the SmartCare upgrade exercise. IT will conclude the review and plan for the telephone systems upgrade. FHI transitioned to a more reliable and affordable global satellite provider and this delayed the installation of Vsat equipment in Kabwe and Ndola. As a result of the switch to a new satellite provider, the IT team conducted surveys in Mansa and Kasama to determine the requirements to continue using the existing Vsat equipment. Next quarter, the IT team will complete installation of the Vsat equipment in Kabwe and Ndola. Recommendations from the surveys to prepare Mansa, Kasama and Solwezi for the new satellite provider changes will also be addressed.
- International Travel:

The Chief of Party travelled to Arlington, USA to attend the annual Global Leadership Meeting organized by FHI. The goal of the meeting was to provide a forum for FHI's leadership team to maximize synergies, optimize strengths and share knowledge on topics relevant to FHI's leadership.

The Deputy Chief of Party (DCOP)/ Director of Programs travelled to South Africa to participate in the USAID/CDC administrative compliance requirements and the financial management of USAID/CDC awards seminars.

The Associate Director, Technical Support and the Senior Clinical Care Officer travelled to Kampala, Uganda to participate in the regional advanced ART training program. The training included educational lectures, case presentations, journal club discussions and clinical placements in different clinical areas, hospitals and institutions.

The Laboratory Manager and one full-time Biomedical Technologist from ADCH attended a two week training in PCR techniques in Thailand. The first training was in nucleic acid testing assays in the prevention and treatment of HIV/AIDS at Armed Forces Research Institute for Medical Sciences (AFRIMS) followed by quality management systems for medical and diagnostic laboratories at FHI Thailand. The trainings also included visits to three medical and research laboratories in Bangkok and Bamrasnaradura where routine viral load and drug resistance tests are performed.

4. NATIONAL LEVEL ACTIVITIES

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

A complete list of meetings and workshops participated by ZPCT staff are listed under **ANNEX C**.

5. TECHNICAL AREAS

Major activities undertaken this quarter in each of the technical components are described below.

5.1 Counseling and Testing (CT)

At the end of this quarter, CT services were being provided in 218 of the 219 ZPCT supported facilities.

CT Services

ZPCT provided technical assistance to HCWs and lay counselors in supported facilities in order to strengthen CT services, maintain a high uptake of testing and collection of same day results and strengthen the linkage to clinical care for ART services. Most of the facilities in all the supported provinces reported a high uptake in general CT services with good linkages to care.

Technical assistance during this period focused on:

- CT services in general, TB, FP and STI clinics: Technical support was provided to HCWs working in the TB, STI and family planning services on the importance of ensuring that all clients and patients accessing these different services are also offered CT services routinely, preferably within the unit or referred to a CT room. The general CT uptake is almost 100%.
- Strengthening CT services for children admitted in care or attending the under-five clinics: Routine CT for children in care is strengthened with on-going mentorship of lay counselors newly trained in child counseling from the five supported provinces and HCWs trained from Luapula and Northern Provinces. The UTH Paediatric Center of Excellence (PCOE) mentorship program mentored 24 lay counselors to strengthen child CT services. .

The number of children tested and received results has increased significantly from 3,926 to 10,467. CT services were extended to parents or guardians of the children using a family centered approach by extending services to other family members.

- Strengthening documentation of CT services provided: ZPCT continued to mentor HCWs and lay counselors working in CT corners on how to accurately document CT services in the appropriate registers, is an ongoing process.
- Strengthening linkages of HIV positive clients to ART: In order to facilitate initiation of ART for eligible clients and provide general care for the rest of the HIV infected patients, linkages to ART services are being improved in all supported facilities. Emphasis is being made to CT

counselors on the importance of referring HIV positive clients to ART using referral forms and also ensuring that feedback is provided to CT counselors.

Community Mobilization and Outreach in CT

During this reporting period, ZPCT collaborated with health facility staff and community groups to encourage people in communities to access HIV/AIDS by conducting community mobilization. A total of 14 Community Purchase Orders (CPOs) were implemented in ten districts across the five supported provinces.

- Mobile counseling and testing (CT) services: CT services were provided to 2,893 people through mobile activities. Mobile CT increases the number of people accessing CT services, including those that do not see the need to go to the clinic to access these services. It has also been observed that the number of men who get tested during mobile CT has increased, 60.3% (1507) of adults tested were men while the women accounted for 39.7% (993). From the 2,893 people that accessed CT services through the mobile services, 393 (13.6%) were children. During this quarter, mobile CT services were provided in eight districts, bringing services closer and more accessible to the community.

A list of community mobile services conducted is provided in **ANNEX D**.

Key Issues /Constraints in CT

- Inconsistency in availability of HIV test kits and supplies: Inconsistent availability of HIV test kits and supplies was the major cause of interruption in CT service provision during this quarter. The shortages were due to difficulties experienced with the logistics systems in most districts. For more than one third of the quarter, most facilities in Northern, North Western and Luapula Provinces had no test kits. In some instances, test kits with short expiry dates were supplied. ZPCT worked with the facility staff to strengthen and improve the ordering systems. The new logistics system had just recently been rolled out to these areas and many facilities will only place orders using the new system early next quarter. Once all the facilities fall into the routine ordering cycles it is hoped that an improvement will be seen.
- Quality assurance/quality control (QA/QC): Re-testing ten percent of all samples tested by lay counselors for the purpose of external QA remained a challenge since lay counselors do not do venipunctures. Lay counselors are encouraged to ensure that 10% of the tested blood samples were being sent for retesting.
- Inadequate space for children: Often the facility is not able to provide the space needed to initiate and expand pediatric services. DHOs and facilities continue to be engaged to find ways to resolve this problem which has caused some facilities to delay initiation of child CT services.
- Long distances from CT to ART sites: In some provinces, HIV positive clients referred from CT to ART sites are unable to access services due to long distances to be covered. ZPCT is working closely with the PHOs / DHOs to initiate and strengthen mobile ART services in affected areas.

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

During this reporting period, PMTCT services were provided in 210 ZPCT supported facilities.

PMTCT Services

A very high uptake for HIV testing for all ANC clients within the PMTCT program in all supported facilities has been maintained by continued operationalization of the 'opt out' strategy. In line with the WHO recommendations and the Zambia national protocol guidelines, ZPCT continued to support provision of quality PMTCT services by strengthening provision of more efficacious ARV regimens for PMTCT, same day testing and results, DBS and CD4 sample referral networks as well as hemoglobin monitoring for HIV positive mothers.

To strengthen the capacities for the facilities to do hemoglobin estimations and initiate HIV positive pregnant women on AZT, 91 additional haemocues were procured for some of the supported facilities across the five provinces. During this quarter, ZPCT embarked on piloting the introduction of the NVP infant-dose pouches in ten facilities across the five provinces for a six months period after which an evaluation will be done. The NVP infant-dose pouches are given to HIV positive

mothers coming from areas that are not close to facilities in order to facilitate dispensing NVP syrup to positive mothers prior to giving birth so that in the event the mother delivered at home, the NVP syrup can be given to the baby.

The areas of focus in PMTCT technical assistance during this reporting period include the following:

- Providing more efficacious ARVs for HIV positive pregnant women: For HIV positive women, the emphasis is in the collection of CD4 samples on the same day as antenatal booking so that all HIV positive pregnant women are able to access CD4 count services. This will facilitate HAART assessment and eligible clients will be initiated on HAART. Provision of triple therapy in labour was being encouraged in line with the national PMTCT protocol guidelines.
- Strengthening mother-baby follow up: This is an ongoing part of the pediatric HIV efforts to follow up on HIV infected mother-baby pairs in the MCH services. HIV exposed babies continue to be identified; have DBS samples collected and Cotrimoxazole prophylaxis initiated at six weeks to prevent Pneumocystis Pneumonia (PCP). During this quarter, 2,161 infants born to HIV positive mothers received Cotrimoxazole prophylaxis. Technical assistance is provided to strengthen mother-baby pair follow-up through the use of PMTCT lay counselors. Infants with positive DNA PCR results are being tracked and referred to ART clinics for further management and initiation of HAART.
- Strengthening documentation: Despite the improvements noted in documenting services in most of the supported facilities this still needs to be strengthened and improved in some of the facilities where it is still poor. Facility staff are encouraged to document PMTCT services they were providing to women.
- Linkage of PMTCT to family planning (FP): Providing technical assistance in linkages to family planning services through counseling during the ANC period and by providing dual protection method at the appropriate time after delivery is an ongoing activity. All women continue to be linked to family planning services within PMTCT. In addition, clients accessing FP services were routinely being offered CT services and sensitized in PMTCT services.

Key Issues/Constraints in PMTCT

- Limited human resource: Staff shortages continue to persist coupled with a high staff turnover through staff rotations, transfers, retirements and deaths. This has contributed to some of the challenges experienced in the implementation of PMTCT services in some ZPCT supported facilities. There are a number of rural facilities manned by support staff.
- Poor male involvement: Although some of the supported facilities have recorded improvement in male involvement in PMTCT services, male involvement has been low. PMTCT service providers continue to be encouraged to promote and strengthen male involvement in PMTCT services by involving the neighborhood health committees (NHC) traditional and other community leaders.

5.3 Antiretroviral Therapy (ART)

During this quarter, the number of health facilities providing ART services reached 103. Natuseko, Tulemane and Senga clinics started providing ART services in this quarter. Initially, the total number of sites targeted for ART support by the end of this workplan period was 101. Two facilities, Muyombe and Kaniki Clinics started ART services at the request of Isoka and Ndola DHOs respectively; bringing the total of ZPCT supported ART sites to 103.

95 of the 103 ART sites are reporting data independently, while eight of the outreach sites are reporting through the static ART sites. Once fully accredited, ART numbers are received and depending on the pace of Medical Council of Zambia these sites will also be reporting independently. A complete list of ZPCT ART sites is available in **ANNEX E**.

ZPCT continues to provide technical assistance and mentoring in all health facilities targeted for ART with a renewed focus on clinical seminars and on-site mentorship as well as quality assurance and quality improvement of services. Quality improvement assessment is expected to get better with the capacity of most facilities to be able to generate SmartCare clinical reports. Expansion of the DBS referral and transportation system and links to the PCR laboratory and the roll out of SmartCare in ART

sites continue to be a priority. ZPCT has been actively involved in preparing high volume ART sites with over 500 clients in all the provinces for assessments which has led to accreditation of 23 sites to support the national program spearheaded by the Medical Council of Zambia (MCZ).

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

ART Services

A total of 6971 new clients (including 514 children) were initiated on antiretroviral therapy this quarter. Cumulatively, a total of 73,665 clients were receiving antiretroviral therapy at ZPCT supported sites, of these 5,093 were children.

ART on-going activities

- Implementation of SmartCare and mentorship in new ART protocols: Implementation and roll out of SmartCare, and mentorship in new ART protocols continues through scheduled technical assistance visits and follow-up. SmartCare is generally progressing well with the exception of a few facilities with electricity supply challenges. By the end of this quarter, all health facilities had started implementing the new national ART protocol guidelines including the new sites.
- Collaboration with home-based care program: ZPCT continues to provide ART outreach support to three home based care centers supported by the Ndola Catholic Diocese, namely, Chishilano in Ndola, Twatasha (TRAKK) in Kitwe, and Iseni in Chingola. Additionally, support continued at the Mpatamatu Home-based Care Centre, in Luanshya.

However this quarter, a significant reduction in patient enrolment on ART was recorded across all the HBC centers, with only 28 patients initiated on ART compared to 119 initiated last quarter. Some of the factors for the decline were: funding to the ART services by the Catholic Diocese significantly reduced for Chishilano and Iseni leading to community mobilization activities being affected due to non-payment of allowances to the community peer educators; provision/supply of food packs from WFP to Catholic Diocese which was acting as an incentive was reduced especially for Iseni and TRAKK; and the opening up of Mindolo clinic by Kitwe DHMT as an ART site with an efficient turn around time for lab services meant that some patients accessed ART services at the new sites instead of the existing nearby TRAKK site. Another challenge is old sites seem to be concentrating on patients coming for reviews with little time for new clients. The total number of clients monitored during this quarter was 1,248.

