HSSP
Health Services and Systems Program
Contributing to improved health status of Zambians

Year 3 Annual Report
October 2006 - September 2007

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Abt Associates Inc.

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FROM THE AMERICAN PEOPLE

JHPIEGO An Affiliate of Johns Hopkins University

Save the Children

Health Services and Systems Program
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Abbreviations/Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ADR/E	Adverse Drug Reaction/Event
ARTIS	ART Information System
BHCP	Basic Health Care Package
CARE	Cooperative for Assistance and Relief Everywhere
CCS	Clinical Care Specialist
CHN	Child Health and Nutrition
CHWk	Child Health Week
CHWs	Community Health Workers
CIDRZ	Centre for Infectious Disease and Research in Zambia
COG	Clinical Officer General
CRS	Catholic Relief Services
CTC	Counseling Testing and Care
DHMT	District Health Management Team
ECZ	Environmental Council of Zambia
EmOC	Emergency Obstetric Care
EOP	End of Program
EPI	Expanded Program of Immunization
FP	Family Planning
GNC	General Nursing Council
HBC	Home Based Care
HCP	Health Communication Partnership
HRDC	Human Resource Development Committee
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSSP	Health Services and Systems Program
ICC	Interagency Coordinating Committee
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IRH	Integrated Reproductive Health
IRS	Indoor Residual Spraying
ITNs	Impregnated Treated Nets
LTFP	Long Term Family Planning
M&E	Monitoring and Evaluation
MCZ	Medical Council of Zambia
MTEF	Medium Term Expenditure Framework
MDGs	Millennium Development Goals
MOH	Ministry of Health
MOU	Memorandum of Understanding
NGO	Non Governmental Organization
NITCS	National In-Service Training Coordination System
NTGs	National Training Guidelines
NMCC	National Malaria Control Centre
PA	Performance Assessment
PAC	Post Abortion Care
PHO	Provincial Health Office
PMTCT	Prevention of Mother to Child Transmission

PRA	Pharmaceutical Regulatory Authority
RED	Reach Every District
RH	Reproductive Health
RHIS	Routine Health Information System
SWAP	Sector Wide Approach
TA	Technical Assistance
TB	Tuberculosis
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UTH	University Teaching Hospital
WHO	World Health Organization
ZDHS	Zambia Demographic Health Survey
ZPCT	Zambia Prevention Care and Treatment

1 Program Overview

1.1 Background

Infant and under five mortality remain high in Zambia. The country has an under-five mortality rate of 168/1000, while the neonatal mortality rate is 37/1000 live births (DHS 2001/2). Forty percent of infant deaths occur during the first month of life, and one in six children die before their 5th birthday.

The Bellagio Child Survival papers, published in The Lancet 2003, classified Zambia as a Profile Four country, where malaria and AIDS are leading causes of under-five deaths, along with pneumonia, diarrhea, neonatal disorders, and malnutrition.

Malaria is the biggest cause of illness and death among children under five years of age, accounting for 45% of outpatient consultations and admissions and an estimated 50,000 childhood deaths per year. Malaria exerts a tremendous burden on the health care system, on education, and on family resources and is a contributing factor to levels of poverty.

Pediatric AIDS is among the first ten causes of mortality in children under five as evidenced by a study in children admitted to the University Teaching Hospital (UTH) in Lusaka that showed an HIV sero-prevalence of 25 percent. Another study of the contribution of HIV to under-five mortality found AIDS to be the cause of 21 percent of mortality in that age group in Zambia.

The Ministry of Health (MOH) and its cooperating partners have focused efforts to improve child health and nutrition through the implementation of strategies such as integrated management of childhood illness (IMCI) in facilities and communities, the expanded program of immunization (EPI), and nutrition programs including micronutrient supplementation and food fortification. All these form part of Zambia's basic health care package (BHCP). Although these programs are relatively well-established, they continue to suffer from weaknesses that limit both coverage and quality of care.

At 750 per 100,000 live births, the maternal mortality ratio in Zambia is also high. The lifetime risk of maternal death is estimated at 1 in 19. More than half of deliveries take place outside of health facilities and emergency transportation in cases of complications is limited. Almost all pregnant women receive some kind of antenatal care (ANC) which represents a tremendous opportunity to reach women of reproductive age. Nevertheless, many women use these services late in their pregnancy and services do not consistently include key interventions such as iron/folate supplementation, IPT to prevent malaria in pregnancy (MIP), and provision of antiretroviral therapy to prevent mother-to-child transmission (PMTCT). It is estimated that 13% of maternal deaths are due to unsafe abortion. Unsafe abortions are attributed in large part to the unmet need for family planning services in Zambia (Source: DHS 2001/02).

HIV/AIDS has added a further threat to maternal survival and burdens a health system already unable to provide widespread access to quality essential and emergency obstetric care. Importantly, Zambia's cadre of nurse midwives has been among the most affected by attrition over the past 5 years, draining not only service providers but qualified teachers and

trainers for pre- and in-service training of skilled birth attendants. Even the deliveries that do occur in rural health clinics and hospitals are often attended by unskilled personnel. Current availability of midwives in Zambia is approximately 1 per 6,000 pregnant women – compared with international standards suggesting that one midwife can reasonably attend no more than 250-300 births per year.

At 5.9 births per woman of reproductive age, the total fertility rate remains high in Zambia. Currently, up to 23 percent of married women use some form of modern FP, while 17 percent of women use other methods. Despite the recent increase in modern FP use, condom use has not increased in recent years and 27 percent of married women still report an unmet need for modern FP. This is partly due to the unavailability of a wider range of methods of FP, the need to better integrate HIV/AIDS into contraceptive counseling and to integrate FP into antenatal/ postnatal, HIV/AIDS and other programs. There is also a continuing need to address adolescent reproductive health needs, and strengthen youth-friendly services. Oral contraceptives (OCs), including Microgynon and the socially marketed Safe Plan, are the most frequently used methods of FP, and while Noristerat is available widely, DMPA has only been available in limited geographic areas. Norplant and vasectomies are minimally used and counseling in dual protection needs to increase. In addition, a large discrepancy exists between urban and rural modern contraceptive use, with 39 percent of urban married women using modern FP, a percentage three times higher than that of women in rural areas.

Recognizing child and reproductive health, malaria and the HIV/AIDS pandemic as serious health challenges to Zambia, USAID/Zambia signed a cooperative agreement with Abt Associates and its partners JHPIEGO, Save the Children and the International Science and Technology Institute in August, 2004 for the implementation of the Health Services and Systems Program (HSSP). The Program extends through 2010. HSSP represents a continuation of Mission support to child health and nutrition, integrated reproductive health, malaria, HIV/AIDS and health systems strengthening in Zambia and is designed to build upon the success of earlier efforts. The program is funded by USAID with Population/Child Survival funds and the USG President's Emergency Plan for AIDS Relief (PEPFAR) and is working to scale up and maintain coverage for key interventions, improve quality of care, and strengthen key health systems.

1.2 Program Purpose, IRs and Objectives

1.2.1 Program Purpose

The purpose of the Health Services and Systems Program is to: contribute to USAID's Strategic Objective 7: Improved status of the health of the Zambian people, total fertility rate, infant mortality rate, and HIV prevalence decreased; and to contribute to Ministry of Health's goal of improving the health status of Zambians.

1.2.2 IRs

HSSP contributes to the following USAID Intermediate Results:

IR7.2: Achievement and maintenance of high coverage for key health interventions
IR7.3: Health systems strengthened

1.2.3 Program Objectives

The three HSSP Program Objectives that crosscut all technical areas are:

1. Achievement and maintenance of high coverage for key child health and nutrition, integrated reproductive health, malaria and HIV/AIDS interventions
2. Improvement of the quality of key health interventions
3. Strengthening of health systems in the delivery of key health interventions

1.3 Technical Health Areas and Funding Sources

HSSP works in the following technical health areas, with funding from the following sources. Some technical areas, noted below, were included in the first two years of the project (2004-2006). Although activities did not take place related to those technical areas during this reporting period, they are included in the list below to provide a full picture of the HSSP scope during the life of the program:

USAID Pop/CS:

- Child Health and Nutrition (CHN):
  - Facility-based IMCI
  - Community-based IMCI
  - EPI
  - Vitamin A and Deworming
  - Fortification of food (2004-2006)
- Integrated Reproductive Health (IRH):
  - Safe motherhood: Post abortion care (PAC)
  - Safe motherhood: Emergency obstetric care (EmOC)
  - Family planning
  - Focused antenatal care (FANC) (2004-2006)
  - Sexually transmitted infections (STIs) (2004-2006)
  - Adolescent and reproductive health (2004-2006)
- Malaria:
  - National, provincial and district strengthening in malaria
  - Indoor residual spraying (IRS)
  - Malaria and child health
  - Malaria and reproductive health

President's Emergency Plan for AIDS Relief (PEPFAR):

- ARV drugs
- Clinical Care Specialists
- Human resources planning, management and training
- Performance improvement and accreditation
- Planning and strategic information
- HIV/AIDS coordination through a sector-wide approach (SWAp)

1.4 Year 3 Operating Environment

1.4.1 Adoption of the COP targeting approach for CHN and IRH

In the past year, the USG modified its approach to CHN and IRH by adopting the Country Operation Plan (COP) strategy used by PEPFAR. Annual targets were set and new indicators added to existing project indicators.

1.4.2 Revision of the Monitoring and Evaluation (M&E) Framework and Process

The adoption of the COP approach in CHN and IRH resulted in the need to revise the project's M&E framework and data collection process to adequately collect, analyze and report on the new set of indicators. The introduction of the COP approach also required reorientation of staff.

1.4.3 Zambia qualified as a malaria initiative country

In the past year, Zambia qualified as a Presidential Malaria Initiative (PMI) country. HSSP will focus on IRS in 15 districts, IPT and FANC in two provinces (Central and Eastern).

1.5 Organization of the Annual Report

The Annual Report for Year 3, from October 2006 through September 2007, is divided by technical areas and funding sources, as listed above. Program objectives and general strategies are included in each section, as they pertain. Key indicators and progress to date related to each technical area are also reported in the pertinent sections and are summarized in Annex 1. This format will allow HSSP and the Mission to track project progress related to each funding source, technical area and program objective over time.

2 Child Health and Nutrition

2.1 Related program objectives:

1. Achievement and maintenance of high coverage for key CHN interventions
2. Improvement of the quality of key CHN interventions
3. Strengthening of health systems in the delivery of key CHN interventions

2.2 General strategy

The HSSP strategy in CHN is to work with the MOH on national, provincial and district levels to strengthen human resources and basic systems to scale up CHN coverages and ensure provision of quality care. Investments are being directed towards the development and testing of sustainable approaches to scale-up CHN interventions, integrating them into existing systems and services. Focus is on high-impact activities that will improve infant and child morbidity, mortality and nutritional status.

2.3 Strengthened overall national level capacities in CHN

HSSP continued to strengthen overall national level capacities related to CHN over the past year through the following activities:

2.3.1 Overall Child Health and Nutrition

Maternal Newborn and Child Health Partnership TOR, advocacy materials, national launch

Several preparatory meetings were held in the first quarter for the launch of the Maternal, Neonatal and Child Health Partnership, resulting in the finalization of the Partnership Terms of Reference and the development of advocacy materials. A workshop was held to share the TORs with the various stakeholders. The official launch of the partnership is scheduled for January 2008.