- Pediatric HIV/AIDS care and treatment: Technical assistance and mentoring to scale-up pediatric AIDS treatment continues with emphasis on routine or provider-initiated CT, timely initiation of ART, and cotrimoxazole prophylaxis. Paediatric HIV officers continue to be innovative to improve delivery of paediatric ART service and broaden entry points and access to HIV care. Pediatric ART/HIV clinics have been set in some facilities like Solwezi Urban Clinic, and Lubuto and Chipokota clinics in Ndola. This addresses the issue of waiting time as the day is dedicated to attending to children only. At Kabwe General Hospital, a family centered approach has been established so that through an index client, other family member/siblings are brought in to care through appropriate CT service to the family. Other focus areas include usage of fixed drug combinations to improve adherence and improved mentorship using the MoH standardized approved tools.
- Orientation visit to Center of Excellence at UTH: As an additional strategy to expand pediatric HIV/AIDS interventions in the provinces, ZPCT supported PHOs and DHOs, hospital managers and facility in-charges to participate in a three day field visit to the UTH Center of Excellence, in Lusaka. The purpose of the visit was to orient managers and clinicians to operationalize comprehensive paediatric HIV care including the implementation of routine CT or provider initiated testing and counseling (PITC) in infants and children. During this quarter, Luapula and Northwestern Provinces benefitted from this program. Central Province will conduct this activity in the next quarter. Sites that participated in this exercise will be assisted to implement the best practices and strategies that were learned.
- Ready-to-Use Therapeutic Food (RUTF) program: Support for the enrolment of eligible infants and children on to the therapeutic food programme (Plumpy Nut/Ready to Use Therapeutic Food) has continued and shown improvements on the nutritional status of malnourished and also HIV infected children. During this quarter, a total of 1,214 children were enrolled and benefitted from this programme. At the point of enrolment, routine counseling and testing is

provided for those children whose HIV status is still. Children who are HIV positive are immediately linked to the ART program for care and treatment and all ten sites were supplied with plumpy nut this quarter. A report from a site in Central Province indicated that some clinicians were prescribing plumpy nut even to adults who were PLHA and found to have signs of malnutrition. However, the currently operational guidelines for plumpy nut that ZPCT has disseminated only caters for children from six months to five years. ZPCT staff will follow up this development to correct the situation.

- Quality assurance/quality improvement (QA/QI): Focus on QA/QI issues continue to be part of technical assistance visits to health facilities. ZPCT ART/Clinical Care QA tools were submitted to the MoH for adoption last quarter. Progress has been made in this process and MoH will be scheduling a pilot orientation of the tools to be done during an upcoming performance improvement approach training session next quarter. ZPCT will be called in to provide technical support and orientation on these tools.
- Accreditation of ART sites: Support to ART sites continued to enable them to meet certain minimum standards so that these sites can officially get accredited by the Medical Council of Zambia (MCZ). This is being done by ensuring all the seven domains assessed for accreditation are satisfied. This activity is complimented by the administration of QA/QI tools. The MCZ has thus far implemented the pilot phase, phases one and two of the accreditation programme with 23 ZPCT supported sites having been accredited out of 60 sites that have been accredited nationally. Next quarter, the MCZ will commence administering the newly revised ART accreditation guidelines
- Standard Operating Procedures (SOPs) for ART, adherence counseling and post exposure prophylaxis (PEP): 3000 ART SOPs were printed. During this quarter, the unit conducted an orientation session for provincial clinical care staff on the use of the SOPs in delivery of quality ART services at facility level. The provincial clinical care team commenced the orientations for HCWs in respective ART sites across the five provinces and simultaneously disseminating copies of the SOPs to facilities and staff.
- Revision of national documents and guidelines: ZPCT continues to be involved in the revision and updating of national guidelines and documents. Last quarter, ZPCT was involved in the revision of the ART accreditation guidelines and certification of ART provider guidelines, revision of other documents including mobile ART, PMTCT and CT guidelines. The opportunistic Infections (OIs) training manual is on going and will be completed by next quarter.
- ART nurse prescriber program: Beginning last quarter, ZPCT together with the General Nursing Council and other stakeholders has been actively involved in this program which will train or orient nurses in prescribing HAART and OI drugs. Review of the training package is happening and the first training will start in the next quarter with the possibility of ZPCT sponsoring some nurses.
- Clinical seminars: ZPCT supported clinical seminars for HCWs for capacity building; discussing case studies and any new developments in HIV care including any critical clinical or programmatic issues related to the implementation of the HIV/ART program.
- Quarterly review meeting: ZPCT continues to actively participate in provincial review meetings where among other issues ART program performance is reviewed, discussed and the way forward is agreed upon.
- Continuous Medical Education (CME): ZPCT continues to support the implementation of CME for HCWs involved in the provision of ART services. This programme is further enhancing teamwork as well as sharing of latest technical information.

Key Issues/Constraints in ART

The following challenges were faced in ART service provision:

- Initiating ART services: ART services started in all the targeted sites at the end of this reporting period. However, some DHOs have continued to start ART services on their own in some of the facilities and then request logistical and technical support including trainings from ZPCT, which is not always feasible as they are not among the targeted sites and within the budgets.
- Patient monitoring/tracing: Adherence support workers (ASWs) are involved in the follow up of patients on ART who have missed appointments or defaulted mainly by using bicycles supplied for this purpose. However, this is not always easy in rural districts where the distances between the facility and villages are vast. Another challenge has been the maintenance of the bicycles

used by ASWs as they sometimes find it cumbersome to follow procedures to access budgeted funds for maintaining these bicycles.

- Baseline and monitoring tests: Stock outs of consumables, reagents, breakdown of laboratory equipment and in some cases lack of qualified laboratory personnel are some of the challenges that are being faced in carrying out baseline tests. In some cases the attitude of clinicians not ordering these tests is a factor while priority for patients initiating ART compared to those being monitored is another. ZPCT is working with MSL at both the central and facility levels to improve communication, quantification and timely delivery of commodities. MSL continues to be engaged in discussions in an effort to improve the ordering and procuring of commodities. Lab equipment vendors (Beckton-Dickinson, Scientific Group and Bio-group) are providing training to facility laboratory personnel and ZPCT lab technical staff to provide them with knowledge so that they are able to operate and service equipment accordingly.
- Administration of ART in children: Even with training, some HCWs still lack confidence initiating children on ART. Therefore more emphasizes continues to be placed on hands-on mentorship of HCWs by the paediatric HIV clinical care officers, enabling the former to be able to initiate ART (on their own) in children with minimal support over time.
- DBS (DNA PCR) results: Some clients are not able to get their DBS results (at appropriate times) in some sites because of the longer turn around time which makes it difficult to give specific appointment dates. Through the use of SmartCare patient locator form, ASWs are able trace some of these clients in their respective communities and facilitate their re-engagement back into care and subsequently treatment.
- PMTCT link to ART: Linkage of HIV positive pregnant women to ART can be challenging when referral laboratory equipment is not functioning or they do not accept samples from non ART sites because they are overwhelmed attending to ART clients with appointments.
- Linking CT and ART: To minimize the number of children who miss out on ART once discharged from the ward and referred to ART clinic, initiation of ART on the wards continues to be encouraged. However, where this isn't feasible, lay counselors assisting these clients (and their guardians) reach the ART clinics through escorted referral, once discharged from the admission wards.
- Community volunteers: In some of the facilities where HCWs have not been oriented to the role of the lay cadres before placement, there have been challenges in the HCWs accepting the lay cadres as important partners in the delivery of HIV service. ZPCT staff continue to work with the facility in-charges and DHO to ensure that HCWs in their facilities understand the role of the different lay cadres placed in the facilities...

5.4 Clinical Palliative Care

ZPCT is working across all health facilities to strengthen and improve palliative care for PLHA. During this quarter, all 219 reporting health facilities targeted for ZPCT assistance in this area provided clinical palliative care services.

Clinical Palliative Care Services

Technical assistance provided in clinical care as part of on-going strategy implementation is highlighted below:

Reporting of adverse drug reactions (ADR): The revised pharrma-covigilance registers, from the Pharmaceutical Regulatory Authority (PRA) will be printed next quarter and made available to the health facilities. In the meantime, HCWs continue to use old registers/forms to document and report adverse drug reactions.

- Diagnosis and management of opportunistic infections: This continues as an on going activity and part of the technical assistance to the health facilities.
- Scale-up cotrimoxazole prophylaxis: Implementation and strengthening of this strategy continues for both adults and children through mentorship, trainings, provision of reference guidelines, and by ensuring consistent supply and availability of cotrimoxazole in facilities.
- Routine CD4 testing of all HIV positive TB patients: As a national recommendation to strengthen TB-HIV collaboration and improve the management of TB-HIV co-infection, HCWs

continue to be mentored on this strategy to ensure the routine conduct of CD4 count tests for all TB patients who also have HIV positive status.

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

Key Issues/Constraints in Clinical Palliative Care

- Referral linkages: Although the implementation of the referral system within and between health facilities and other organizations offering health related services continues to be strengthened, some sites still did not adequately document referrals made between HIV related services for example between TB and CT. This is despite being provided with appropriate referral forms and registers and constant reminders during technical assistance visits.
- Drugs for OIs: Cotrimoxazole prophylaxis and full treatment of OIs as well as drugs for treatment of tuberculosis are readily available in most sites. However, 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. The MoH, through JSI, will work to ensure that there is an adequate supply of the available essential drugs in all public health facilities once the new drug logistic system is implemented.

5.5 Pharmacy Services

Support for pharmacy services is provided to all ZPCT supported health facilities. Ongoing activities include the provision of basic pharmacy equipment, furniture, and renovations to enhance pharmaceutical service delivery, training and technical assistance.

Technical Assistance in Pharmacy

Currently ZPCT provides technical support to 53 sites on the use of the updated ARTServ Dispensing Tool. This tool is used by pharmacy staff to record data of clients on ART, including drug regimen, side effects, and drug dispensing dates and 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 in order to strengthen commodity management information systems in facilities offering ART services. Guidance is provided 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, all facilities offering ART and PMTCT services are encouraged to adhere to the ordering procedures as defined by the National ARV logistics management system and the PMTCT ARV Drug Logistics System for PMTCT only sites.

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

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

The MoH is working in collaboration with CHAI and other partners to mitigate the negative nutritional impact of HIV and AIDS in infants and children by providing nutritional support in the form of RUTF, also known as plumpy nut. The plumpy nut is being provided nationwide to HIV infected infants and children as a supplement to what is locally available and accessible. Through a well established system by MSL, this food supplement is supplied to the ART sites that have been identified as centers for the RUTF/plumpy nut support program. To date, 1214 children have been enrolled on this program and the benefits of nutrition supplement are noted in their therapeutic outcomes as seen in the records of children graduating from this program.

ZPCT coordinates this program in ten sites in the five provinces. Records are maintained well, enrollment criteria are being followed and monthly reports are submitted to MoH and CHAI. The guidelines are still under review as the nutritionist at MoH has been out of the country for sometime. ZPCT continues to collaborate with MoH and other stakeholders to address these issues to ensure uninterrupted supplies to the facilities. However, the issues around securing adequate funds is still pending and plans to further roll-out the program are still on hold.

Guidelines and SOPs

ZPCT continues to distribute and promote the use of the Zambia ART Pharmacy SOPs to the facilities and provides technical assistance to ensure that services are provided according to the guidelines and SOPs. Site specific adaptation of these SOPs is facilitated by ZPCT in line with GRZ policy. However, dissemination of the new ART guidelines and the need for inclusion of the new ARV logistics system procedures and forms are dependent on updated Zambia ART pharmacy SOPs. After discussions with the MoH, the review process was initiated but is still incomplete. There is need for more participation from MoH and the stakeholders in this process. Once complete, the new SOPs will be distributed to all ZPCT static ART sites, and selected outreach ART sites.

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

Key Issues/Constraints in Pharmacy Services

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

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

5.6 Laboratory Services

Currently 111 facilities are being strengthened for laboratory services by providing technical assistance, supporting renovations, equipment maintenance, training and procurement of equipment. 81 of these laboratories are now fully operational with an additional 25 performing minimal lab support. Five

laboratories are still under renovations. Technical assistance is routinely provided to support laboratory needs including additional ART sites (both static and outreach).

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

Technical Assistance in Laboratory Services

Technical assistance in laboratory services is provided to all ZPCT supported health facilities throughout the five target provinces. The specimen referral system for CD4 which was set up to provide laboratory services even in the most outlying areas experienced some challenges during this quarter. The main reasons for this are interrupted equipment functionality, inadequate staffing at referral laboratories and incorrect implementation of the motorcycle policy. Discussions with the equipment vendors to improve the turn-around-time to address equipment breakdowns are ongoing. Efforts are made to ensure that there is optimal use of the motorcycles for the benefit of the specimen referral system.

Special attention is being paid to performing internal quality control when the materials are available and not available. Facilities are encouraged and mentored to prepare their own quality control materials. Follow up on quality concerns has been made with facility laboratories who are being encouraged to send blind samples to testing corners for purposes of monitoring quality.

The national HIV rapid testing TOT was held and plans are underway for the implementation of the National HIV External Quality Assurance program using dry tube specimen panels and the UTH virology laboratory as the referral laboratory. ZPCT will participate in this activity to ensure facility staff are oriented, and that the panels reach the sites and the results are sent back to the referral laboratory.

Technical assistance is ongoing to improve commodity management systems for laboratory services at all ZPCT supported health facilities. Technical assistance in this area focuses on quantification, timely ordering and storage of commodities. In addition, encouragement to all facilities offering HIV testing services to adhere to the ordering procedures as defined by the national systems in use, is ongoing. 80% of ZPCT facilities have been trained in the use of the new HIV test kits logistics management system, while the rest are still using the old system. This has been a challenge in accessing HIV test kits across various facilities in all the provinces as this transition is ongoing.

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

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

Guidelines/SOPs

ZPCT continues to promote and monitor the use of the Zambia ART laboratory SOPs to facilities with laboratories, providing CT, PMTCT and/or ART services. However, in line with the launch and dissemination of the new ART guidelines, the Zambia ART laboratory SOPs were revised in the second quarter of 2008 but are still not yet in circulation. The review of the SOPs was facilitated by MoH who are also responsible for the printing and dissemination of revised SOPs. This process is still in its planning stages and will continue to be followed up next quarter.

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

evaluation of the initial pilot for CD4 and HIV testing. The draft guidelines which were submitted to MoH have still not been reviewed and ZPCT is awaiting feedback.

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

IQC monitoring continues with each test batch. In addition, the PCR laboratory participates in the CDC Proficiency Testing External Quality Assurance Program. Under this program, CDC Atlanta supplies participating laboratories with external control low positive, high positive and negative DBS specimens which are also included in every run with the Roche controls. Ten DBS specimens with unknown HIV status are also sent with every batch and when tested, the results are submitted back to CDC for evaluation. The fourth batch of controls and unknown specimens from CDC were received and tested in February 2009. Results were sent back to CDC before the deadline via email and postal mail. Feedback from CDC showed 100% success.

Specimen Referral System

The specimen referral system which provides support to facilities with limited or no laboratory capacity that ZPCT developed and implemented continues to function well. The system is functional with 111 health facilities referring specimens to 40 facilities with CD4 equipment across 32 districts. ZPCT continues to monitor the usefulness and quality, as well as to strengthen the specimen referral systems. ART sites without CD4 equipment, as well as the outreach sites, also refer specimens to the nearest facility with CD4 equipment. Specimens for baseline and monitoring investigations, chemistry and hematology analysis, are also being referred.

The referral systems in place have been evaluated in Northern, Copperbelt and North Western Provinces. The data has now been analyzed and will be presented to ZPCT technical staff early next quarter. This will provide information on areas needing improvement and appropriate training.

PCR laboratory:

The PCR laboratory continues to serve as a referral center for the five ZPCT supported provinces. During this quarter, all five provinces sent in DBS specimens for analysis. The specimen referral system has been expanded to transport dry blood spot samples from health facilities offering MCH services in the five target provinces to Arthur Davison Children's Hospital for early infant diagnosis of HIV in children less than 18 months old. Samples are being batched at the district hubs and transported by Express Mail Service (EMS) operated by the Zambia Postal Service to ADCH PCR laboratory in Ndola.

MoH conducted a national review of the DBS specimen referral systems to identify gaps to strengthen the systems. The report with the findings of that review are yet to be disseminated but preliminary findings show that the main challenges expressed were long turn-around-time for PCR results and access to DBS blood collection kits from MSL. Once this report is disseminated it will provide insight into the many challenges and will identify the areas needing improvement.

There is a full time laboratory manager to oversee the operation of the PCR laboratory. In addition, there are two full time biomedical scientists working in the laboratory to process and analyze the DBS specimens received from all referring facilities. One of the biomedical technologists was hired by ZPCT and the other has been assigned to the laboratory by ADCH management. The fulltime laboratory staff are assisted by the MoH staff that were trained by ZPCT in PCR laboratory techniques and work in rotating shifts to assist with the processing and analysis of DBS specimens. However, during this quarter, the number of trained staff who have continued to support the ADCH PCR laboratory on a rotational basis had dropped from eight to five. Of the ten rotational staff trained by ZPCT, two have cited other commitments and responsibilities as the reasons they are unable to consistently come in for PCR shifts, one lacked the technical capability to perform PCR tests based on required standards while a fourth has returned to college to pursue further studies. This initially had a negative impact on the provision of services in that it delayed the release of results as fewer staff were available to process the specimens. ZPCT has since revised the schedule so that the available staff provide cover for the absence of the other staff and this has relieved the situation. ZPCT has plans to identify and train five additional MOH staff who will be

able to provide services to the laboratory on a rotational basis. ZPCT has placed two full time data entry clerks to support data management and ADCH placed a trained office assistant at the PCR laboratory to ensure that a clean and safe environment is maintained in the laboratory.

The laboratory has seen a significant increase in the total number of DBS specimens received during this quarter. A total of 2,697 DBS specimens were received from these 177 facilities (33 are non ZPCT supported facilities) in 39 districts (four are non ZPCT supported) in the five provinces. However, of these specimens, only 2,707 were tested of which three hundred and seventy seven (377) were positive. There was a brief stock-out of the Roche PCR kits in the lab during this quarter. The remainder of the specimens will be tested next quarter.

Equipment and Reagents

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

- CD4 count equipment: Many challenges have been faced with CD4 equipment functionality:
 - The FACSCount at Serenje District Hospital still has a malfunctioning printer. BD has placed the order for a replacement for this part and this will be installed as soon as it arrives in the country.
 - The automatic micropipettes for use on the FACSCount at Mporokoso District Hospital developed a fault and the Lusaka BD office could not repair it. ZPCT has commenced procurement of a replacement pipette.
 - The FACSCounts at Solwezi Urban Clinic and Solwezi General Hospital were successfully repaired, but the one at Zambezi District Hospital is still non-functional. It is awaiting a replacement probe which BD has ordered.
 - The FACSCount at Luwingu District Hospital developed a fault but this was successfully repaired and is now working well.
 - The FACSCount at Puta developed a fault and was attended to by the BD engineer. It was determined that spare parts will be needed namely which have been ordered from South Africa for urgent delivery.
 - The FACSCount at Kasama General Hospital has been faulty for a while. BD are currently awaiting spares which have already been ordered from South Africa for. In addition the FACSCalibur at the hospital has also not been working since mid-March as it developed a problem with the software. This will be attended to early next quarter.
 - ZPCT procured 11 additional FACSCounts for placement at supported facilities. These instruments are awaiting installation, training and commissioning by the vendor BD. .
- Chemistry analyzer:
 - There were no major challenges faced with the chemistry analyzers this quarter and breakdowns were minimal.
- Haematology analyzer:
 - The ABX Micros 60 at Mansa General Hospital is old and has been faulty affecting service delivery. The procurement of the ABX Pentra 60 for Mansa has been facilitated and the instrument is expected in-country early next quarter.

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

PCR equipment and reagents:

All the equipment procured for the PCR laboratory at ADCH, except for the backup equipment, distiller, autoclave and purifier, has been installed and is working well. The rest will be installed when the ongoing refurbishments of the room is completed. In addition the Eppendorf centrifuge which was substituted with a backup after developing a fault with the frequency converter last quarter was immediately replaced with the backup centrifuge, which also developed a similar fault. Both machines were shipped out for repairs, one to South Africa and another to Biogroup Zambia, and have since been substituted with three mini-centrifuges in the laboratory.

ADCH PCR laboratory has begun accessing DNA PCR laboratory consumables through the national system. These commodities are procured through CHAI and stored at MSL for onward distribution to the HIV DNA PCR laboratories in the country. The contents of these kits however do not cover the full needs of the laboratory and so ZPCT has continued 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. There has been an erratic supply of reagents and PCR consumables from MSL. Orders for both Roche kits and PCR consumables bundles often have to be followed by telephone to ensure timely delivery. There was a stock out of Amplicor V1.5 reagent kits for three days in February, due to lack of delivery of the correct quantities of the kits as requested. The laboratory has also been experiencing problems with the brand of pipette tips supplied through MSL which are incompatible with the pipettes currently in use.

Key Issues/Constraints in Laboratory Services

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

- Late submission of aggregated data: Submission of aggregated data on HIV related commodities (e.g. HIV rapid test kits) from DHOs to central level has improved while a few DHOs continue to be a challenge. Stock outs of test kits have been experienced in many districts this quarter. ZPCT continues to work with the DHOs to build capacity at the district level to eliminate the delays. Collaboration is ongoing with JSI's USAID/Deliver program to ensure that all ZPCT supported sites offering HIV testing services are trained in the implementation of the HIV test kits logistics system.
- Lack of qualified staff in the facilities: Shortages of trained staff have continued to compromise the quality of service delivery in the facilities. Although the MoH has embarked on posting laboratory graduates to hospitals and health centers, the challenge remains to be the retention of staff in these facilities. Tulemane Health Centre in Mbala district is in the process of having equipment removed from the lab and reallocated because of the unavailability of lab staff.
- Supply of commodities: Overall, there has been a great improvement in the availability of reagents and most facilities are accessing supplies. The Supply Chain Management System (SCMS) project working with the MoH is in the process of planning a roll-out after the evaluation of results from the pilot centers for the new logistics system for laboratory commodities. This is scheduled for early next quarter. However, there has been an erratic supply of Roche DBS blood collection kits from MSL. There was a stock out early in the quarter and various facilities are still finding challenges in accessing this commodity from MSL. ZPCT continues to work with the partners to ensure its facilities are included in the national quantification exercises. In addition, mentoring is provided to district and facility staff on procedures to access the kits from MSL.
- Maintenance of diagnostic equipment: Routine preventive maintenance of diagnostic equipment is an issue and is still not being done consistently even with MoH vendor contracts in place. This results in frequent equipment breakdowns thereby interrupting laboratory testing in the facilities. ZPCT in collaboration with the vendors/suppliers (Biogroup, BD and SG) trained the ZPCT laboratory staff in preventive maintenance to deal with minor faults and only call the engineers for major issues. This has helped to curtail the long turn-around time for equipment maintenance.

PCR Laboratory: ZPCT does not have agreements with vendors to maintain any of the laboratory equipment but bi-annual certification of the class II biosafety cabinets in the laboratory is being done by ZPCT through Air Filter Maintenance Systems of South Africa. During the national PCR laboratories meeting held on 27th June 2008, a suggestion was made to have biosafety cabinets in the three laboratories certified at the same time to reduce costs for individual laboratories.

- Specimen referral systems: Overall, the specimen referral system is working well, but has continued to occasionally be affected by distances and the development of faults on the CD4, hematology or biochemistry instruments. ZPCT continues to find innovative ways of addressing these gaps, including using DHO vehicles to transport specimens and refer samples to where a CD4 instrument is functional.
- DBS specimens: The PCR laboratory is receiving specimens from non-ZPCT supported facilities in the five provinces. ZPCT working with the MoH/CHAI has been training non ZPCT

supported sites in DBS preparation, packaging and transportation. Quality of specimens has improved. The challenge is the transportation system and the receipt of samples without requisition forms. Samples without requisition forms also cannot be logged into the PCR laboratory database because of the missing patient information. ZPCT has continued working with the DHOs concerned to provide training and mentorship to these facilities. In addition, there have been delays in collection of DBS packages from hubs due to issues with EMS. Discussions are still ongoing with EMS, the courier service, to resolve this. ZPCT will continue to utilize EMS and switch to Post Courier, the provider identified by the MoH once the amount pre-paid by ZPCT to EMS is depleted.

6. MONITORING AND EVALUATION (M&E)

6.1. Technical Assistance in M&E

The Strategic Information unit (SI) continues to provide technical support to MoH aimed at strengthening systems or infrastructure for M&E HIV/AIDS programs. During this reporting quarter, a successful upgrade of SmartCare version 3.2.0.3 to version 4.0.2.3 was conducted. As a result of the implementation of SmartCare data quality control pilot exercise conducted at Kabwe Mine Hospital and Pollen Clinic in the fourth quarter of 2008, the SI unit continued scaling up this activity to all health facilities supported by ZPCT. Currently, 64 out of 86 facilities with SmartCare have been upgraded and the updating of records both in SmartCare and ARTIS registers is ongoing. All ART supported sites will start reporting ART and palliative indicators using the SmartCare system by end of June 2009.

ZPCT is working in partnership with the MoH, USAID/JSI Deliver and CDC on the integration of the ARVs dispensing tool, ARV logistics system, and SmartCare has reached an advanced stage. The concept paper for this has been submitted to the MoH permanent secretary awaiting approval. Currently, work is progressing well with the commodity management module being developed.