Position Paper on Newborn Health finalized

HSSP also participated in the core group tasked to write a Position Paper on Newborn Health in Zambia. The final document was produced.

Road Map for Accelerated Reduction of Maternal-Neonatal Morbidity and Mortality strengthened to include newborn and child health

A four-day workshop was held to review and strengthen the newborn and CH components of the Road Map for the Accelerated Reduction of Maternal and Neonatal Morbidity and Mortality. The revision was completed and the document is awaiting finalization of the costing.

Routine monthly reporting format for Clinical Care Specialists developed

Data reporting was incorporated into the routine monthly reporting of Clinical Care Specialists (CCS) in all provinces. Although information is primarily for HSSP program work, data obtained from CCSs is shared with the MOH national team and with the Inter-agency Coordinating Committee.

Integrated Measles Campaign materials developed

HSSP also provided support to the Child Health Technical Committee to ensure integration of Child Health Week activities with the Measles Campaign in July 2007. Integrated Measles Campaign materials were developed.

2007 Integrated Measles Campaign (Child Health Week) successfully conducted

With support from HSSP, the MOH and its partners successfully implemented the Integrated Measles Campaign in 2007. The following table presents the results of the campaign this year:

2007 Integrated Measles Campaign Results

Activity	Target	No. of children reached	Coverage (%)
Measles vaccination	2,042,987	2,187,096	107
Vitamin A supplementation	2,238,531	2,223,396	99
Deworming	1,999,050	2,006,815	100
ITN re-treatment	500,000	436,439	87

2.3.2 Collaboration in training of community and facility health workers

The following partners collaborated in the training of both community and facility health workers in Year 3:

- Churches Health Association of Zambia (CHAZ) and selected DHMTs made significant contributions to the training of CHWs, using HSSP-developed training materials for their training, and contributing to the printing of training materials.
- A total of K4 billion was also provided to the MOH Child Health Unit by the World Bank for key childhood interventions
- UNICEF printed CHW training manuals and supported community level work (e.g. water and sanitation, growth monitoring and prevention (GMP), and case management)
- CARE provided technical assistance and trained CHWS in Ndola, Kasama and Lusaka districts
- NMCC provided coordination and contributed to the printing of CHW training materials
- NFNC provided technical assistance in GMP.

2.4 Facility-based IMCI

2.4.1 Strengthened national capacities through facility-based IMCI

The following strengthening activities took place in facility-based IMCI on the National Level in Year 3:

HIV/AIDS integrated into the national F-IMCI supervisory checklist

Specific F-IMCI monitoring tools/checklists are used during supervisory visits to facilities nationwide. These tools were reviewed in the first quarter of the year to integrate HIV/AIDS, which was previously missing.

Scale-up plan for pre-service IMCI implementation developed in collaboration with the General Nursing Council

In order to standardize and scale up implementation of F-IMCI in pre-service training, HSSP supported a two-day workshop in the second quarter to review the status of IMCI implementation in nursing training institutions. The meeting was held in collaboration with the General Nursing Council (GNC) and the MOH Child Health Unit. The workshop aimed to learn from those schools that had begun teaching F-IMCI, and reach consensus on teaching methods. A total of 7 nursing schools attended. Participants agreed that IMCI should be taught during the pediatric block, be taught in full, and be examinable, that schools would plan and budget for IMCI training in their annual plans, and make use of visiting lecturers until institutional lecturers are prepared to teach IMCI.

National IMCI guidelines adapted to include emerging practices: RDTs/blood slides, newborn, use of zinc and low osmolar ORS

HSSP also provided technical assistance in the second quarter to the MOH Child Health Unit in the adaptation of IMCI guidelines to include emerging practices: newborn, zinc for the treatment of diarrhea and the use of low osmolar ORS, strengthening of the HIV/AIDS component, and reviewing the IMCI management of fever to conform with national malaria guidelines. The process involved development of TOR for two consultants and participation in a five-day pre-adaptation workshop aimed at reaching consensus on key elements to be included in the IMCI algorithm. HSSP also played a key role in revising the IMCI fever guidelines in the third quarter to incorporate the use of the Rapid Diagnostic Test (RDT) or blood slide for the diagnosis of malaria. The revised guidelines were piloted during an abridged course for District Health Office (DHO) and Provincial Health Office (PHO) managers. The malaria program had made efforts to train some health workers from each of the 72 districts in the use of these techniques, but they had not been included in the IMCI algorithm. The inclusion of RDTs and blood slides during F-IMCI training ensures that all health workers that undergo IMCI case management training acquire skills in this area.

GNC Malaria Handbook for Nurses and Midwives revised to include updates on malaria management in children

The HSSP child health unit and the HSSP HR training unit also supported the GNC to review and harmonize the information contained in the chapter on management of malaria in children in the Malaria Handbook for Nurses and Midwives with the IMCI guidelines. The chapter on malaria management in children was reviewed and the information updated. HSSP has printed 3000 copies of the handbook which will be distributed to all nursing

training institutions. The handbook will be a valuable reference document for use by both faculty and students.

2006 District IMCI Profile Analysis completed and disseminated

In the third quarter, HSSP completed a detailed national analysis of F-IMCI implementation in all 72 districts (data collected December 2005-March 2006), including those factors influencing district abilities to conduct F-IMCI training among health workers. The analysis identified major gaps in implementation: only 20% of health centers were found to have the recommended 60% or more of health workers who manage children trained in IMCI case management, 56% of PHOs and 26% of rural District Health Offices (DHOs) had no one or only one staff member trained in IMCI case management compared to the recommended three; 9% (79) of rural and 2% (8) of urban health centers were still staffed by untrained health workers; and the effective management of data at all levels was found to be a challenge. Although useful data is generated it is rarely used to provide guidance on critical areas or to focus technical assistance**.** Presentation of this information at the second national child health annual review stimulated a constructive discussion and presented an opportunity for self-examination by individual districts. Results are being used as a baseline for the analysis of district performance.

First National Emergency Triage Assessment and Treatment (ETAT) training held

HSSP also provided TA to the MOH in conducting the first national ETAT ToT training for 14 provincial and district health workers. An analysis of the level of care provided by a selection of 13 district hospitals in 2005 showed that most lacked the basic skills, knowledge and equipment needed to care for seriously ill children referred from a health centre. For F-IMCI to make a difference, referred children should receive quality care at all levels of the health system.

Technical updates in F-IMCI provided during the national launch of the planning cycle

With input from HSSP, technical updates were developed and presented at the launch of the national planning cycle. Some of the updates included new-born health issues, zinc for the treatment of diarrhea and the use of low osmolar ORS, strengthening of the HIV/AIDS component and reviewing the IMCI management of fever to conform to national malaria guidelines.

TOR/SOW for Save the Children consultant on the national framework to scale up newborn health programs developed

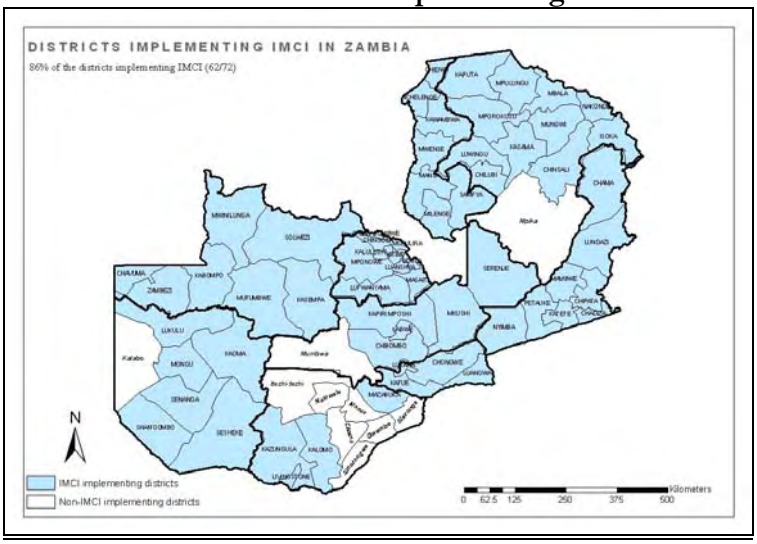
Support from HSSP in 2006 helped set the stage for the national newborn agenda by bringing together key child health stakeholders to develop and share a Newborn Environmental Scan Report. In spite of the tremendous efforts being made, however, gaps still exist in the national agenda for newborn health. In the fourth quarter HSSP finalized the TOR for a consultant from Save the Children to provide STTA to develop a national scale-up framework for newborn health.

9 Provinces and 62 districts implementing F-IMCI

By the end of the year, all 9 provinces and 62 of the 72 districts were implementing F-IMCI. All had received national level orientation on the effective implementation of the IMCI strategy and all had begun to train health workers in IMCI case management. HSSP

technical and financial assistance resulted in renewed district enthusiasm and ownership of the IMCI program.

9 Provinces and 62 Districts Implementing IMCI in Zambia, September, 2007



2.4.2 Strengthened provincial and district capacities through facility-based IMCI

The following strengthening activities took place in facility-based IMCI on the provincial and district levels in Year 3:

F-IMCI 6-day course piloted for primary level health workers

A comparative study between the skills and knowledge acquired using the 6-day versus the 11-day IMCI training program for primary level health workers showed that there was no significant difference in outcome (MOH 2005), however lessons were needed on how practical this training would be outside the study setting. For this reason, HSSP supported 3 pilot training programs in Southern Province in Year 3 using the 6-day approach. Important lessons were learnt during training which were shared with other districts. Guidelines were disseminated as the districts prepared for the next round of the planning cycle. The use of the 6-day training approach for primary level health workers helps to reduce the cost of training and shortens absences from work stations.

Provincial and district managers trained in the F-IMCI 6-day course

In an effort to ensure that supervisors have the necessary skills and knowledge to supervise F-IMCI activities, the national level has been systematically training managers in F-IMCI at all levels. In Year 3, HSSP supported the 4th national training of managers. Participants were drawn from districts that did not have enough F-IMCI-trained staff within the DHMT (based on *HSSP 2006 District Profiles).* The training also attracted three Clinical Care Specialists. By the end of the year, all 9 provincial offices had at least one or both Clinical Care Specialists trained in F-IMCI case management skills.

437 health workers trained in F-IMCI by the end of the year

During Year 3, a total of 413 persons were trained in F-IMCI: 233 health center staff, 123 student nurses, 40 nurse tutors, and 17 DHP/PHO staff. In addition, 24 persons were trained under ETAT and in IMCI facilitation skills: 14 district hospital staff in ETAT and 10 in IMCI facilitator skills. A contributing factor to the growth of IMCI training has been the enthusiasm and district ownership of the IMCI program that has been cultivated with leadership from HSSP.