The unit has also continued providing strategic guidance to other units within ZPCT by ensuring that monthly service statistics data is captured regularly, on time and providing technical support to all DEC's on data management and collection.

Key Issues/Constraints in M&E

During the SmartCare quality control assessment a number of errors suspected to have been made during the data migration process from ARTIS were observed. However, with the inclusion of the Data Quality Report (DQR) tool in the current version of SmartCare, both facility information officers and DEC's are now able to appropriately update and correct observed errors. So far, 84 out of the 95 ART sites are able to report using SmartCare and of that, ten sites have upgraded to the newer version. SmartCare installation is still being rolled out and the data quality control is being conducted in the rest of the facilities and is expected to be concluded by June 2009. The running of SmartCare still remains a challenge. 10% of the supported facilities do not have stable or reliable power supply. Further, a number of clinicians still have difficulties in filling out the SmartCare forms. However, ZPCT has lined up a number of refresher trainings for clinical and data entry staff to address this gap.

6.2. ZPCT Indicators/Results

The table showing the service statistics and related data through March 31, 2009 from ZPCT supported sites is represented in the executive summary. 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 indicated in the table.

7. COMMUNITY MOBILIZATION AND REFERRAL NETWORKS

ZPCT is working with community groups and health facilities to prioritize couples for service provision. Community purchase orders (CPOs) are being developed with community groups to disseminate information to men on the benefits of being tested with their partners, the benefits of PMTCT interventions in keeping their partners and children healthy, and to make 'male involvement' more acceptable and encouraged by the community.

During this reporting period, ZPCT participated in the MEASURE evaluation study of referral systems for HIV which was conducted in four African countries, including; Kenya, Nigeria, Swaziland, and Zambia. ZPCT referral model in collaboration with MoH was picked to highlight the referral systems in the ZPCT supported health facilities in Zambia. Also, the referral network case study for Kabwe was started this quarter by orienting the research assistant who will spearhead focus group discussions and administer questionnaires.

The implementation of community mobilization and referral activities was a challenge this quarter, particularly in rural provinces, due to heavy rains and farming activities. This affected the number of referrals made to HIV/AIDS services.

Health Communication Partnership (HCP) invited stakeholders in February, for a meeting to plan for the health day concert. ZPCT is on the subcommittee for this. The objective of the health day is to use entertainment and art to capture the public's attention in key health issues experienced in Zambia. During the follow-up meetings, it was agreed that the concert will be held at the Lusaka show grounds on May 16, 2009 and the theme is "Rhythm of Life – Arts, Music and Health Festival."

7.1. Working with Local Community Groups

During this reporting quarter, ZPCT collaborated with the health facilities to strengthen community groups in creating awareness of HIV/AIDS clinical care services being provided. Community groups were encouraged to motivate community members to access CT and PMTCT services at facilities within their communities as an important entry point for care and treatment, with emphasis being placed on the referral of children for CT services and male involvement.

Central Province worked with a community mobilization group called KATECH entertainment to mobilize and sensitize couples on HIV/AIDS and the benefits of accessing CT services. This activity was held during the valentine's week in February. KATECH entertainment performed poetry, songs and drama at Mukuyu tree in Kabwe with messages on the benefits of couples accessing CT services. A total of 302 clients were counseled and tested and 20 of them were couples.

In North Western Province, Chief Ntambu of Mwinilunga District led 75 headmen in a meeting held under Luwi mission catchment area, a CHAZ/ZPCT supported facility. The purpose of the meeting was to engage community leaders on the lack of partner notification by community members on HIV status and the implications that this has on care, treatment and services for women and children. Community leaders were oriented to community job aides for HIV, CT and PMTCT to strengthen their ability to disseminate messages in the community and to the referral tools. The trained headmen mobilized and sensitized community members. A total of 337 adults and 113 children were referred, counseled, tested, and received their results on the same day. 25 of these were couples who accessed CT services as a result of the headmen community mobilization. Eight adults that tested positive were referred for CD4 count assessment. In addition, ZPCT implemented 14 CPOs with community groups. A detailed list of CPOs implemented by site is available under **ANNEX F**.

Community Volunteers

During this quarter, 62 lay counselors were trained in basic CT from Central, Copperbelt Luapula, and Northern Provinces through four trainings. This brings the total number of lay counselors trained in the project to 554. Of these total trained, 385 are currently working in the facilities.

90 adherence support workers (ASWs) from Central, Copperbelt, Luapula, and Northern provinces were also trained this quarter bringing the total number of ASWs trained in the project to 521. Of this total, 411 are currently working in the facilities.

ZPCT conducted two community volunteer seminars in Luapula and North Western Provinces. The purpose of the two-day seminar for the community cadres (lay counselors, PMTCT volunteers, adherence support workers) was to allow sharing of experiences, best practices, achievements, and challenges among the volunteers and the facilities, as well as to provide technical updates in their areas of work such as updates on HIV testing, the pediatric ART scale-up, follow-up of pregnant women and infant diagnosis. During the seminars, facility staff and supervisors were invited to participate, share experiences and respond to volunteer queries. Central Province will conduct their seminars next quarter.

Stigma Reduction

During this quarter 17 stigma reduction workshops were facilitated and rolled out at the ZPCT supported health facilities. The participants in these stigma workshops included; HCWs, DECAs, community volunteers (lay counselors, ASWs), and people living with HIV/AIDS. These stigma reduction roll out workshops were implemented in Kabwe (11), Ndola (four), Mwinilunga (one), and Kabompo (one) districts. These trainers will train other HCWs, PLHA and community groups in facilities and communities to conduct exercises to increase awareness on the negative effects of stigma. This is expected to contribute to stigma reduction at the facility and community setting that will lead to increased uptake of services. Participants were selected by respective facilities and the training workshops were based on the regional anti-stigma tool kit.

7.2. Referral Network

ZPCT collaborates with DHOs to facilitate initiation of referral networks in districts where ZPCT is supporting HIV/AIDS care and treatment services. To date, a total of 27 referral networks have been established and eight are in various stages of development. During the reporting period, Kabwe referral network continued data inputting in the established database to monitor and report on referral activities. The functionality of the Kabwe referral network database will continue to be monitored and reviewed to determine whether it can be adapted for use by other networks.

The DHOs lead the referral review meetings. ZPCT works with the DHOs to help strengthen the coordinating units' role in resource mobilization for the functionality of the networks. The network members review the referral systems in place and identify ways to strengthen activities such as provision of feedback and documentation of referrals by community based organizations.

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

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

The Mansa district-wide referral network and the facility based referral network established at Chembe RHC have continued collaborating within their areas of operation. The network members have been referring clients for the required services and are receiving constructive feedback. The Mansa district-wide referral network is facing a challenge in inconsistent meetings because the district referral focal person from DHO has taken up other responsibilities within the Luapula province.

In addition, traditional Healers Practitioners Association of Zambia (THPAZ) Mansa Branch involvement is still critical in enhancing community partnership with traditional healers within the network. A detailed list of the ZPCT supported referral networks is available in **ANNEX G**.

Key Issues/Constraints for Community Mobilization and Referral Networks

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

- **Retention of lay counselors:** Lay counselor's retention continues to be a challenge because some move to other organizations due to monetary incentives. 36 counselors across the five provinces have left. ZPCT continues to train more lay counselors to cover the gaps in HIV CT services.
- **Large referral networks:** Kabwe district referral network continues to grow and coordination among members for provision of feedback and collection of monthly reports remains a challenge. The established referral network database is being used by members to input their referral activities reports. ZPCT is working to refine the referral network database to be able to generate reports.
- **Fear of disclosure of status:** Couples' fear to disclose their HIV status still remains a challenge. It is difficult to target HIV exposed children for pediatric CT in cases where HIV status disclosure by the women to their spouses has not been done, and consent has not been sought

from the parents. PMTCT service providers are continuously encouraged to promote male involvement in PMTCT services through its community mobilization activities which include the involvement of local/traditional leaders and community organizations using community purchase orders.

8. QUALITY ASSURANCE AND QUALITY IMPROVEMENT (QA/QI)

ZPCT continues to strengthen and streamline the QA/QI and district graduation processes. Following the revision of graduation tools last quarter, new graduation tools were implemented in many of the districts targeted for graduation. The transition to using new graduation tools is expected to be completed next quarter.

Re-orientation in QA/QI for staff was conducted in Central, Luapula, Copperbelt and North Western Provinces. This was done through staff refresher trainings in the QA/QI system and graduation strategy held at ZPCT provincial offices. Capacity building was done in CSPro use, QA data management, analysis and reporting. Key steps in QA/QI and graduation processes were revisited. The refresher trainings also presented an opportunity to get feedback and suggestions from staff on successes and challenges encountered in strengthening the QA/QI system. This QA/QI refresher training for Northern Province is planned for next quarter.

Administration of QA/QI Tools

ART/Clinical care tools: During this quarter, ART/clinical care QA tools were administered in 81 ART sites. These tools include the ART facility checklist and ART provider tools. ZPCT provides technical assistance so that national guidelines on ART are implemented in health facilities. This includes baseline and follow up monitoring of critical liver function, renal function, hemoglobin, and CD4 count of HIV positive patients and those initiated on ARVs. The technical assistance also involves implementing recommended national ARV regimens. ZPCT also ensures that national MCZ accreditation guidelines are well understood and implemented in health facilities. This includes re-enforcing the importance of having functional QA/QI committees and regular ART clinical meetings in health facilities.

During this quarter, challenges to providing quality HIV/AIDS services were faced in health facilities across all five provinces. Laboratory result delays and insufficient laboratory monitoring of HIV positive patients are still a challenge. Critical laboratory functions not always routinely conducted at baseline and follow-up are CD4, liver function (liver enzymes) and renal function (creatinine clearance) monitoring. Additionally, a gap in adequately trained pediatric-ART providers exists, as a result, HIV positive children are being attended to by un-skilled health care workers. Therefore, the quality of pediatric ART services provided is compromised. There is a need for more training, mentorship and supervision in this area. Health facilities require more mentorship in establishing regular ART clinical meetings. There still is a lack of functional QA/QI committees. This requires collaboration with MoH in revitalizing and rolling out a national QA/QI system.

PMTCT/CT: This quarter, 159 health facilities administered the tools. ZPCT continues to administer the CT/PMTCT QA tools: facility checklist, CT provider tool, PMTCT provider tool, and counselor reflection form.

All five provinces are still not able to conduct routine QC of HIV tests done (i.e. 10% of all samples tested) at point of service require re-testing at the QC lab to assess accuracy of HIV test results. This is because lay-counselors who perform most of the HIV tests in the absence of HCWs are not eligible to perform venipunctures. Further, collaboration with MoH in developing and rolling out a suitable QC system is needed. Internal and external counselor supervision is not being conducted due to shortage of counselor supervisors within districts. Collaboration with DHOs is needed to assist in building the pool of counselor supervisors. Low male involvement in PMTCT and CT in some provinces also proves to be a challenge.

Laboratory infrastructure: Laboratory QA tools were administered in 64 health facility laboratories. These tools assess the status of lab record management, availability of essential recommended guidelines and reference materials, laboratory safety and space. The tools also assess the status of the sample referral system, lab equipment and quality control systems.

Areas of weakness identified using the QA/QI tools were lack of availability of safety reference manuals and equipment. Laboratory staff not routinely attending clinical/departamental meetings in

several health facilities is another weakness. In the absence of a well established laboratory QC/QA system, conducting routine internal QC external quality assurance activities also remains a challenge in most laboratories. When these activities are conducted, results are not routinely documented. Collaboration with MoH to reinforce its implementation is needed. Mentorship and supervision of laboratory staff is also required. Several provinces report that regular servicing and maintenance of laboratory equipment remains a challenge.

Pharmacy: Pharmacy QA tools were administered in 58 health facility pharmacies. These were the pharmacy bulk store tool, dispensing and medication tool, and pharmacy records tool. The tools assess commodity storage and management, counseling and dispensing procedures, pharmacy record management and space.

Quality gaps were identified in the sites. Some health facilities did not have functional air conditioners in their bulk store rooms. Reasons given included repairs not being done in a timely manor, and health facilities awaiting procurement and installation. Several facilities lacked drug expiry monitoring charts for ARVs. ZPCT will facilitate procurement of these charts and conduct orientation and mentorship of pharmacy staff. All five provinces also reported lack of adverse drug reaction forms in several districts. Collaboration with the Pharmaceutical Regulatory Authority, health facilities and DHO is required to address this. Additionally, collaboration with health facility management is needed to create well established functioning drug and therapeutic committees. Lack of recommended reference materials in most facilities was also reported. In some health facilities, reference materials provided by ZPCT were being removed indiscriminately. There is need to facilitate the provision of these guidelines and SOPs to health facilities and to ensure that once provided, materials remain securely within the facilities.

Monitoring and Evaluation (M&E): The M&E QA tool was administered in 169 sites. It assesses the quality of record management for CT/ PMTCT services and ART and clinical care.

Weak areas reported this quarter were in accuracy and completeness of data recorded in registers in all technical areas assessed and monthly summation forms. In some facilities, ART and PMTCT registers were not updated adequately. Privacy of data was a challenge in facilities where they that do not have lockable file cabinets to store this information securely. ZPCT has continued to provide lockable file cabinets to supported facilities that needed them.

Facility Graduation Sustainability Plan

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

Last quarter, two out of the seven targeted districts were graduated. ZPCT continues to work with PHOs and DHOs in order to graduate the remaining districts targeted for graduation. This quarter, five districts (Kasama, Nakonde, Mpika, and Chinsali) in Northern Province, and (Mkushi) in Central Province were graduated. The target to graduate at least seven districts by the end of this workplan period has been met. However, ZPCT continues to work with the DHOs to identify more districts for graduation and to implement post graduation plans in graduated districts.

Luapula Province: Kawambwa was targeted for graduation this quarter but was not graduated because there were some areas that needed to be improved. The district has since improved in its graduation scores and is now eligible for graduation during the next quarter. Minimal technical assistance in laboratory and pharmacy are required.

Northern Province: Mbala district has been targeted for graduation next quarter if the constraints being faced are rectified. Mbala General Hospital requires mentorship of HCWs to increase the number of liver function test monitoring being performed. Several health centers have experienced challenges in providing quality PMTCT/CT services due to high staff turnover. Finally, refurbishments at Senga health center are ongoing and expected to be completed next quarter.

Copperbelt Province: Chingola, Chililabombwe and Mufulira were targeted for graduation. Several challenges were experienced preventing their graduation. Challenges included inadequate space for laboratory reagent storage and pharmacy staff lacked training in ART management, use and PMTCT

logistic system. Routine child counseling and HIV testing needed to be implemented in all under 5 clinics.

North Western Province: Kabompo and Mufumbwe districts are eligible for graduation. Their graduation scores improved this quarter and so they will both be graduated next quarter.

Central Province: Serenje district has been targeted for graduation next quarter. Areas for improvement in Serenje before the district can be graduated include training new staff in PMTCT.

Key Issues/Constraints in QA/QI

In addition to the constraints outlined in the previous sections, the main challenges faced are:

- Establishing a national QA/QI system for HIV services: The process of having the ZPCT QA Tools adopted by MoH has slowed down this quarter due to inadequate funds and additional time needed to negotiate with MoH on how best to conduct this pilot.
- Lack of national guidelines on implementing QA/QI: Health facilities lack clear guidelines from MoH on how to conduct QA/QI processes. The main concerns were lack of guidelines on forming QA/QI committees at health facility and district level. Guidelines are also required on institutionalizing QA/QI as part of HCWs and managers job description.
- District graduation and sustainability: Adequate tracking of progress towards district graduation at province level proved a challenge this quarter. In spite of clear guidelines on administering graduation tools, the monthly schedule could not be completed in some provinces because responsible staff where conducting trainings. Identifying obstacles to district graduation in a timely manor will remain a challenge until the process of tracking progress towards graduation is implemented smoothly.

9. TRAINING

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

A recent communication from the U.S. Embassy outlined the training per diems allowed to pay for MoH staff has made it more difficult to roll out the trainings, even though these per diems are in line with the FHI rates. The memo also stated that USG supported programs are not allowed to provide facilitation fees to MoH staff. This has decreased the participation in trainings since many of the MoH staff are not willing to conduct training without the facilitation fees. In attempts to address this challenging issue, ZPCT put out a call for private consultants and consulting agencies to conduct training in the areas of CT, PMTCT, ART/OI and clinical care. Challenge is still faced is finding non-GRZ individual consultants and agencies

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

During this quarter, health facility staff attended courses in basic CT (39HCWs), child counseling (22 HCWs), counseling supervision (7 HCWs), PMTCT (38 HCWs), pediatric ART/OI (61 HCWs), DBS 138 HCWs. 14 ZPCT M&E staff and data entry clerks were trained in SmartCare software use and in addition, community volunteers were trained; 29 in child counseling and 20 in PMTCT.

The M&E modules which cover record keeping and reporting for respective technical areas were offered to participants undergoing technical trainings in CT, PMTCT and ART from ZPCT supported health facilities.

10. PLANS FOR THE NEXT QUARTER (April – June 2009)

ZPCT will continue to partner with MoH and other partner organizations at the provincial and district levels and with staff and management in the supported facilities. In addition to starting the process for closing out ZPCT and transitioning to ZPCT II, a summary of the plans for the next quarter (April – June 2009) is given below:

Technical Area	Planned Activity
General	<ul style="list-style-type: none"> ▪ Provide leadership training in the next quarter for staff occupying supervisory positions. ▪ Continue to provide human resource support to Lusaka and all provincial offices with a focus on strengthening performance management systems and staff motivation. ▪ Complete the renovations planned for under the amended recipient agreements. ▪ Complete procurement of pending equipment and furniture for health facilities as specified through the RA. ▪ Continue to support PHO recipient agreements and implementation of activities. ▪ Complete implementation of rural refurbishment for staff housing in Northern and North Western provinces. ▪ Complete the community volunteers seminars (for lay counselors, adherence support workers and PMTCT volunteers) in Central Copperbelt and North Western provinces. ▪ Strengthen the referral network system including integrating the review of referral data during PHO and DHO supervisory visits. ▪ Conduct regular program support visits to monitor program activities in all five provinces. ▪ Collaborate with CHAZ on implementation of project activities and monitor to assure quality. ▪ Monitor activities listed in the transition/close out plan.
CT	<ul style="list-style-type: none"> ▪ Provide technical support and capacity development to the Provincial Offices. ▪ Continue to strengthen routine CT services within the existing TB and STI services in all the supported facilities. ▪ Strengthen linkages to ART, family planning and other services in the facilities. ▪ Strengthen provision of routine CT services to children in paediatric wards and under five clinics. ▪ Attend the Quality Rapid HIV testing training in Ndola and implement the Dry Tube Testing (DTS) for rapid HIV testing External Quality Assurance program to improve on QA/QC. ▪ Follow up supervision of counsellors. ▪ Strengthen QA/QI implementation for CT in the existing sites and initiate. ▪ Participate in the National VCT Day. ▪ Participate in NAC CT Technical Working Group. ▪ Follow up certification of recently trained couple counsellors. ▪ Follow up mentorship program for HCWs and Lay counsellors at UTH.
PMTCT	<ul style="list-style-type: none"> ▪ Support provincial offices with TA and capacity development as needed. ▪ Provide ongoing facility staff mentoring. ▪ Strengthen mother baby pair follow up including initiation of cotrimoxazole at six prophylaxis and DBS sample collection at six weeks for HIV exposed babies. ▪ Strengthen provision of more efficacious ARV regimens for PMTCT to reduce the use of SD NVP and strengthen the linkages to ART services. ▪ Distribute the procured 71 hemocue machines to respective facilities so that HB estimations and administration of AZT to HIV positive mothers can be facilitated. ▪ Collaborate with laboratory and pharmacy unit to strengthen CD4 sample referral. ▪ Continue to strengthen the linkages for PMTCT and family planning services among ANC mothers during the postnatal period especially for HIV infected mothers. ▪ Strengthen the implementation of QA/QI systems for PMTCT services. ▪ Evaluate the use of the NVP infant dose pouch in the ten selected ZPCT supported facilities. ▪ Participate in the MoH PMTCT and Pediatric National Working Technical Group and the DBS/PCR stakeholders' committee. ▪ Strengthen male involvement in PMTCT services. ▪ Hold one PMTCT/CT technical capacity building meeting with provincial staff. ▪ Operationalise DBS sample collection in newly trained sites and strength it in the old facilities. ▪ Train 30 HCWs from three ZPCT supported provinces including Copper belt, Central and Northern in DBS collection, handling and storage through CHAI funds.
PMTCT/ Laboratory	<ul style="list-style-type: none"> ▪ Implement and monitor the DBS courier network. Ensure the functionality of the PCR laboratory for early infant diagnosis. ▪ 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. ▪ Strengthen sample referral system for CD4 analysis to enhance provision of more efficacious ARVs for PMTCT. ▪ Follow up on review of SOP outlining the techniques of DNA extraction from DBS, general laboratory guidelines, a bio-safety manual, proper use of PCR equipment and criteria for rejection of specimens by PCR laboratory subcommittee for comparison with the other two PCR laboratories in the country. ▪ Conduct training in DBS collection, transportation and documentation for Solwezi.
Laboratory	<ul style="list-style-type: none"> ▪ Develop schedules for ZPCT staff to conduct periodic routine maintenance on laboratory equipment based on trainings conducted in previous quarters. ▪ Conduct trainings in ART commodity management for facility laboratory staff. ▪ Conduct trainings in equipment use and maintenance for users at the facilities. ▪ Complete procurement and placement of 11 FACSCounts for CD4 analysis to increase the

Technical Area	Planned Activity
	<p>number of referral laboratories from 40 to 51.</p> <ul style="list-style-type: none"> ▪ Develop indicators and tools for monitoring the sample referral and transportation system and IQC usage and conduct an evaluation of the system. ▪ Continue to monitor the use of the automated systems in laboratories at ART sites to enhance the process of accurate management of data. ▪ Conduct technical review and update meeting with provincial and Lusaka pharmacy and laboratory officers. ▪ Participate in the national quantification exercises for laboratory commodities and HIV test kits to ensure that ZPCT facilities are included in the national commodity procurement plans. ▪ 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. ▪ Three trainings on equipment use and maintenance is scheduled to be conducted by Beckton Dickinson, Scientific Group and Biogroup in Ndola.
ART	<ul style="list-style-type: none"> ▪ Provide technical assistance and mentorship to scale-up pediatric ART. ▪ Orient HCWs on the national SOPs for ART, adherence counseling and PEP. ▪ Distribute the MoH approved SOPs for ART, post-exposure prophylaxis and adherence. ▪ Orient HCWs in supported sites to start generating SmartCare clinical reports to assist in reviewing and improving the quality of patient care. ▪ Ensure all ART sites have ART teams as recommended by the ART accreditation document. ▪ Ensure all ART sites have Quality Assurance committees as recommended by the ART accreditation document. ▪ Ensure all supported ART sites fulfill the requirements of the revised ART accreditation document and receive accreditation. ▪ Administer QA/QI tools in collaboration with health facility staff, DHOs and PHOs. ▪ Ensure all ART sites are able to discuss the QA/QI feedback summary reports together with the SmartCare Clinical reports as part of their QA Committee meetings. ▪ Implement facility based Continuing Medical Education (CME) program in ART sites with MoH and other partners. ▪ Provide technical assistance and mentoring on new national ART protocol guidelines and SmartCare system. ▪ Ensure children eligible for ART are provided with appropriate treatment, including cotrimoxazole prophylaxis. ▪ Strengthen the established comprehensive care centre for the family at ADCH and replicate this model in other high volume hospitals. ▪ Work on the revision of pediatric job aids to include initiation on HAART of HIV infected infants and usage of fixed drug combinations (FDCs). ▪ Ensure the provincial teams plan and implement regular clinical seminars at facility level to improve group mentoring. ▪ Ensure usage of the MoH approved standardized mentorship guidelines to improve pediatric individual health worker mentoring. ▪ Implement fast tracking of reactive (positive) DBS results from ADCH to the provinces to provide follow-up care and treatment to children and share statistics of both HIV positive and negative results from DBS with the PHOs, DHOs and facility staff.
ART, Pharmacy	<ul style="list-style-type: none"> ▪ Continue updating the ARV dispensing tool at ART sites where it is already installed, and install in new ART sites once computer sets are delivered. ▪ Monitor the implementation of the RUTF (Plumpy Nut) program and work with MoH on the completion of the national guidelines. Once finalized, disseminate them. ▪ Conduct trainings in ART Commodity Management for pharmacy staff at the facilities. ▪ Facilitate the printing of Adverse Drug Reaction reporting forms in support of the implementation of the pharmaco-vigilance program at ART centers. ▪ Roll out the usage of pharmaco-vigilance registers to standardize reporting of adverse drug reactions. ▪ Monitor the implementation of the ARV logistic system. ▪ Participate in the national evaluation of the PMTCT Drug Logistics System and collaborate with stakeholders in the re-design and roll-out of the new system. ▪ Contribute to the development of the National HIV/AIDS Commodities Security (HACS) strategic plan together with other implementing partners and the MoH.
TB/HIV	<ul style="list-style-type: none"> ▪ Integrate and strengthen the TB/HIV links through opt-out provider initiated HIV and CD4 testing for all HIV positive TB patients.
Community mobilization and Referral Network	<ul style="list-style-type: none"> ▪ Implement at least 15 CPOs and conduct at least 15 mobile CT activities across the five provinces ▪ Conduct ten stigma orientations for facility staff, clients visiting the facilities and community members and 5 stigma TOT for health care workers. ▪ Conduct quarterly referral network review meetings. ▪ Hold community technical/program capacity building meeting with community mobilization and referral officers. ▪ Complete documentation of ZPCT Kabwe experience in initiating and strengthening district based