HW at Kasamba RHC checking the temperature of a child

Post IMCI training technical support supervision (TSS) visits conducted for 71health workers in 9 districts

Effective and consistent focused supervision is essential if quality of service provision at the district level is to be maintained. For this reason, HSSP provided both technical and financial support to conduct TSS in the 8 districts that had trained health workers in IMCI case management with HSSP support. The main objectives of the visits were to:

- Reinforce IMCI skills and help health workers transfer these skills to clinical practice
- Identify problems faced by health workers in managing IMCI cases and help solve these problems
- Gather information on the performance of health workers and the conditions that influence the implementation of IMCI and provide feedback to the district

For health workers to effectively manage fever, basic equipment such as thermometers, diagnostic equipment and effective drugs should be available. Having conducted TSS in Kabompo, Mufumbwe, Chingola, Mkushi, Serenje, Kalulushi, Kapiri-Mposhi and Solwezi Districts, the following feedback was given to the provincial, district and national level on areas for improvement:

- Stock-out of the first line anti malarial drug, Coartem
- Lack of rapid diagnostic test kits for malaria
- Need to clarify case management guidelines in case of Coartem stock out

10 DHO and 2 PHO staff trained in IMCI/Child Survival supervision:

Building supervisory capacities at the district level ensures that quality supervision is sustained. Some districts are unable to effectively supervise trained staff at the health centers simply because they do not know how. During the year, HSSP trained 10 DHO and 2 PHO staff members from Northwestern, Central and Copperbelt Province in the skills to effectively conduct IMCI/Child survival-related TSS.

F-IMCI-trained health workers trained as facilitators and master trainers

In order to rapidly scale up and sustain the training of health workers in F-IMCI, it is important that each province have a complete team of facilitators. One strategy undertaken

by the national level this year was to train master trainers for each province, who in turn train local facilitators. This year, HSSP provided technical support to train 3 master trainers from Central, North Western, and Eastern Provinces. In addition 10 health workers were trained in facilitator skills.

2.4.3 Strengthened capacity of training institutions to implement the IMCI curriculum

The following strengthening of training institutions in facility-based IMCI took place in Year 3:

120 student nurses trained in F-IMCI from 3 nursing schools (Solwezi, Chipata and Kitwe)

In the first quarter, 43 student nurses from the Solwezi School of Nursing were trained in two courses in F-IMCI. In the third quarter, HSSP continued training with support to three training programs for nursing schools in Kitwe and Chipata Districts. A total of 143 final year students were trained. In both cases the initiative was taken by the training institutions and HSSP provided technical support. This initiative reflected the renewed interest in implementing F-IMCI in training institutions.

40 nurse tutors and clinical instructors trained from 24 training institutions

Since 2003, when IMCI was incorporated in the curriculum for nursing schools, very little student training has taken place at most training institutions. This is because most training institutions have not had enough tutors trained to teach IMCI case management and have had to rely on expensive guest lecturers. In Year 3, HSSP continued to focus on building the internal capacity of training institutions to train students in F-IMCI. The Kitwe School of Nursing included 8 of their tutors as participants in both training programs mentioned above. HSSP also supported two abridged course programs for 32 nurse tutors and clinical instructors from 24 schools.

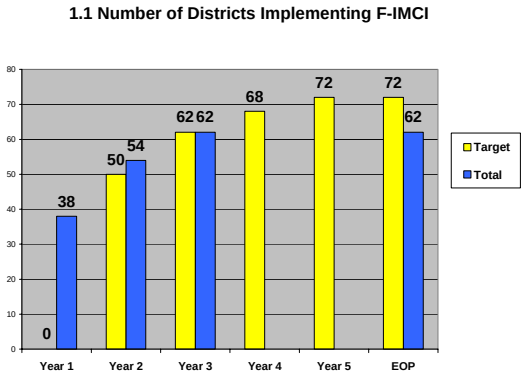
2.4.4 Challenges in Facility-based IMCI

Facility-based IMCI faced the following challenges in Year 3:

- Inadequate capacity, funding, transport at district level for supervision of trained health workers
- Competing provincial and district priorities, inadequate human resources, low levels of funding affecting supervision
- Inadequate human resources in the national-level Child Health Unit resulting in delayed activities
- Lack of a national system to track F-IMCI trained health workers at district level
- Inadequate district funding for training
- Clinical Care Specialist (CCS) participation in F-IMCI limited by time constraints
- Insufficient numbers of facilitators to conduct F-IMCI training at provincial level
- Emerging new updates requiring revision to the guidelines

2.4.5 Improved CHN coverage and quality of care through facility-based IMCI

Key indicators show the following result for facility-based IMCI through Year 3:



HSSP key indicator 1.1 shows an increase in the number of districts implementing F-IMCI from 38 in the first year of the project to the current 62. This is an increase from 53% of total districts to 86% in three years, and constitutes 86% of the end of project (EOP) target. In all years, HSSP has met or exceeded its annual targets for this indicator.

2.5 Community-based IMCI

2.5.1 Strengthened national capacities through community-based IMCI

The following strengthening activities took place related to community-based IMCI on the national level in Year 3:

National C-IMCI Technical Working Group Formed

In the first quarter, HSSP facilitated the formation of the National C-IMCI Technical Working Group whose major task is to advocate for strengthened coordination and support to the implementation of the national C-IMCI Strategic Plan. The Forum works to improve coordination, leverage resources and conduct technical monitoring. The group tasked members with the collection of information needed to establish a community monitoring system and established consensus on key indicators and monitoring tools for child health activities at community level. HSSP played a leading role in the Forum this year.

Support to the Sub-Regional International Conference on Child Health Interventions at Community Level

In the third quarter, HSSP and JICA assisted the MOH to host the first Sub-Regional International Conference on Child Health Interventions at Community Level. The project also provided support to selected districts to document best practices which were shared during the conference. The conference urged countries to begin to address key issues including: matching community volunteer activities with government motivation mechanism policy, strengthening the roles of the various levels of the health system in support of community level interventions, and coordinating partner contributions.

Best Practice documentation and dissemination with Luangwa and Lukulu Districts

HSSP also provided technical assistance to Luangwa and Lukulu Districts for the documentation and dissemination of Zambia's experience with the Reaching Every District (RED) strategy to local and international audiences. This included best practices from Luangwa's community PHC unit initiative and Lukulu's PD/Hearth program, and strengthened provincial and district capacities through community-based IMCI. In the fourth quarter, HSSP and NFNC also assisted Lukulu District to share its experiences with

the PD/Hearth approach with the Chikankata Child Survival Project and Valid International which in turn presented information on community based therapeutic care for the management of severe malnutrition in communities and health facilities. Presentations demonstrated a variety of methodologies for managing malnourished children with different levels of malnutrition

2.5.2 Strengthened provincial and district capacities through community-based IMCI

The following strengthening activities took place in community-based IMCI on provincial and district levels in Year 3:

Positive Deviance/Hearth program in Lukulu District showed positive results

The Positive Deviance/Hearth approach introduced in early 2006 to improve the health status of children was successfully implemented in Lukulu District this past year. According to the Central Statistical Office, Lukulu District's total population in 2007 is 84,920. By the first quarter, several positive results and recommendations had been noted as follows:

- Some of the key practices acquired by participants through the PD/Hearth approach included hand washing practices, ensuring that children complete their full immunization coverage, better family and housekeeping practices, and family planning.

- With strong household food security, the PD/Hearth approach has been shown to have positive impact and to be easy to sustain at community level. The community should be encouraged to start vegetable gardens to supplement available food resources. Concurrently, the district committee on PD/Hearth needs to be strengthened through the active involvement of a member from Ministry of Agriculture.

- The initial 30 caregivers - 10 supported by HSSP and 20 by the District Health Management Team (DHMT) - continued to make positive strides in improving the nutritional status of children. 10 additional caregivers and 10 children had been recruited for a total of 40 children using the PD/Hearth approach.

- Of the 40 children enrolled in the program, 70% had gained weight within the first 12 days of intensive PD/Hearth sessions. Overall, this was a significant increase in the children's weight over a short period of time.

- Increased community awareness regarding malnutrition was demonstrated through growth monitoring records and the increased demand for PD/H by communities.
- The PD/Hearth approach should be scaled up to other districts. The district has planned to scale up to Ngimbu and Luvuzi in order to achieve maximum impact on the malnutrition situation in Lukulu district. Scale-up should include training of new supervisors and mother-volunteers to support mother-caregivers. Fathers should also be

targeted to be more active participants in the program. The transport situation needs to be improved as well as the availability of IEC kits for the local level.

252 DHO trainers and supervisors trained in 72 districts

In the first quarter, 15 trainers and supervisors from four Lusaka districts were trained in C-IMCI to expand delivery of the 6 Key Family Practices. In the second quarter, an additional 21 trainers were trained in C-IMCI on the Copperbelt. In the third quarter an additional 216 district health workers were trained as trainers and supervisors to support C-IMCI implementation. By the end of the year, a total of 252 district health workers had been trained as trainers and supervisors in Year 3 to support C-IMCI implementation.

All 9 provinces oriented in C-IMCI

By the end of Year 3, all 9 provinces had at least one staff member oriented in community IMCI.

615 CHWs trained (cumulative to date 1,501), including those trained with leveraged funding

The 252 trainers in turn trained volunteer community health workers (CHWs) this year to promote child survival, growth and development: 32 CHWs were trained in the first quarter, 75 CHWs were trained in the second quarter, 107 CHWs in Lusaka Province drawn from all 4 districts were trained in C-IMCI in the third quarter, and additional resources during the final quarter resulted in the training of 433 CHWS. This increased the number of CHWs trained in the third year to 615, for a cumulative total of 1,501 trained to date.

Technical Support Supervision to supervisors and CHWs in 10 districts

Technical support supervision of trained CHWs was conducted in 10 districts this year, including 8 low-performing districts in Southern and Western Provinces. Spot checks and problem-solving revealed problems with data management, the cold chain, human resources and injection waste management. Progress on C-IMCI, the RED strategy, CHWk planning and strengthening, and micro-planning practices were also reviewed. CHWs were found to be implementing the key practices, however, they lacked adequate supplies, equipment and drugs. TSS trips were also used to identify districts with best practices at community level. Documentation of these practices began this year, some of which were presented during the regional conference in May, mentioned above. The topics documented included effective referral systems, community HMIS, an innovative retention scheme, and reporting by community volunteers.

Support to Luangwa District to strengthen Primary Health Care through 26 trained CHWs in game management areas

Luangwa District communities began working with the DHMT this year to introduce Primary Health Care services in the predominantly game management catchment area. HSSP responded in the third quarter by providing support for a two-week C-IMCI training of 26 CHWs. The CHWs began work in health posts, thus taking health services as close to the households as possible. Community members no longer have to walk long distances to the nearest health facilities for care (15km or more for some) or risk being attacked by wildlife (e.g. elephants).

69 districts with trained CHWs implementing Key Family Practices

By the end of Year 3, a total of 69 out of 72 districts had trained CHWs implementing the Key Family Practices.

378 facilities with at least one trained health worker in C-IMCI

400 Facility based health workers had been trained in Community IMCI by the end of the third year, resulting in 378 health facilities with at least one trained health worker in C-IMCI.