Technical Area	Planned Activity
	<ul style="list-style-type: none"> referral networks, including analysis of referral data. ▪ Complete the development and strengthening of referral networks in the remaining eight districts. ▪ Conduct two day community cadre seminars in Central Province.
PMTCT/ Laboratory	<ul style="list-style-type: none"> ▪ Implement and monitor the DBS courier network. Ensure the functionality of the PCR laboratory for early infant diagnosis. ▪ 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. ▪ Strengthen sample referral system for CD4 analysis to enhance provision of more efficacious ARVs for PMTCT. ▪ Follow up on review of SOPs outlining the techniques of DNA extraction from DBS, general laboratory guidelines, 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 countries. ▪ Conduct trainings in DBS collection, transportation and documentation for Solwezi.
Laboratory	<ul style="list-style-type: none"> ▪ Implement schedules for ZPCT staff to conduct periodic routine maintenance on laboratory equipment based on trainings conducted in previous quarters. ▪ Conduct three trainings in ART commodity management for laboratory staff at ZPCT supported facilities. ▪ Conduct one training in equipment use and maintenance for users at ZPCT supported facilities for Biogroup equipment – Sysmex pocH 100-i for haematology and the Humalyser 2000 and the COBAS Integra for chemistry analysis. ▪ Facilitate and coordinate the installation and commissioning of the 11 FACSCounts for CD4 analysis to increase the number of referral laboratories from 40 to 51. ▪ Develop indicators and tools for monitoring the sample referral and transportation system and IQC usage and conduct an evaluation of the system. ▪ Continue to monitor the use of the automated systems in laboratories at ART sites to enhance the process of accurate management of data such as patient information, test profiles, inventory management (the laboratory MIS). ▪ Conduct a technical review and update meeting with provincial pharmacy & laboratory officers and Lusaka office staff. ▪ Continue to participate in the national quantification exercises for laboratory commodities and HIV test kits to ensure that ZPCT facilities are included in the national commodity procurement plans. ▪ Continue to participate in the National Laboratory Services Strengthening Committee to ensure that ZPCT's laboratory strategic approach is in line with the national objectives for laboratory services in Zambia. ▪ Support provincial offices in the implementation of the provincial close-out plans.
M&E	<ul style="list-style-type: none"> ▪ Conduct full M&E training for targeted districts for health information staff at the district level and selected hospitals. ▪ Conduct site visits to provide data management support and ensure data is collected. ▪ Collaborate with MoH and partners to implement and support SmartCare in ART sites. ▪ Provide TA on data management and QA/QC for information systems such as SmartCare, ARV dispensing tool, Lab MIS and PCR. ▪ Conduct ZPCT M&E technical update meeting. ▪ Implement a geographical information system (GIS) for use in data management, analysis and presentation. ▪ Design facility profile data collection template and collect facility profile data from supported sites. ▪ Procure SmartCare forms for ZPCT supported health facilities.
QA/QI	<ul style="list-style-type: none"> ▪ Conduct a QA/QI refresher training for Northern Province. ▪ Review Client Exit Interview tools. ▪ Administer client exit interviews for ART, pharmacy and CT services. Analyze results and plan appropriate actions to improve quality based on the findings. ▪ Provide technical assistance to the provinces on the systematic and regular use of all QA/QI tools and graduation plans. ▪ Collect and analyze QA/QI data to identify support needs for sites performing poorly. ▪ Support ART sites in attaining national accreditation status from the MCZ/ MoH and track ART site progress towards achieving accreditation. ▪ Support the revision and dissemination of national guidelines and SOPs for all technical areas. ▪ Follow up SmartCare QA/QI indicators/ reports with CDC. ▪ Strengthen procedures to ensure that collected data is analyzed, documented and disseminated on a quarterly basis. ▪ Strengthen feedback and evaluation mechanisms to ensure that QA/QI goals are accomplished and concurrent with standard outcomes. ▪ Continue to work closely with MoH to institutionalize and develop a National QA/QI system for HIV/AIDS services. ▪ Provide technical support and move the plan forward for district graduation for all provinces. ▪ Develop simple update/ orientation packages for QA and graduation for ZPCT and MoH staff.

Technical Area	Planned Activity
	<ul style="list-style-type: none"> <li data-bbox="363 181 1394 210">▪ Collaborate with MoH in conducting QC of finger prick test for HIV testing in supported sites. <li data-bbox="363 210 1465 262">▪ Collaborate with other stakeholders to create a forum for exchanging information on best practices and other innovative ideas in QA/QI.

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ANNEX A: ZPCT Supported Facilities by Province

Central Province: ZPCT Supported Services

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					◆	◆		◆		◆

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
Totals		3	13	14	20	29	5	34	16 active 3 planned	23 active 6 planned

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

<ul style="list-style-type: none"> ◆ Services have started ❖ Services are planned, but not yet started *New facilities are indicated in red. 	<ul style="list-style-type: none"> 1 = Outreach ART Site 2 = Facility has a laboratory but not yet functional 3 = Referral laboratory for CD4
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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		◆	◆		◆	◆	◆
	26. Kasompe 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		◆	◆		◆		◆		◆	
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			
<i>Luanshya</i>	49. Thompson District Hospital		◆		◆	◆		◆	◆ ³	
	50. Roan General Hospital		◆		◆	◆		◆	◆	◆
	51. Mikomfwa HC				◆		◆	◆		◆
	52. Mpatamatu Sec 26 Urban Clinic		◆ ¹		◆		◆	◆	◆	◆
<i>Mufulira</i>	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			◆		◆		◆		◆
<i>Kalulushi</i>	59. Kalulushi Government Clinic	◆			◆	◆		◆	◆ ³	
	60. Chambishi HC		◆ ¹		◆	◆		◆	◆	◆
	61. Chibuluma Clinic				◆	◆		◆		❖
<i>Chililabombwe</i>	62. Kakoso District HC	◆		◆		◆		◆	◆ ³	
	63. Lubengele Urban Clinic		◆ ¹	◆		◆		◆	◆	◆
<i>Lufwanyama</i>	64. Mushingashi RHC			◆		◆		◆		◆
	65. Lumpuma RHC	◆ ¹		◆		◆		◆		◆
	66. Shimukunami RHC	◆ ¹		◆		◆		◆	◆	◆
Totals		22	15	42	23	58	8	66	33 active 5 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. Ndoba RHC				◆		◆	◆		◆	
	32. Nsonga RHC				◆		◆	◆		◆	
	33. Paul Mambilima RHC				◆		◆	◆		◆	
	<i>Milenge</i>	34. Mulumbi				◆	◆		◆		◆
	<i>Mwense</i>	35. Mambilima HC (CHAZ)		◆ ¹	◆	◆			◆	◆	◆
		36. Mwense HC		◆ ¹	◆	◆			◆	◆ ³	
		37. Chibondo RHC						◆	◆		◆
		38. Chipili RHC				◆		◆	◆		◆
		39. Chisheta RHC						◆	◆		◆
40. Kalundu RHC							◆	◆		◆	
41. Kaoma Makasa RHC					◆		◆	◆		◆	
42. Kapamba RHC					◆		◆	◆		◆	
43. Kashiba RHC					◆	◆		◆		◆	
44. Katuta kampemba RHC					◆		◆	◆		◆	
45. Kawama RHC					◆		◆	◆		◆	
46. Lubunda RHC					◆		◆	◆		◆	
47. Lukwesa RHC					◆		◆	◆		◆	
48. Luminu RHC							◆	◆		◆	
49. Lupososhi RHC							◆	◆		◆	

District	Health Facility	ART		PMTCT		CT		CC	Lab	Specimen Referral for CD4
		Strengthen	Initiate	Strengthen	Initiate	Strengthen	Initiate			
	50. Mubende RHC				◆		❖	❖		❖
	51. Mukonshi RHC				◆		◆	◆		❖
	52. Mununshi RHC						◆	◆		◆
	53. Mupeta RHC						◆	◆		◆
	54. Musangu RHC				◆	◆		◆		◆
	55. Mutipula RHC						◆	◆		◆
	56. Mwenda RHC		◆		◆	◆		◆	◆	◆
Nchelenge	57. Nchelenge RHC	◆		◆		◆		◆	◆	◆
	58. Kashikishi RHC	◆		◆		◆		◆	◆	◆
	59. Chabilikila RHC	◆		◆		◆		◆		◆
	60. Kabuta RHC	◆		◆		◆		◆	◆	◆
	61. Kafutuma RHC	◆		◆		◆		◆	◆	◆
	62. Kambwali RHC	◆		◆		◆		◆		◆
	63. Kanyembo RHC	◆		◆		◆		◆	◆	◆
	64. Chisenga RHC		◆ ¹	◆		◆		◆		◆
	65. Kilwa RHC		◆ ¹	◆		◆		◆		◆
Samfya	66. St. Paul's Hospital (CHAZ)	◆		◆		◆		◆	◆ ³	
	67. Lubwe Mission Hospital (CHAZ)	◆		◆		◆		◆	◆ ³	
	68. Samfya Stage 2 Clinic		◆ ¹		◆	◆		◆	◆	◆
Totals		12	10	15	45	30	38	68	16 active 5 planned	24 active 35 planned

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

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

North Western Province: ZPCT Supported Services

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

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

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

Northern Province: ZPCT Supported Services

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

ANNEX B:
ZPCT Training Courses
January 1 to March 31, 2009

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic CT-HCWs*	3/2/2009 To 3/14/2009	Luapula	Chiengi	2	2
			Kawambwa	2	4
			Mansa	2	3
			Mwense	4	4
			Nchelenge	3	4
Samfya	2	3			
Basic CT-HCWs*	1/12/2009 To 1/24/2009	Northern	Chinsali	1	3
			Isoka	2	4
			Kasama	4	5
			Luwingu	1	3
			Mbala	1	1
			Mpika	1	1
			Mpulungu	1	1
Nakonde	1	1			
			Total	27	39

*The training included one-day on monitoring and evaluation

Table 2: Basic Child counseling for lay

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling-Lay	3/9/2009 To 3/14/2009	Central Copperbelt Northwestern Northern	Chibombo	1	1
			Kabwe	2	2
			Mkushi	1	1
			Kitwe	1	1
			Ndola	1	1
			Chavuma	1	1
			Solwezi	2	2
			Isoka	1	1
			Luwingu	1	1
			Mbala	1	1
			Mpika	2	2
Basic Child Counseling-Lay	2/23/2009 To 2/28/2009	Luapula	Chiengi	2	2
			Kawambwa	1	1
			Mansa	4	5
			Mwense	3	3
			Nchelenge	1	2
Samfya	2	2			
			Total	27	29

Table 3: Basic Child Counseling for HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Basic Child Counseling-HCWs	1/19/2009 to 1/24/2009	Northwestern	Chavuma	1	1
			Kabompo	1	2
			Kasempa	1	1
			Mufumbwe	1	3
			Mwinilunga	1	1
			Solwezi	1	2
			Zambezi	2	2

Basic Child Counseling-HCWs	3/2/2009 To 3/7/2009	Northern	Isoka	1	1
			Kasama	2	4
			Luwingu	1	1
			Mbala	2	2
			Nakonde	2	2
			Total	16	22

Table 4: Couple Counseling HCWs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Couple Counseling HCWs	1/26/2009 To 2/6/2009	Central	Chibombo	5	5
			Kabwe	9	9
			Mkushi	3	3
			Serenje	3	3
Couple Counseling HCWs	2/16/2009 To 2/27/2009	Northern	Chinsali	1	1
			Isoka	2	2
			Kasama	4	5
			Mbala	4	4
			Mpika	2	2
			Mporokoso	1	1
			Mpulungu	1	1
Nakonde	3	3			
			Total	39	40

Table 5: Couple Counseling for Lay

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Couple Counseling Lay*	3/16/2009 To 3/21/2009	Central Copperbelt Luapula Northwestern	Mkushi	1	1
			Chililabombwe	1	1
			Kalulushi	1	1
			Kitwe	3	3
			Ndola	3	4
			Mansa	1	1
			Nchelenge	1	2
			Mufumbwe	1	1