2.5.3 Challenges in Community-based IMCI

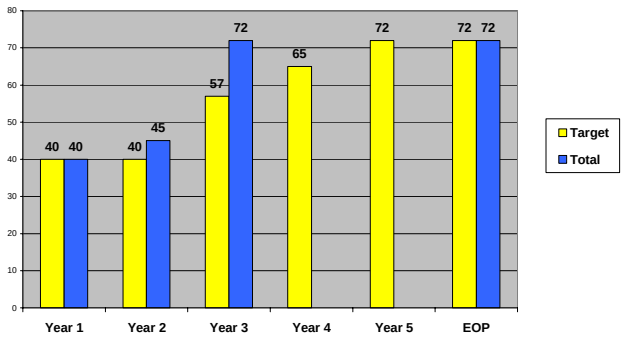
Community-based IMCI faced the following challenges in Year 3:

- Adherence to the co-funding principal with districts and provinces proved difficult
- Lack of basic equipment, supplies, IEC materials and counseling cards, simplified community IMCI protocols, protective clothing, and simple transport among CHWs negatively affected service delivery
- The inadequate and erratic supply of CHW drug kits negatively affected service delivery
- Inadequate orientation of facility supervisors in C-IMCI supervision and lack of standardized supervisory and reporting formats resulted in inadequate supervision of trained CHWs
- Inadequate referral systems for sick children
- Inadequate household food security, clean water and sanitation
- There was no system in place for communities to track achievements or for gathering and reporting on community work from community to central level, or there were multiple reporting systems in the same community

2.5.4 Improved CHN coverage and quality of care through community-based IMCI

Key indicators show the following results for community-based IMCI through Year 3:

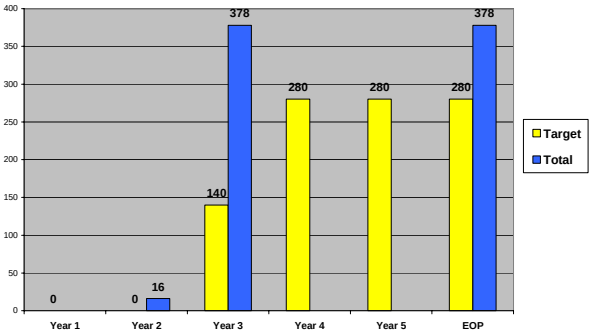
1.2 Number of districts with at least one health worker trained in C-IMCI



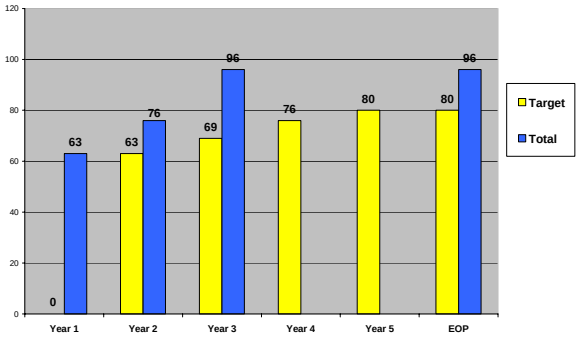
HSSP key indicator 1.2 shows the number of districts with at least one health worker trained in C-IMCI to have increased from 40 in year one to 72 in Year 3, exceeding the Year 3 target of 57, and achieving 100% of the EOP target. This is an increase from 56% to 100% of districts in Zambia in three years. HSSP achieved or exceeded its targets for this indicator in all funding years.

HSSP key indicator 1.3 shows the number of facilities with at least one health worker trained in C-IMCI to have increased from 16 in year one to 378 in Year 3, nearly three times the third year target of 140 facilities, and exceeding the EOP target for this indicator of 280 facilities.

1.3 Number of facilities with at least one health worker trained in F-IMCI



1.4 Percent of districts offering 6 Key Family Practices



HSSP key indicator 1.4 shows the percent of districts offering Key Family Practices to have increased from 63% in year one to 96% in Year 3, exceeding the third year target of 69% as well as the EOP target of 80%. This is an increase from 32 districts in the first year to 69. In all project years HSSP exceeded its targets for this indicator.

2.6 Expanded Program on Immunization (EPI)

By June, 2006, 36 of the 72 districts (50%) had reported full immunization coverage of 80% and above for children under one year of age. In the third program year, HSSP continued to provide TA to the MOH to scale up these achievements through the district level micro-planning process, CHW activities and scale-up of the RED strategy to 72 districts. Poorly performing districts received targeted technical assistance.

2.6.1 Strengthened national capacities in immunization

The following strengthening activities took place in EPI on the national level in Year 3:

Support to the MOH in the development of three proposals

HSSP provided technical assistance to the MOH/Child Health Unit in the adaptation and editing of country proposals for:

- Health Systems Strengthening from the GAVI secretariat
- Key childhood interventions from the World Bank, and
- Funding for the Integrated Measles Campaign

K1.2 billion (US$300,000) sourced for the MOH from the World Bank for key childhood interventions

In the second quarter, HSSP's TA to the MOH Child Health Unit resulted in the disbursement of K1.2 billion ($300,000) from the World Bank for all districts in Copperbelt, Northwestern, and Eastern Provinces for key childhood interventions at the community level including training of community volunteers to implement key family practices. These funds enabled expansion in F- and C-IMCI, which includes EPI activities. As a result of World Bank funding, some districts began development of proposals to Cabinet Office to access funding for community activities and for the use of community radio to communicate key messages on child health. Mpika District built primary health care units in communities using these funds.

Proposal on Health Systems Strengthening approved by GAVI, funding pending

In the third quarter, the GAVI secretariat approved Zambia's HSS proposal subject to revisions. This was positive a step for Zambia as the funding will provide an opportunity to address some of the systems barriers to EPI service delivery.

$3 billion (US$750,000) sourced for the Integrated Measles Campaign

HSSP's assistance to the MOH for the 2007 Integrated Measles Campaign was also successful, accessing $1,200,000 from the UN Foundation for the purchase of vaccines and operational costs, and $1,000,000 from UNICEF for social mobilization, transport and personnel. K800 million was also sourced from government and local partners including HSSP for support supervision and monitoring of campaign activities. HSSP provided TA in the documentation of the pre-campaign preparation, while UNICEF and WHO provided TA in the documentation of the measles campaign exercise. HSSP was subsequently awarded a certificate of appreciation from Ministry of Health for its life saving contribution to the measles campaign.

RED strategy scaled up from 10 to 46 districts with GAVI award funding

The Reach Every Child in Every District (RED) strategy piloted in 10 districts was scaled up to 36 districts in Year 3 using GAVI award funds, with technical assistance from HSSP, WHO and UNICEF. Following the completion of the micro-planning process, start-up funds were sent to districts and provinces to support RED strategy implementation. The national level took this opportunity to review progress during meetings in each province. Participants presented reports on each of the 5 key operational components of the strategy. Innovations in community-based agent (CBA) support, motivation, immunization coverage and emerging issues were discussed. According to field reports, the RED strategy has:

- Improved community involvement (defaulter tracing has resulted in fewer dropouts)
- Improved immunization coverage in districts where the strategy has been institutionalized
- Been successfully used as an entry point for C-IMCI initiatives, and
- Improved community documentation through the use of community registers

Districts to sustain RED strategy activities with basket funding

Implementation of the RED strategy in Zambia began with pilots in 10 high priority districts selected on the basis of immunization coverage rates and numbers of children that were not immunized. The implementation of the RED strategy was facilitated with financial support from WHO/GAVI, while HSSP provided technical assistance in micro-planning and monitoring. In order to sustain RED strategy activities at community level, consensus was reached that districts would utilize district basket funding to support the activities in the districts.

Key Results of RED strategy Implementation

Since the inception of the RED strategy in 2003, most RED-implementing health facilities have established extra vaccination posts and recorded an increase in immunization coverage. In RED strategy areas immunization coverage increased from 35% in 2003 to 81% in the 3rd quarter of 2005, while the number of children not immunized fell from 2,386 in 2003 to 1,124 by the end of 2004. The increase in community participation and reduction in children not immunized resulted in a monetary award to Zambia which is being used to immunize additional children above the target. The RED strategy has also improved linkages between staff and communities and has promoted the integration of other activities into the strategy. The micro-planning process with communities has proven key to attaining program ownership and sustainability, and the practice of providing feedback on the performance of interventions has proven key to continued improvements and to motivating facility and community level service providers. In conclusion, with the principle of active community participation and bottom-up planning, as demonstrated in the implementation of RED strategy activities, the RED strategy has been found to be a very useful approach that will assist Zambia to attain the 90/80 goal set for 2010 and contribute to achieving Millennium Development Goals. The RED strategy had been scaled-up from ten pilot districts to 36 additional districts by end of September 2007.

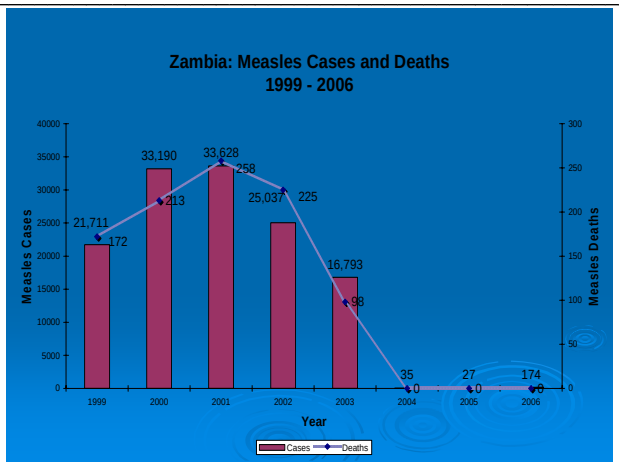
Validation of Maternal Neonatal Tetanus Elimination

In 2007 Zambia was also due for MNTE validation through a Lot Quality Audit. Two poorly performing districts were identified: Kaoma and Sesheke. Zambia passed the Lot Quality Audit as it met the requirement of less than 1 case per 1000 live births. Future steps will focus on strengthening maternal neonatal tetanus surveillance.

Support to the 2007 Integrated Measles and Supplemental Immunization Campaign

The national Measles Campaign Field Guide, Measles Training Package, Monitoring and Supervisory Tools and Post-Evaluation Assessment tools were reviewed in the first quarter of the year in preparation for the 2007 Integrated Measles and Supplemental Immunization Campaign, held in July. HSSP also supported the development of district operational budgets, micro-plans, and the national monitoring plan, provided financial support to the MOH in printing 2,500 copies of the Measles Field Guides and oriented 27 provincial and 216 district staff. HSSP also provided financial assistance to support national level monitoring teams and supplemental funding to 6 out of 9 provinces with the aim of providing an opportunity for targeted districts to hire extra staff and volunteers to support the campaign. The objectives of campaign were to: immunize at least 95% of all children aged 9 – 59 months (2 million) regardless of immunization status; provide Vitamin A supplementation to at least 90% of children 6 - 59 months of age (2.1 million); provide Mebendazole to at least 90% of children aged 12 – 59 months (1.8 million); and re-treat 500,000 bed nets.

The following graph presents trends in measles morbidity and mortality in Zambia from 1999 to 2006. Since 2004, there have been no deaths due to measles and the number of measles cases has declined dramatically.



2.6.2 Strengthened provincial and district capacities in immunization

The following strengthening activities took place in EPI on provincial and district levels in Year 3:

Focused TA in planning and field support for supplemental immunization activities in 11low-performing districts

HSSP provided focused TA and supplemental funding to 11 low-performing districts during the 2007 Integrated Measles Campaign, and worked with them to provide a comprehensive package of antigens for eligible children. Low performing districts also received focused support in micro-planning for EPI, C-IMCI, CHWk and injection safety practices monitoring

36 provincial and district health workers oriented on liquid pentavalent vaccines

In the second quarter, 36 provincial and district health workers representing all nine provinces were oriented on liquid pentavalent vaccines and formed into provincial teams. Provincial teams are responsible for the orientation of district and facility level staff.

Support to RED strategy district innovations

HSSP also continued to encourage district level innovations and integration of C-IMCI activities with other community-level programs. Some districts responded favorably. For instance, Kasama District initiated integration of the RED strategy with the PMTCT program. In this case, the focus is on neonatal care as the target groups are the same.

2.6.3 Challenges in EPI

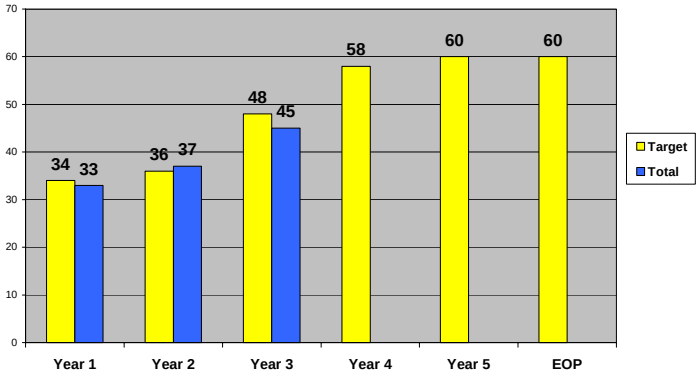
EPI faced the following challenges in Year 3:

- Late release of funds delayed scale up of RED strategy activities
- National, provincial and district staff with competing priorities
- Lack of use of available data for planning
- Measles outbreak in one district hindered micro-planning development
- Floods in three provinces negatively affected service delivery and TSS
- Late release of funds delayed delivery of supplies and IEC materials during the Integrated Measles Campaign

2.6.4 Improved immunization coverage and quality of care

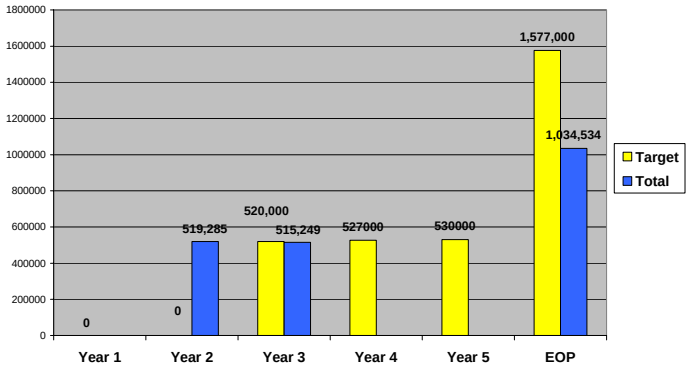
Key indicators show the following results for EPI through Year 3:

1.7 Number of districts with at least 80% of children fully immunized by age 1



HSSP key indicator 1.7 shows the percent of districts with at least 80% of children fully immunized by age one to have increased from 33% in year one to 45% in Year 3. This is an increase from 24 districts in the first year to 32 in the third. HSSP will continue to assist the MOH to reach the targets for this indicator each year.

1.8 Number of children <12 months who received DPT3 in last 1 year



HSSP key indicator 1.8 shows the number of children under 12 months of age who received DPT3 in the past 1 year to have remained constant in years two and three at just under 520,000, the annual target for Year 3, over half of the cumulative EOP target. HSSP will also continue to assist the MOH to reach the targets for this indicator each year.

2.7 Generic Nutrition, Vitamin A and De-worming

2.7.1 Strengthened national capacities in Nutrition, Vitamin A and De-worming

General Nutrition
In the area of General nutrition several activities were supported through technical assistance from HSSP. These activities include:

Minimum Package of Care in Nutrition document updated
In the fourth quarter, HSSP provided technical assistance during a 3-day workshop to finalize the development of the Minimum Package of Care in Nutrition for Zambia. The document was updated following this workshop. The document is aimed providing guidance in the planning and implementation of nutrition interventions both in the public health and clinical settings.

Input into the revision of HMIS nutrition indicators
In quarters two and three, HSSP advocated with the MOH to ensure that key nutrition indicators were retained in the new HMIS. The HMIS was undergoing review with support from the European Union.

NFNC's Food and Nutrition Monitoring and Evaluation Framework finalized
HSSP provided support to NFNC in the development and finalization of a Food and Nutrition Monitoring and Evaluation Framework. The framework as completed and a first draft report was generated. The framework developed was aimed at providing information to stakeholders on the performance of different program indicators contributing to addressing malnutrition in Zambia. The report was also aimed at repositioning of the role of NFNC in coordinating the nutrition sector.

TA to the Infant and Young Child Feeding Program
HSSP hosted a meeting on the Infant and Young Child Feeding Program to reach consensus on the WHO statement on HIV and Infant Feeding. As a result of this meeting, WHO guidelines were adopted by Zambia. Assistance was also provided to the MOH in the development of the Baby Friendly Hospital Initiative Self-Appraisal Reports.

Participation in Pre-service Training activities
HSSP participated in the revision of the curriculum for the pre-service training of nutritionists at the Natural Resources Development College. The curriculum was updated to take into consideration emerging needs. HSSP also participated in a meeting and activities related to the development of the curriculum for the development of a Bachelor of Science degree in Nutrition at University of Zambia. The activities will contribute significantly to improving the capacities of nutritionists employed in the health sector.

Performance Assessments and Technical support supervision to Luapula Province, Lusaka and Central
HSSP also provided support during a performance assessment in Luapula and technical support supervision in Central and Copperbelt Provinces. Participation in routine supervisory activities provides opportunities to strengthen the integration and implementation of nutrition interventions. Observations made following participation in

these exercises indicated a critical need for improved nutrition competencies at provincial and district levels. In most instances nutrition was not being adequately addressed. Strengthening competencies will enable health centers to implement nutrition interventions and attain the desired impact on the target population.

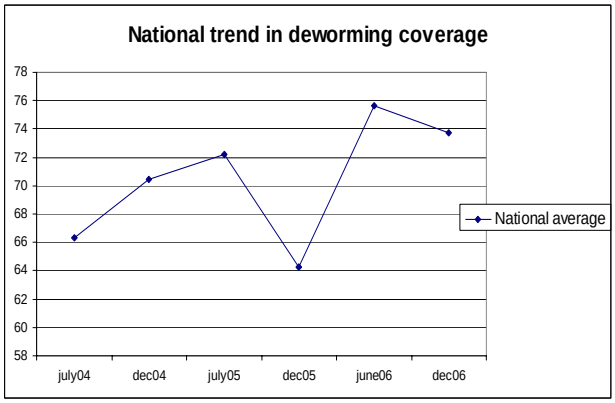
Documentation of case studies of best practices in nutrition

In Year 3, a few case studies were collected in the areas of growth monitoring and promotion and infant and young child feeding. The primary purpose of the case studies is to document strategies that are working in specific communities and share best practices with other districts. Copperbelt Province has successful case studies on the continuity of CHWs in implementing community-based GMP.

Vitamin A supplementation and De-worming

Vitamin A trend analysis 2000 - 2006 completed

In the first quarter of the year, a trend analysis of Vitamin A supplementation coverage was conducted with technical assistance from ISTI. Results from this analysis indicated the need to stabilize coverage and identified gaps requiring action, particularly in data management. A draft report was developed, preliminary findings shared at the CHWk consultative meeting, and the report finalized. Recommendations included the transfer of responsibility for data management to DMS and DHIOs and primary screening of reports at all levels prior to sending them on to higher levels.



Participation in the International Conference on Micronutrients

During the third quarter, HSSP participated in the International Conference on Micronutrients and shared experiences in implementing micronutrient control programs. Key recommendations from the conference included the need for programs to continue investing in cost-effective interventions such as Vitamin A supplementation.

Support to the 2007 Integrated Measles Campaign:

HSSP also provided support to the Child Health Technical Committee to ensure the integration of vitamin A and de-worming activities into the 2007 Integrated Measles Campaign. HSSP invested time and effort in the planning, implementation and post-evaluation of the Measles Campaign.

Analysis of Vitamin A coverage and its association with morbidity conducted

HSSP also conducted an in-depth analysis of the coverage of vitamin A supplementation and its possible association with morbidity.

2007 Child Health Week Consultative Meeting

HSSP also supported the planning, funding and facilitation of a 2007 Child Health Week consultative meeting. Representation was obtained from all the 9 provincial Clinical Care Specialists, Data Management Specialists and Surveillance focal points. The meeting addressed ways of coping with the challenges affecting the implementation of Child Health Week and generated ideas for improving data management.

Strengthening data capturing tools for postnatal supplementation

Focus was on primary data tools such as the Integrated Child Health tally forms and harmonized with community-based Child Health registers (which also capture postnatal supplementation data). The community register is a key data collection tool for maternal health as over 50% of deliveries are still conducted in homes. Community registers that register children born in a community provide a great opportunity to record postnatal supplementation.

Reaching Every District EPI sites visited in Ndola

In the third quarter, HSSP also conducted a site visit to RED pilot areas in Ndola. The visit focused on strengthening the use of primary data tools and data collection systems to improve reporting on vitamin A coverage.

Review of gaps in anemia control programs completed

HSSP also supported a review of existing anemia control programs to identify gaps needing strengthening. Several existing gaps have been identified and different recommendations on strengthening interventions require follow up.

2.7.2 Strengthened provincial and district capacities in managing vitamin A supplementation and de-worming program

The following strengthening activities in vitamin A and de-worming took place on provincial and district levels in Year 3:

Support supervision conducted in 12 districts during Child Health Week

HSSP supported Child Health Week in 4 districts in the first round and 8 districts in the second round of Child Health Week. Support supervision continued to yield useful information regarding ways to address the bottlenecks to successful implementation. From the perspective of the districts, support from the PHO and national level is seen as a morale-booster and more importantly a buffer to the inadequate human resources and transport available. Financial and technical support supervision was provided during the implementation of the second round of Child Health Week which was integrated in the National Measles Campaign.

8 provincial workshops held to strengthen data management

The provincial workshops were a follow up action to the trend analysis conducted earlier in the year. The workshops were also held to strengthen data management for vitamin A and de-worming in Eastern, Copperbelt, Northwestern, Central, Southern, Lusaka, Luapula and Northern Provinces. Eastern Province was the first province to be covered in March, followed by the other 7 in September 2007. The meeting was held with support from ISTI. The expected outcome of the process is that districts will aim to improve the data quality of

reports and utilization of their data in planning and implementation (with a focus on specific challenges evidenced in the data collected). The ultimate goal is for districts managers to focus their efforts on their district specific challenges following the improvement of data quality, resulting in stabilized and increased coverage to the desired level of over 80%.

Child Health Week 2006 review meeting in Lusaka Province

HSSP also supported Lusaka Province to conduct a Child Health Week 2006 review meeting. The aim was to share experiences and help the Provincial Health Office provide support to districts using a peer review strategy. The meeting allowed districts to learn best practices (e.g. Kafue District had already started setting aside money for Child Health Week 2007).