*1 HCW was trained in this training

Table 6: Counseling Supervision

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Counseling Supervision	1/12/2009 To 1/23/2009	Copperbelt	Chililabombwe	1	1
			Kitwe	3	3
			Ndola	3	3
			Total	7	7

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT-HCWs*	3/08/2009 To 3/15/2009	Central Copperbelt Luapula Northwestern Northern	Kabwe	2	3
			Serenje	1	1
			Chililabombwe	1	2
			Chingola	1	1
			Kitwe	1	1
			Mufulira	2	4
			Mansa	1	2
			Mwense	1	1
			Solwezi	1	1
			Zambezi	1	1

			Mbala	2	3
PMTCT-HCWs*	1/11/2009 To 1/17/2009	Copperbelt	Chingola Kalulushi Luanshya Mufulira Ndola	5 2 2 2 6	6 2 2 2 6
			Total	31	38

*The training included one-day on monitoring and evaluation

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

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT for Lay Counselors	3/15/2009 To 3/21/2009	Central Luapula Northwestern	Chibombo	2	2
			Kabwe	1	1
			Mkushi	1	1
			Serenje	4	4
			Chiengi	1	2
			Mwense	1	1
			Nchelenge	3	3
			Kabompo	1	1
			Kasempa	1	1
			Mwinilunga	2	2
			Solwezi	2	2
		Total	19	20	

Table 9: Dry Blood Spot (DBS) Collection

Training Course	Dates	Province/District		Number of Facilities	Number Trained
DBS	2/26/2009	Central	Mkushi	2	4
			Serenje	2	5
DBS	2/24/2009	Central	Chibombo	8	8
			Kabwe	12	12
DBS	3/31/2009	Central	Kabwe	1	5
			Mkushi	2	6
DBS	3/11/2009	Copperbelt	Kitwe	1	2
			Ndola	10	23
DBS	2/24/2009	Northwestern	Kabompo	2	4
			Kasempa	2	2
DBS	2/24/2009	Northwestern	Mufumbwe	2	2
			Solwezi	5	7
DBS	2/17/2009	Northwestern	Zambezi	1	4
DBS	2/18/2009	Northwestern	Zambezi	1	4
DBS	2/19/2009	Northwestern	Chavuma	1	4
DBS	2/26/2009	Northwestern	Mwinilunga	4	9
DBS	3/16/2009	Luapula	Mansa	5	10
DBS	3/27/2009	Luapula	Kawambwa	3	5
DBS	3/30/2009	Luapula	Mwense	6	10
DBS	3/30/2009	Luapula	Nchelenge	5	7
DBS	3/30/2009	Luapula	Samfya	2	5
			Total	77	138

** Some of these trainings were supported with funding from the Clinton Foundation HIV/AIDS Initiative.

Table 9: ART/OIs Pediatrics

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs Pediatrics	2/23/2009 To 2/27/2009	Central	Chibombo	2	2
			Kabwe	8	8
			Mkushi	2	2
			Serenje	2	2
ART/OIs Pediatrics	3/16/2009 To 3/20/2009	Central	Chibombo	3	3
			Kabwe	4	7
			Mkushi	2	3
			Serenje	2	2
ART/OIs Pediatrics	3/09/2009 To 3/12/2009	Luapula	Chiengi	1	1
			Kawambwa	1	1
			Mansa	1	9
			Mwense	3	3
			Nchelenge	3	3
			Samfya	2	3
ART/OIs Pediatrics	1/11/2009 To 1/16/2009	Northwestern	Chavuma	1	1
			Kabompo	2	3
			Kasempa	1	2
			Mufumbwe	1	1
			Mwinilunga	2	2
			Solwezi	1	1
			Zambezi	2	2
			Total	46	61

Table 10: ART/OIs

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs*	2/15/2009 to 2/20/2009	Copperbelt Northern	Ndola	1	20
			Isoka	1	1
			Kasama	2	5
			Mporokoso	1	1
ART/OIs*	3/16/2009 to 3/21/2009	Copperbelt	Chingola	1	1
			Kitwe	3	23
			Luanshya	1	1
			Mufulira	2	2
ART/OIs*	2/09/2009 to 2/20/2009	Northwestern	Chavuma	1	2
			Kasempa	1	2
			Mufumbwe	1	2
			Mwinilunga	1	2
			Solwezi	5	6
			Zambezi	2	3
ART/OIs	2/09/2009 To 2/14/2009	Copperbelt	Ndola	1	20
			Total	24	91

*The training included one-day on monitoring and evaluation

Table 12: Adherence Counseling for Adherence Support Workers

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Support Workers	2/17/2009 To 2/28/2009	Central	Chibombo	3	8
			Kabwe	4	8
			Mkushi	3	4
			Serenje	2	5
Adherence Support Workers	1/11/2009 To 1/23/2009	Copperbelt	Chililabombwe	2	3
			Chingola	4	7
			Kalulushi	2	2
			Kitwe	9	9
			Mufulira	2	4
Adherence Support Workers	2/22/2009 To 2/14/2009	Northern	Chinsali	1	1
			Isoka	1	3
			Kasama	3	5
			Luwingu	1	2
			Mbala	1	1
			Nakonde	1	3
Adherence Support Workers	2/15/2009 To 2/26/2009	Luapula	Chiengi	1	2
			Kawambwa	2	5
			Mansa	3	8
			Mwense	2	2
			Nchelenge	2	3
			Samfya	2	5
			Total	51	90

Table 13: Adherence Counseling for Health Care Workers

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence HCWs	3/22/2009 To 3/25/2009	Central	Chibombo	2	2
			Kabwe	5	8
			Mkushi	2	2
Adherence HCWs	2/24/2009 To 2/25/2009	Northwestern	Kabompo	1	1
			Mufumbwe	1	1
			Solwezi	3	8
Adherence HCWs	2/10/2009 To 2/11/2009	Copperbelt	Chingola	2	3
			Kitwe	5	7
			Mufulira	1	1
Adherence HCWs	2/10/2009 To 2/13/2009	Copperbelt	Luanshya	2	4
			Ndola	4	7
Adherence HCWs	29/03/2009 To 31/04/2009	Luapula	Chiengi	1	2
			Kawambwa	1	1
			Mansa	3	4
			Mwense	1	1
			Nchelenge	2	2
			Samfya	2	2

Adherence HCWs	3/22/2009 To 3/25/2009	Northern	Chinsali	1	2
			Isoka	2	2
			Kasama	2	3
			Luwingu	1	1
			Mbala	1	1
			Mporokoso	1	1
			Mpulungu	1	1
			Nakonde	1	1
			Total	48	68

Table 14: Stigma Reduction

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Stigma Reduction	16/03/2009 To 17/03/2009	Northwestern	Mwinilunga	2	13
Stigma Reduction	19/03/2009 To 20/03/2009	Northwestern	Kabompo	1	20
			Total		33

Table 15: Laboratory/Pharmacy

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Equipment Use & Maintenance	2/3/2009 To 2/5/2009	Central Copperbelt Northwestern Northern	Kabwe	1	1
			Mkushi	1	1
			Serenje	1	1
			Chililabombwe	1	1
			Chingola	1	2
			Kitwe	2	2
			Luanshya	2	4
			Ndola	4	1
			Kabompo	1	1
			Mwinilunga	1	2
			Kasama	2	1
			Mbala	1	
			Equipment Use & Maintenance	2/15/2009 To 2/19/2009	Copperbelt
Chingola	2	2			
Kalulushi	1	1			
Kitwe	3	3			
Luanshya	2	2			
Mufulira	2	2			
Ndola	4	6			
ART Commodity Management A for Lab and Pharmacy	10/03/2009 To 12/03/2009	Northwestern	Chavuma	1	2
			Kabompo	2	3
			Kasempa	2	3
			Mwinilunga	3	3
			Solwezi	3	4
			Zambezi	2	3
			Total	46	53

ANNEX C: Meetings and Workshops

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

Date	Technical Area	Meeting/Workshop/Training
March 20, 2009	Program management	<u>NAC HIV/AIDS information services visioning</u> : a stakeholders meeting was held at Mulungushi international conference centre. The purpose of this meeting was to discuss the current status, and future of HIV/AIDS information services in Zambia. The meeting also shared findings from the study visit to Ethiopia AIDS resource centre undertaken by NAC staff. A partner mapping exercise was also conducted and a draft vision statement was agreed upon. A report will be generated for all stakeholders.
February 28, 2009	PMTCT/Clinical Care	<u>Zambia Medical Association (ZMA) HIV/AIDS, TB, ART and PMTCT scientific seminar</u> : this meeting was organized by ZMA and was held at Cresta Golfview, Lusaka to provide updates to HCWs involved in HIV/AIDS, TB, ART and PMTCT. Participants were drawn from the public and private sectors and included students from the School of Medicine at Ridgeway campus.
February 27, 2009	PMTCT	<u>Official launch of the PMTCT national protocol guidelines and the national PMTCT health worker training package</u> : this meeting was held at Ndeke house grounds, MoH. The deputy minister of health officially launched the national protocol guidelines and the training package. At the same meeting, a vehicle from WHO procured through the CIDA grant for the PMTCT program was handed over to the MoH, PMTCT program.
February, 19-20, 2009	PMTCT	<u>Continuous Medical Education (CME) update course for ART providers</u> : This meeting was organized by JHPIEGO and was held at Protea Hotel in Chisamba. The workshop was called to identify and produce PMTCT modules for recording on DVD/CD for the ART CME update course for ART providers.
February 19, 2009	PMTCT	<u>Validation of ART, VCT and PMTCT sites meeting held at Gonde lodge</u> : this meeting was organized by NAC to try and develop a database (national directorate) for HIV and AIDS service sites as well as map cooperating partners that are providing support in various provinces. The purpose was to verify sites offering PMTCT, VCT, ART, and TB/STI and confirm what services are being provided by each site in respective provinces.
January 29, 2009	General	<u>Half day consultative meeting on prevention (microbicides and pre-exposure prophylaxis) research in Zambia</u> : This meeting was held at the Intercontinental Hotel in Lusaka. It was organized by the NAC in collaboration with the MoH, FHI and the Centre for Infectious Disease Research in Zambia (CIRDZ) to provide opportunities for technical persons to exchange information and obtain technical updates on HIV prevention research from local and international speakers. During the meeting it was reported that the efficacy of microbicides was said to be about 40% to 60% and should be promoted as back methods only for prevention
February 2 nd – 6 th , 2009	Clinical care	<u>Food By Prescription (FBP) training workshop</u> : this workshop focused on inpatient and outpatient management of severe and moderate malnutrition. It was organized by CRS who intend to partner with ZPCT in implementing the FBP activity at two of ZPCT supported sites in Copperbelt (Ndola Central Hospital) and Central (Serenje District Hospital).
February 12, 2009	ART	<u>Paediatric HIV subcommittee</u> : this meeting looked at a number of cross cutting issues including plans for 2009; HIV testing kits; roll out of new HMIS software (this will be able to capture data in a disaggregated manner into specific age bands for children initiated on ART); utilization of paediatric ARV fixed dose formulations(FDCs); community outreach programmes for paediatric HIV by UTH Centre of Excellence to prisons; paediatric TB/HIV activities; and evaluation and harmonization of RUTF programmes among MoH and partners.