National and provincial level orientation on the Measles Campaign

In the third quarter, HSSP supported the preparations, provided funding and hosted national and provincial level orientations related to the Measles Campaign in Eastern and Southern Provinces. HSSP also provided financial and technical support for orientations in Lusaka Urban, Chongwe, Mazabuka, Livingstone, Kitwe, Ndola, Mongu and Kaoma Districts.

Data quality audits conducted in 5 districts

In the first quarter, data quality audits were conducted in 5 selected districts (Mazabuka, Monze, Livingstone, Kabwe and Chibombo) to assess key issues surrounding poor data management. Findings pointed to the need for supervision before and during Child Health Week in data management. A draft tool was developed. The data quality audit results were shared with the provinces during the consultative meetings.

2.7.3 Challenges in Vitamin A and De-worming

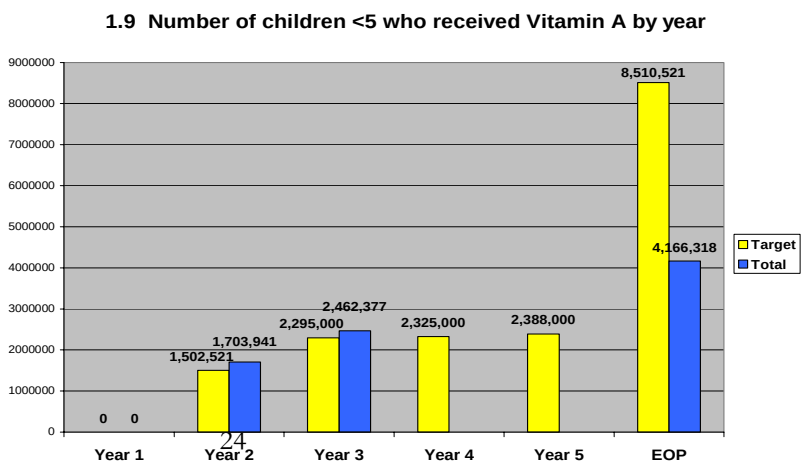
Vitamin A and de-worming faced the following challenges this year:

- Inadequate human resources at the MOH limited technical assistance that could be provided as the only Nutrition person had several competing priorities
- Inadequate distribution of supplies continued to be a constraint to the efficient delivery of services

2.7.4 Improved Vitamin A and De-worming coverage and quality of care

Key indicators show the following results for vitamin A and de-worming through Year 3:

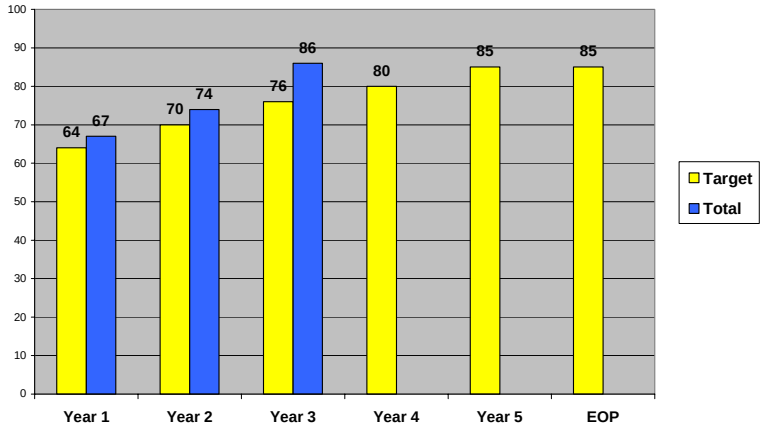
HSSP key indicator 1.9 shows the number of children under 5 who received vitamin A to have increased from 1.7 million in year two to nearly 2.5 million children in Year 3 exceeding the third year target of 2.3 million, and reaching 49% of the cumulative



EOP target. In both project years HSSP exceeded its targets for this indicator.

HSSP key indicator 1.10 shows the percent of children 6-59 months receiving Vitamin A supplementation in the last year to have increased from 67% in year one to 86% in Year 3. In all project years HSSP exceeded its targets for this indicator. HSSP will continue to assist the MOH to achieve the annual targets for this indicator throughout the project.

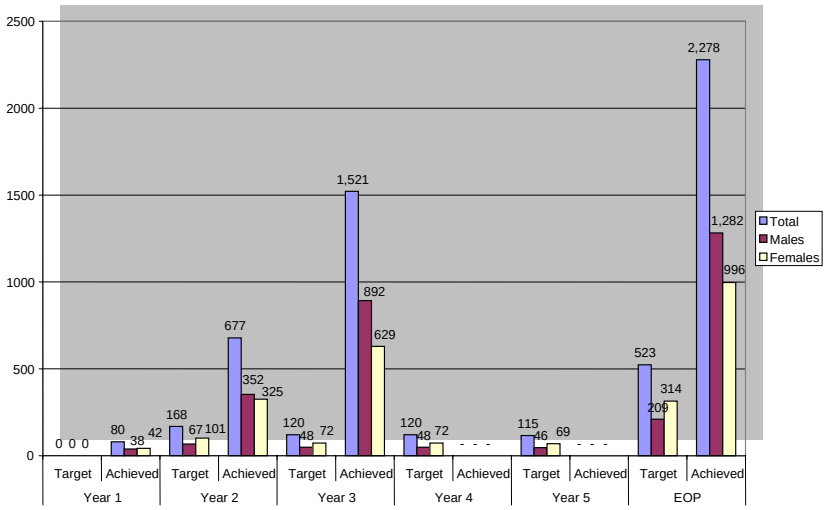
1.10 Percent of children 6-59 months receiving Vitamin A supplementation in the last 1 year



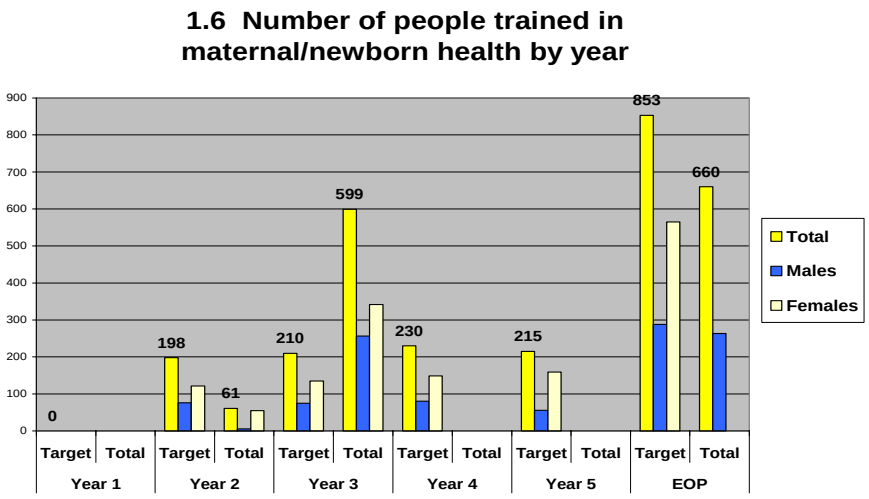
2.8 CHN overall training results

Key indicators show the following results for overall CHN training through Year 3:

1.5 Number of people trained in child health care and child nutrition by year



HSSP key indicator 1.5 shows the number of people trained in child health care and child nutrition to have increased each year from 677 in year two to 1,521 in Year 3. In both project years, HSSP far exceeded its targets for this indicator. The cumulative total of persons trained to date far exceeds the EOP target of 523.



HSSP key indicator 1.6 shows the number of people trained in maternal/newborn health to have increased each year from 61 in year two to 599 in Year 3, far exceeding the third year target of 210, and reaching 77% of the cumulative training target of 859 persons trained by the EOP.

3 Integrated Reproductive Health (IRH)

3.1 Related Program Objectives

1. Achievement and maintenance of high coverage for key IRH interventions
2. Improvement of the quality of key IRH interventions
3. Strengthening of health systems in the delivery of key IRH interventions

3.2 General Strategy

The IRH team works closely with the MOH, PHOs and DHMTs to implement selected interventions that address key challenges in IRH. Specifically, HSSP focuses on scaling up post-abortion care (PAC) services through the national PAC Task Force, updating provider knowledge, skills, and decision-making related to obstetric emergency care (EmOC) including PAC, increasing access for maternal and newborn complications at sites closer to or within communities, strengthening community birth-preparedness and complication-readiness through partnerships with TBAs and other community-based agents, and scaling up use of long term contraceptive methods. Care for STIs is integrated into reproductive health.

3.3 Strengthened Overall National Capacities in IRH

The following cross-cutting activities took place in Year 3 to strengthen overall capacities in IRH:

MOH Mid- Term Expenditure Framework (MTEF) 2007-2009 Action Plan and budget finalized

The 2007-2009 reproductive health components of the MOH MTEF action plan and budget were finalized in the first quarter with support from HSSP. HSSP also provided assistance in the launch and review Southern Province's 2008–2010 MTEF Plan.

IRH Supervisory Tools developed, pretested, finalized and rolled out to all provinces except Western Province
In the first quarter, HSSP also assisted in the development and pre-testing of IRH Supervisory Tools for provincial, district and facility levels. In the second quarter, HSSP worked with partners to finalize the Tools, and began the rollout in Lusaka Province with an orientation of MCH Managers. In the third the fourth quarters, rollout of the Tools continued, with all provinces reached except Western Province by the end of the year.

Road Map for the Accelerated Reduction of Maternal and Neonatal Morbidity and Mortality reviewed and to be finalized
In the first quarter, HSSP also played an active role in the review and costing of the Road Map for the Accelerated Reduction of Maternal and Neonatal Morbidity and Mortality. Finalization of the Road Map is planned for next year.

HMIS IRH indicators reviewed
In the first quarter, HSSP also assisted in a review of the HMIS to ensure the inclusion of key indicators related to family planning, PAC and EmOC.

Reproductive Health Policy Guidelines and protocols disseminated to the provinces
In the second quarter, HSSP supported and facilitated dissemination of the Reproductive Health Policy Guidelines and protocols on family planning, safe motherhood and sexually transmitted infections to provincial Clinical Care Specialists and national level stakeholders in all 9 provinces.

MVA Action Plan developed at the Kenya Conference
In the second quarter, support was also given to the development of the Action Plan on MVA instrument sustainability for Zambia.

IRH IEC materials in FP and safe motherhood drafted and in the process of finalization
In the fourth quarter, HSSP hired a consultant to develop national IRH IEC materials. The consultant worked in collaboration with HCP to develop IEC materials related to FP/EmOC. Materials are in draft and ready for pre-testing.

Technical Working Group meetings in FP, SMH and EmOC attended
Throughout the year, HSSP attended FP, SMH, and Emergency Obstetric Care (EmOC) technical working group meetings to encourage partnerships, coordination and leveraging of resources among stakeholders. In the second quarter, HSSP also attended the National Technical Steering Committee meeting for Christian Children's Fund.

3.4 Post-Abortion Care (PAC)

3.4.1 Strengthened national level capacities in PAC

The following strengthening activities in PAC took place on the national level in Year 3:

PAC/EmOC training curricula harmonized to a comprehensive EmOC
During the past year, HSSP worked to harmonize the PAC/EmOC training curricula to form a comprehensive EmOC curriculum. In the fourth quarter, the combined training

curriculum was completed. The harmonized training package will be used to train service providers as a single unit block for both PAC and EmOC to be called EmOC.

16 national trainers from 8 provinces oriented to the harmonized EmOC/PAC training package
In the fourth quarter, 16 national trainers of trainers from 8 provinces (except Central Province) were oriented to the new combined EmOC training package.

EmOC training coordinator position discussed
In the fourth quarter, a series of meetings was also held with the Ministry of Health and other key partners to discuss the recruitment of the EmOC Coordinator. EmOC Working Group meetings were held as scheduled.

Vacuum aspiration data from Ndola Central Hospital and UTH collected and analyzed
During the year, data from Ndola and UTH on PAC services was collected and analyzed. The analysis revealed that 5,400 clients had received manual vacuum aspiration in 12 months, from February 2006 to February 2007. A total of 37 and 9 maternal deaths had occurred respectively during the same period at UTH and Ndola Central Hospitals. Data was collected to monitor service provision and assist in planning and strengthening of PAC services in the two institutions.

3.4.2 Strengthened provincial and district capacities in PAC

The following strengthening activities in PAC took place on provincial and district levels in Year 3:

PAC site assessments conducted
In the first quarter, PAC site assessments were conducted in 4 districts of Southern Province: Mazabuka, Monze, Kalomo and Livingstone. This was in preparation for the provision of PAC services in the four districts.

Chipata General Hospital assessed as a PAC training site
In the third quarter, HSSP conducted a site assessment of Chipata General Hospital, which was found to be suitable for PAC training of service providers in Eastern Province.

32 health care providers trained in PAC
In the fourth quarter, HSSP conducted three training sessions in PAC, two in Kitwe and one in Ndola, for 28 health care providers from 7 districts in Luapula Province from sites that were earlier trained in EmOC. All the EmOC sites in Luapula are now be able to provide a complete package that includes PAC. In addition, 4 service providers were trained in PAC - 2 from Ndola and Kitwe Central Hospitals respectively to strengthen the two training sites.

3.4.3 Challenges in PAC

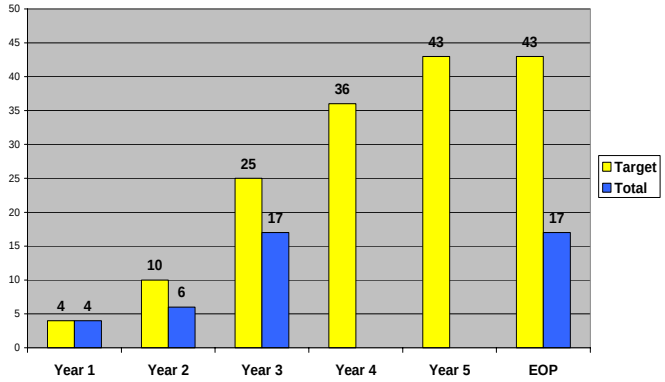
PAC faced the following challenges this year:

- Staff shortages negatively affected program implementation and achievement of targets
- Lack of other cooperating partners implementing PAC
- Inadequate funding at provincial and district levels for PAC training

3.4.4 Improved coverage and quality of PAC services

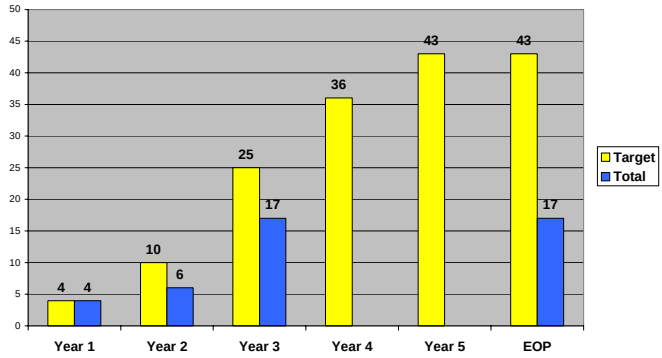
Key indicators show the following results for PAC through Year 3:

3.1 Number of districts with at least one functioning PAC site by year



HSSP key indicator 3.1 shows the number of districts with at least one functioning PAC site to have increased from 4 in year one to 17 in Year 3, 68% of the third year target and 40% of the target for EOP. The number of sites functioning by the end of this year was over four times greater than in year one.

3.2 Number of districts with at least 2 providers trained in PAC and working in facilities providing PAC



HSSP key indicator 3.2 shows the number of districts with at least two providers trained in PAC and working in facilities providing PAC to have increased from 4 in year one to 17 in Year 3, 68% of the third year target and 40% of the EOP target for this indicator. Again, the number of sites increased dramatically in the past 12 months.

3.5 Emergency Obstetric Care (EmOC)

3.5.1 Strengthened national level capacities in EmOC

The following strengthening activities in EmOC took place on the national level in Year 3:

EmOC training package adapted to Zambia and the initial ToT training conducted

In the first quarter, the JHPIEGO EmOC training package was reviewed and adapted to suit the Zambian situation. The 5 week EmOC training period was reduced to 2 weeks covering critical areas that impact positively in the reduction of maternal mortality. Following the completion of the package, 10 trainers of trainers from Ndola received training. In the second quarter, 140 copies of the EmOC training modules were printed for scale-up. A consensus meeting was also held in Lusaka with 13 stakeholders from the MOH, UNICEF,

UTH, USAID and Provincial Health Offices (Eastern, Copperbelt and Lusaka) to discuss the EmOC/PAC rollout. The meeting agreed on key issues regarding training, infrastructure, drugs and medical supplies and equipment provision.

Harmonized PAC/EmOC training curricula developed, trainers trained in comprehensive EmOC
As mentioned above under PAC, in the fourth quarter the combined training curricula for PAC/EmOC was completed. A ToT was conducted for 16 national trainers of trainers from 8 provinces (except Central Province) using the new combined training package, and a series of meetings were held with the Ministry of Health and other key partners to discuss the recruitment of an EmOC Coordinator.

3.5.2 Strengthened provincial and district capacities in EmOC

The following strengthening activities in EmOC took place on provincial and district levels in Year 3:

EmOC site assessments conducted in 3 provinces (Luapula, Northwestern, and Southern), 6 comprehensive and 21basic sites
In the first quarter, site assessments were conducted in Itezhi-tezhi District, Southern Province. The district hospital and 3 health centers (Kaanzwa, Nanzhila and Lubanda) were identified for provision of comprehensive and basic EmOC services respectively. In the second quarter, facility assessments for EmOC and FP were conducted in Luapula Province covering 5 districts, Mansa, Kawambwa and St Paul's Hospitals. Health centers were assessed in Mansa, Chiengi, Kawambwa, Mwense and Nchelenge Districts. Ndola Central Hospital was also visited to prepare for training of service providers from Luapula Province. In the third quarter, site assessments for EmOC continued in Northwestern Province. The following sites were visited: Comprehensive EmOC - Solwezi, Loloma Mission, Kabompo, hospitals; Basic EmOC- clinics: Solwezi urban, Mapunga, St. Dorothy, Mumbezhi Holy Family. Mufumbwe, Kasanda and Kabulamema clinics were assessed in Solwezi, Mufumbwe, and Kabompo districts.

13 District managers from 4 districts in Southern Province oriented in EmOC
In the second quarter, an EmOC orientation meeting was conducted with UNICEF and the Southern Province Health Office in Livingstone for 13 managers from Itezhi-tezhi, Livingstone, Kazungula and Kalomo Districts. The orientation focused on critical managerial roles and responsibilities in the smooth implementation of EmOC on the district level.

49 health workers trained in EmOC
In the second quarter, 49 service providers were trained in EmOC in UTH and Ndola Central Hospitals: 19 from 4 districts in Southern Province and 30 from 7 districts in Luapula Province.

3.5.3 Challenges in EmOC

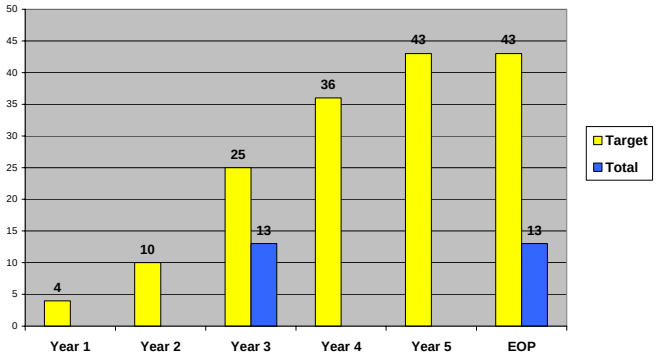
- EmOC faced the following challenges in Year 3:
- Shortage of staff negatively affected service delivery

- Inadequate space and equipment in some facilities negatively affected service delivery
- Shortage of staff within the unit negative affected implementation
- Harmonization of PAC and EmOC training, though more cost-effective in the long run, delayed the rollout
- Inadequate supervision of trained workers

3.5.4 Increased coverage and quality of EmOC services

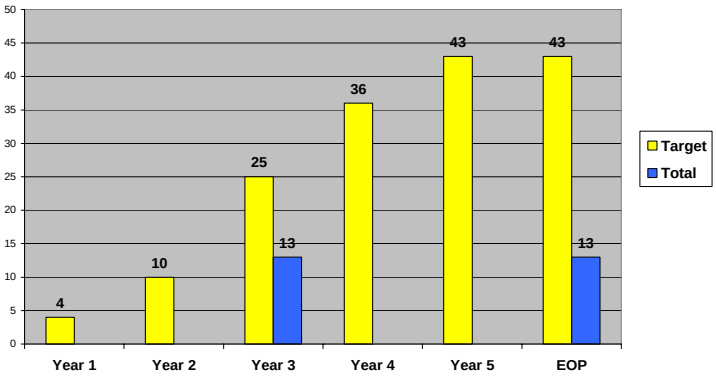
Key indicators show the following results for EmOC through Year 3:

3.3 Number of districts with at least one functioning EmOC site by year



HSSP key indicator 3.3 shows the number of districts with at least one functioning EmOC site to have increased from 0 in year one to 13 in Year 3, 50% of the third year target of 25, and 30% of the EOP target of 43. The number of sites increased dramatically in the past 12 months.

3.4 Number of districts with at least 2 providers trained in EmOC and working in facilities providing EmOC



HSSP key indicator 3.4 shows the number of districts with at least two providers trained in EmOC and working in facilities providing EmOC to have increased similarly from 0 in year one to 13 in Year 3, 50% of the Year 3 target of 25 districts, and 30% of the EOP target. Again, the number of districts increased dramatically in the past 12 months.

3.6 Family Planning

3.6.1 Strengthened national level capacities in family planning

The following strengthening activities in family planning took place on the national level in Year 3:

IRH Supervisory Tools rolled out in Northwestern Province

In the third quarter, HSSP participated in the rollout of the national IRH Supervisory Tools in Northwestern Province. Provincial MCH Coordinators and facility MCH managers were oriented to the use of the Tools.

Technical Working Group meetings attended

Throughout the year, HSSP attended FP, Safe Motherhood, and EmOC technical working group meetings which encourage partnerships, enhance coordination and leveraging of resources in family planning.