Date	Technical Area	Meeting/Workshop/Training
February 13, 2009	ART	<u>Review of ART accreditation guidelines:</u> this meeting was for final review of ART accreditation guidelines and tools of 2006, and guidelines for certification of ART providers. This revision of the guidelines was prompted by feedback from the assessors and other stakeholders following the implementation of the programme/guidelines. Participants included staff from ZPCT, HSSP, MoH (PHOs and DHMTs), Medical Council of Zambia, CIDRZ WHO and private practitioners.
February 24 th and 25 th , 2009	ART	<u>MoH planning meeting on treatment supporters:</u> this meeting in Ndola was to discuss roll out plans for treatment supporters at national level. MoH has resources to conduct trainings in six pilot districts. The meeting reviewed current community ART to identify the most suitable training packages. Three districts would like to use the ZPCT's ASW training package.
February 25, 2009	Clinical Care	<u>Palliative care forum:</u> this monthly meeting was to discuss the signed MoU between MoH, cancer hospitals and hospices. Discussions included how these institutions/organizations will collaborate and coordinate in caring for people with chronic illnesses especially HIV/AIDS and cancer. The need to focus on nutrition assessment and counseling in the community (as this is where beneficiaries are or come from) was highlighted. In addition, the meeting discussed preparations for the Implementers meeting to take place in Namibia in June, 2009.
February 26, 2009	ART	<u>CIDRZ/ZPCT clinical care and ART meeting:</u> the meeting was held between CIDRZ and ZPCT ART units as a follow on from the meeting held previously to discuss both the common and different approaches to HIV/AIDS and ART programme implementation. The initial meeting resolved and recommended initiation and promotion of collaboration between ZPCT and CIDRZ (sharing experiences, common/different approaches, innovation, strategies and the way forward) through formation of joint teams to work together on ART/Clinical care, PMTCT, research, programme implementation and strategic information. The follow on ART meeting discussed training activities and capacity building among HCWs as well as staff from the two organizations.
February 27, 2009	ART/Pharmacy	<u>ARY drug forecast meeting:</u> this was a quarterly review meeting to review the long term 2008 – 2015 ARV drug forecast report (forecast conducted October 2008).
March 17, 2009	ART	<u>JICA's integrated HIV/AIDS care implementation project:</u> JICA and MoH held this meeting to inform participants on the successful implementation of the 3 –year project (2006 -2009) in Chongwe and Mumbwa. This was a mobile ART outreach programme (similar to ZPCT's ART outreach programme). JICA was wrapping up the project by 31 March 2009.
March 18, 2009	Clinical Care	<u>Palliative care forum monthly update meeting:</u> this meeting was hosted by Health Communications Partnership (HCP). Key issues discussed included the programme (by Land O' Lakes and local dairy processors) to fortify locally and readily available dairy products as well as culturally acceptable and affordable foodstuffs to improve their nutritional value for use as nutritional supplements and not for therapeutic purposes.
March 10 th and 11 th , 2009	ART/Clinical Care	<u>NAC stakeholders meeting:</u> the meeting was held to review draft guidelines for the care of PLHA who are not eligible for ART, to see how best the immunologic and clinical status can be sustained for a longer period above ART initiation threshold. The meeting also reviewed how coordination mechanisms should be strengthened within MoH at PHO, DHO, facility and community levels and with and among partners/stakeholders in HIV programmes.
March 11 th , 2009	ART	<u>Paediatric HIV subcommittee:</u> this meeting discussed the framework for establishing HIV clinical mentoring program in paediatric ART. The focus was on planned development of tools to be used for training or orienting mentors. .
March 31, 2009	ART	<u>Medical Council of Zambia (MCZ) consultative meeting on ART sites accreditation:</u> during this meeting, it was officially announced in the registrar's report that the board of MCZ had finally endorsed and

Date	Technical Area	Meeting/Workshop/Training
		adopted the revised ART accreditation guidelines together with the ART provider certification guidelines. ZPCT has been requested to print a set of the two documents for all ZPCT supported ART sites.
Jan 21 2009	Laboratory	<u>Quarterly laboratory quality assurance partners meeting:</u> this meeting reviewed 2008 activities and identified areas that needed action such as the printing and dissemination of SOPs for all levels of health care, QA for rapid HIV testing, introduction of laboratory registers and assessment of CD4 testing platforms. The Laboratory Safety Manual was completed but needs formatting and final printing. Partner activities in all the provinces were also reviewed at this meeting.
Jan 27, 2009	Laboratory	<u>Meeting with CDC laboratory infrastructure chief:</u> ZPCT met with the CDC Laboratory Infrastructure to discuss its plans to set up viral load and resistance testing facilities at the HIV DNA PCR laboratory at Arthur Davidson Hospital in Ndola. This news was welcomed and CDC pledged continued collaboration with ZPCT in laboratory issues.
February 23, 2009	PCR	<u>DNA PCR laboratory TWG meeting:</u> this meeting discussed plans to set up new HIV DNA PCR laboratories in the country. The framework for the guidelines to be used for the setting up of HIV DNA PCR laboratories was agreed upon and the finalization of the guidelines will be done at a workshop to be held later in the year. Two districts (Livingstone and Kasama) were proposed as being the best sites to set up these laboratories. Further discussions will be held with the partners intending to set up the labs and the final decision will be communicated to all partners implementing EID.
February x , 2009 March 24, 2009	Laboratory	<u>Revision of laboratory registers:</u> this was a one day meeting organized by MoH to review the national laboratory registers. The main issue was to differentiate laboratory registers from bench logs, and to come up with one set of approved registers to be used in laboratories nationwide. This meeting was followed up with another meeting during which the group agreed to adopt registers currently in use in Haiti. Follow-on meetings will be held next quarter.
March 2 – 6, 2009	Laboratory	<u>National HIV rapid testing TOT workshop:</u> this was a five day workshop at which the issue of quality assurance of HIV rapid testing was introduced to staff conducting HIV tests. the workshop was convened by MOH and facilitated by CDC and the UTH virology laboratory. In attendance were health care workers dealing with CT, PMTCT, ART and any other HCW testing for HIV diagnosis.
January- March 2009	QA/ QI	<u>Developing a National QA/QI System for HIV/ AIDS Services:</u> As a key partner, ZPCT has been collaborating with MoH and HSSP in development of a National QA Tool for HIV/ AIDS services. This process has continued from the previous quarter. The ZPCT QA Tool has been submitted to MoH for the adoption process. Progress made this quarter was planning for the QA Tools to be piloted as part of the adoption process.
February- March 2009	QA/QI	<u>Conducting Orientation Workshops for MoH Provincial Staff:</u> A key achievement this quarter was a series of workshops held in all five ZPCT supported provinces. Provincial health office, district health office, health facility managers and health care workers were oriented on the ZPCT QA/QI and graduation systems. Participants had the opportunity to discuss QA/QI issues and make recommendations on the way forward in strengthening partnership and the QA/QI system.
February- March 2009	QA/QI	<u>Collaboration with local partner (CIDRZ):</u> ZPCT held meetings with CIDRZ to exchange information, share experiences, and identify areas of collaboration in HIV/AIDS service delivery and research. Information on QA approaches was also shared.

ANNEX D: Mobile CT Data

The table below provides a breakdown of the mobile CT activities

District	Males Counseled and Tested			Females Counseled and Tested			Children Counseled and Tested		
	<i>Total</i>	<i># positive</i>	<i>% positive</i>	<i>Total</i>	<i># positive</i>	<i>% positive</i>	<i>Total</i>	<i># positive</i>	<i>% positive</i>
Kabwe	391	39	9.9%	181	15	16.5%	68	0	0
Mkushi	95	6	6.3%	89	5	5.6%	11		0
Chililabombwe	138	16	11,5%	112	11	9.8%	13	0	0
Kitwe	76	4	5.2%	71	9	12.6%	14	0	0
Mwinilunga	198	1	0.5%	138	7	5%	113	0	0
Chavuma	235	3	1.2%	92	0	0%	32	0	0
Mporokoso	189	10	5.3%	158	13	8.2%	87	3	3.4%
Kasama	185	10	5.4%	152	7	4.6%	55	0	0
Grand total	1507	89	5.9%	993	67	6.7%	393	3	0

ANNEX E: ZPCT ART sites as of March 31 2009

Province	District	Facility	Static	Outreach	Parent Site (report data under this site)
Central	Chibombo	Chisamba		Outreach	
		Liteta Hospital	Static		
	Kabwe	Kabwe General Hospital	Static		
		Kabwe Mine Hospital	Static		
		Kasanda		Outreach	
		Katondo		Outreach	
		Mahatma Gandhi Memorial		Outreach	
		Makululu		Outreach	
		Ngungu		Outreach	
		Pollen		Outreach	
		Natuseko		Outreach	ART services started, logistics on data collection underway
	Mkushi	Masansa		Outreach	
		Mkushi District Hospital	Static		
		Chalata		Outreach	Mkushi District Hospital
	Serenje	Chitambo Hospital	Static		
Serenje Hospital		Static			
Copperbelt	Chililabombwe	Kakoso	Static		
		Lubengele Clinic		Outreach	
	Chingola	Chiwempala		Outreach	
		Kabundi East		Outreach	
		Nchanga North Hospital	Static		
		Clinic 1		Outreach	
		Muchinshi		Outreach	
	Kalulushi	Chambishi Govt Clinic		Outreach	
		Kalulushi Govt Clinic	Static		
	Kitwe	Buchi Main		Outreach	
		Bulangililo		Outreach	
		Chavuma		Outreach	
		Chimwemwe		Outreach	
		Ipusukilo		Outreach	
		Kamfinsa		Outreach	
		Kawama		Outreach	
		Kitwe Central Hospital	Static		
		Luangwa		Outreach	
		Ndeke		Outreach	
		Zamtan		Outreach	
		ZNS		Outreach	
	Luanshya	Mpatamatu Clinic		Outreach	
		Roan Antelope Hospital	Static		
		Thomson Hospital	Static		
	Lufwanyama	Lumpuma		Outreach	
		Shimukunami		Outreach	
	Mufulira	Kamuchanga District Hospital	Static		
		Ronald Ross General Hospital	Static		

Province	District	Facility	Static	Outreach	Parent Site (report data under this site)
	Ndola	Arthur Davison Hospital	Static		
		Chipokota Mayamba		Outreach	
		Kansenshi Prison		Outreach	
		Kavu		Outreach	
		Kaniki		Outreach	
		Lubuto		Outreach	
		Mahatma Gandhi		Outreach	
		Masala New		Outreach	
		Ndola Central Hospital	Static		
		Twapia		Outreach	
Luapula	Chienge	Kabole	Static		
		Putu	Static		
	Kawambwa	Kawambwa District Hospital	Static		
		Mbereshi Mission Hospital	Static		
	Mansa	Chembe	Static		
		Mansa General Hospital	Static		
		Senama		Outreach	
	Mwense	Mambilima		Outreach	
		Mwense		Outreach	
		Mwenda	Static		
	Nchelenge	Chabilikila	Static		
		Chisenga Island		Outreach	
		Kabuta	Static		
		Kafutuma	Static		
		Kambwali	Static		
		Kanyembo	Static		
		Kashikishi	Static		
		Kilwa Island		Outreach	
		Nchelenge HC	Static		
		St. Paul's Hospital	Static		
Samfya	Lubwe Mission Hospital	Static			
	Samfya Stage II		Outreach		
Northern	Chinsali	Chinsali District Hospital	Static		
	Isoka	Isoka District Hospital	Static		
		Muyombe		Outreach	Isoka District Hospital
	Mpika	Mpika District Hospital	Static		
	Kasama	Chilubula	Static		
		Kasama General Hospital	Static		
		Location		Outreach	
	Luwingu	Luwingu Hospital	Static		
	Mbala	Mbala Hospital	Static		
		Tulemane		Outreach	Mbala District Hospital
		Senga		Outreach	
	Mporokoso	Mporokoso District Hospital	Static		
		Mporokoso UHC		Outreach	Mporokoso District Hospital
Mpulungu	Mpulungu HC		Outreach		
Nakonde	Nakonde HC	Static			

Province	District	Facility	Static	Outreach	Parent Site (report data under this site)
North Western	Kabompo	Kabompo District Hospital	Static		
		St Kalembe		Outreach	Kabompo District Hospital
	Mufumbwe	Mufumbwe Hospital		Outreach	
	Mwinilunga	Mwinilunga District Hospital	Static		
		Luwi Mission		Outreach	
	Solwezi	Solwezi General Hospital	Static		
		Solwezi Urban		Outreach	
		St. Dorothy		Outreach	Solwezi Urban Clinic
	Zambezi	Chitokoloki Mission Hospital		Outreach	
		Zambezi District Hospital	Static		
	Chavuma	Chiyeke	Static		
Kasempa	Kasempa		Outreach	Currently transitioning from Mukinge Hospital to DHO	

ANNEX F: CPOs Implemented by Site

Province	District	Facility	Group
Copperbelt	Chililabombwe	Kakoso	Kakoso VB4 Peers
	Kitwe	Garneton	Garneton NHC
Central	Kabwe	Natuseko	KATECH Entertainment
		Railway Surgery	KATECH Entertainment
		Mahatma Gandhi	All Saints UCZ HIV/AIDS Club
	Mkushi	Masansa	Masansa NHC
Luapula	Mansa	Central Clinic	Central Clinic HCC
	Mwense	Kashiba RHC	Kashiba Youth Friendly Corner
Northern	Mporokoso	Mporokoso Urban Clinic	Mporokoso Youth Project
	Isoka	Kasoka Clinic	Kasoka Theatre Club
North - Western	Solwezi	Solwezi Urban Clinic	St. Daniel Parish CHAMP OVC
	Kabompo	Kabompo District Hospital	Kabompo AIDS Program
	Kasempa	Nselauke RHC	Nselauke Peer Educators
	Mufumbwe	Mufumbwe Health Centre	Mufumbwe HBC

ANNEX G: Referral Networks by District

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