3.6.2 Strengthened provincial and district capacities in family planning

The following strengthening activities took place in family planning on provincial and district levels in Year 3:

Orientation workshop on adolescent and reproductive health for 28 providers from 5 districts in Southern Province conducted in promotion of Youth Friendly Services (YFS)

In the first quarter, an orientation workshop was held for 28 health care providers and partners on adolescent sexual and reproductive health from the districts of Siavonga, Namwala, Itezhi-tezhi, Gwembe and Mazabuka, with a view to improving FP services for adolescents and post abortion care.

95 long term family planning (Jadelle) facility assessments conducted in 6 provinces

In the second quarter, 18 Jadelle facility assessments were conducted in Northern Province in 9 districts. This was followed by 16 assessments in Copperbelt Province. In the third quarter, Jadelle site assessments were conducted in 61 service delivery points in 16 districts in Lusaka, Central, Luapula, and Eastern Provinces. Assessments found a lack of suitable rooms, equipment for providing Jadelle services such as weighing scales and sphignomometers for checking blood pressure in some of the facilities. However, these challenges can be corrected by incorporating and addressing them in the action plans with support from the PHOs.

75 health workers trained in Jadelle

In the second quarter, 31 health care providers were trained in Jadelle in Northern Province, drawn from 10 districts, and representing 22 service delivery sites. In Copperbelt Province, 28 providers were also trained from 17 service delivery sites in 9 districts. In the third quarter, Jadelle training was conducted for 16 additional health care providers, bringing the trained in Year 3 to a total of 75.

Technical support supervision (TSS) provided to 20 Jadelle sites

In the third quarter, HSSP provided TSS to 20 Jadelle sites: 16 in Copperbelt Province, and 4 in Southern Province. Most sites were found to be performing well and the demand for Jadelle was found to be high. Most sites had run out of stocks, however, except for Maamba Hospital which was found to have an excess. Arrangements were made to move some of the hospital stocks to needy facilities within the province.

Jadelle scaled up to 57 sites in 19 districts in 4 provinces

By the end of the year, Jadelle service provision had been scaled up to 57 sites in 19 districts and 4 provinces. Further scale up was not possible due to Jadelle stock outs. HSSP continued to encourage the MOH and other partners to improve the Jadelle supply chain.

3.6.3 Challenges in family planning

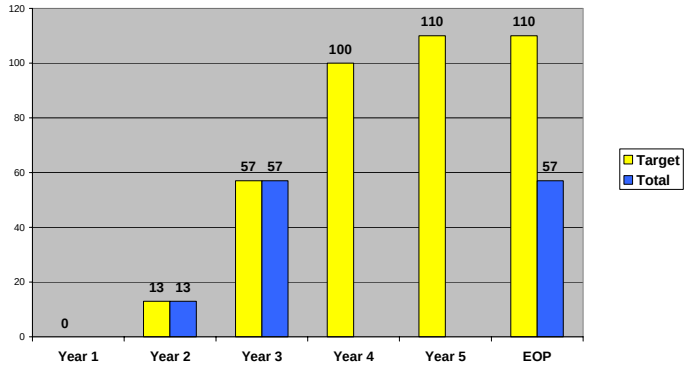
Challenges in family planning in Year 3 were as follows:

- Jadelle stock-outs negatively affected service delivery and hampered efforts to meet targets
- Inadequate space and equipment in some facilities negatively affected service provision

3.6.4 Improved coverage and quality of family planning services

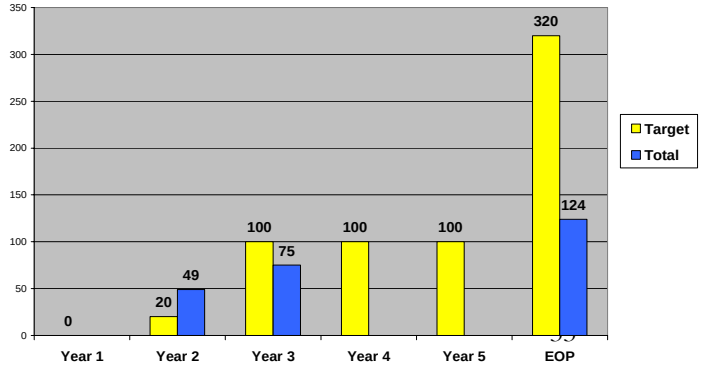
Key indicators show the following results for family planning through Year 3:

3.8 Number of service delivery points providing FP counselling or services (Jadelle)



HSSP key indicator 3.8 shows the number of service delivery points providing family planning counseling or services in Jadelle to have increased significantly from 13 in year two to 57 in Year 3, reaching 100% of the Year 3 target, and 52% of the target for EOP.

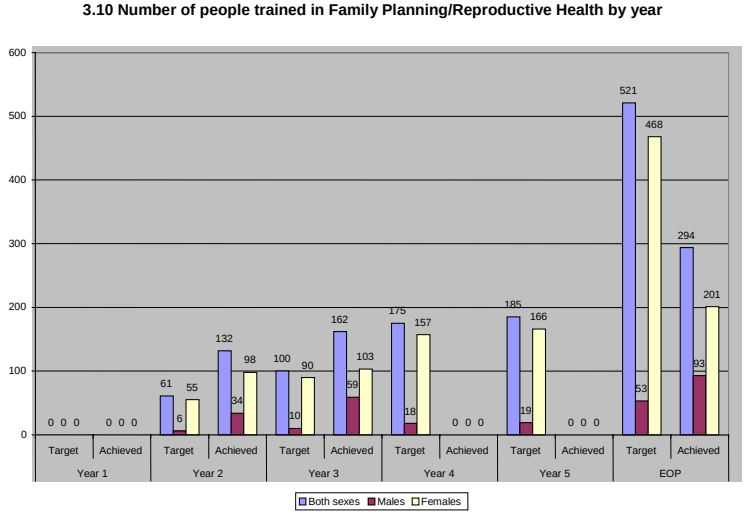
3.11 Number of health care providers trained in long term FP methods by year (Jadelle)



HSSP key indicator 3.11 shows the number of health care providers trained in long term family planning methods (Jadelle) to have increased from 49 in year two to 75 in Year 3, 75% of the third year target of 100 persons trained. The cumulative total of 124 persons trained to date is 39% of the EOP target of 320.

3.7 IRH overall training results

Key indicators show the following results for overall CHN training through Year 3:



HSSP key indicator 3.10 shows the number of people trained in family planning/ reproductive health to have almost doubled over the past 3 years from 132 in year two to 162 in Year 3, far exceeding the third year target of 100 persons trained. HSSP will continue to assist the MOH to meet the annual training targets for this indicator each year.

4 Malaria

4.1 Related Project Objectives

1. Achievement and maintenance of high coverage for key malaria interventions
2. Improvement of the quality of key malaria interventions
3. Strengthening of health systems in the delivery of key malaria interventions

4.2 General Strategy

Malaria exerts a tremendous burden on the health care system and the country's economy in general. It is the major cause of illness and death especially amongst the children and pregnant women. 45% of clinic consultations and 50,000 deaths are estimated to be caused by malaria annually. HSSP's support to the prevention and treatment of malaria is focused on the overall strengthening of the National Malaria Control Centre (NMCC), strengthening and scaling up indoor residual spraying (IRS) on all levels; strengthening of malaria interventions in child health; and strengthening of malaria interventions in integrated reproductive health.

4.3 MOH/NMCC Institutional Strengthening

Support to the MOH/NMCC includes technical, managerial, and administrative assistance in technical areas detailed below, and funding for key staff. USAID has provided assistance to the NMCC since 1998 through the Center for International Health, Boston University through the Applied Research in Child Health (ARCH) project and since 2004 through HSSP. Support in Year 3 was as follows:

Key staff positions funded
HSSP continued to provide funding to the MOH/NMCC for the key positions of IRS Program Officer, Senior Logistics Officer, Senior IRS Advisor, Operations Research/Information Management Officer and a number of support staff.

4.4 Indoor Residual Spraying – IRS

The MOH/NMCC has embarked on an ambitious campaign to reduce malaria through vector control interventions that include the use of ITNs and indoor residual spraying (IRS) in high risk communities. By the end of year two, IRS had been scaled up from 2 districts in 2002 to 15 districts in 2005, while coverage had been scaled up from a focus on specific hotspots to an estimated 40% of households in high risk communities.

4.4.1 Strengthened national capacities in IRS

The following strengthening activities in IRS were conducted on the national level in Year 3:

Protective gear procured for spray operators and distributed to all 15 districts
Protective clothing for all spray operators was procured in the first quarter to ensure minimum safety requirements, including overalls, face masks, chemical droplet fumes, dust cartridges, gloves, gum boots, mutton cloths, hard hats and goggles. Gear was received and distributed to all 15 districts.

Insecticides procured, nearly 100% received in Lusaka, first stock distributed to all 15 districts
HSSP also assisted the MOH/NMCC with quantification of insecticides, equipment and spares for the 2007/08 IRS operation. By the end of the year, a total of 60,000 DDT, 125,000 Fendona and 125,000 Icon sachets had been procured and 75% of the stocks had arrived. The first stock was distributed to all 15 districts.

IRS training monitoring and activity supervision checklist revised and used in the field for the first time
In the first quarter, the national IRS supervision checklist was also reviewed, updated and 1,000 copies printed. It was used during this spray season in the field for the first time.

Insectory at the NMCC being rehabilitated for vector resistance studies: insert text

Vector resistance studies are essential in determining the effectiveness of insecticides used in IRS programs, and are key to routine monitoring. Monitoring is necessary to determine the success of the IRS operation and measure the achievement of expected targets. To carry out these studies routinely, there should be a functional insectory facility on the national level. At present the facility available at NMCC is not up to standards. For this reason, HSSP is assisting NMCC to upgrade the facility to ensure the quality of resistance studies conducted. Facility rehabilitation involves securing an insect-rearing and stock room, acclimatization, facilities for lab space and storage, and improving hygienic levels in the premises.

Efficacy trials on the Deltamethrine WG formulation planned

In the second quarter, HSSP provided support to NMCC to begin planning for efficacy trials on the Deltamethrine WG formulation to determine the cost-effectiveness of IRS in the context of integrated vector management.

Meeting on environmental monitoring held with ECZ

In the second quarter, a meeting was held with the Environmental Council of Zambia (ECZ) to discuss assessment protocols and steps taken by ECZ to conduct environmental monitoring activities. Participants discussed IRS field inspections carried out by ECZ to check compliance in the field. It was concluded that great efforts were being made to ensure compliance to requirements. The USAID Mission also participated in the meeting. During the meeting some gaps were identified including lack of recommended environmental safeguard measures in storage and daily operation of insecticide handling in most of the districts. Plans are already drawn and awaiting funding to improve the conditions in a phased manner in all the 15 districts. Further initial discussions with the University of Zambia, Chemistry Department concerned carrying out environmental monitoring for DDT residuals on behalf the ECZ and NMCC.

First round of entomological surveys conducted in 7 districts for M and E of IRS activities

30 participants from IRS districts were trained in the second quarter in epidemiological and entomological monitoring. Trained staff began collecting mosquitoes for bioassays and insecticide resistance monitoring. By the end of the year, the first round entomological survey had been completed in all 7 districts in Central Province, including 30 houses in IRS areas, and 30 houses in non-IRS areas. Results of the surveys were analyzed and a report completed**.**

IRS Operations Guidelines, Training Manuals and Storage Guidelines drafted

In the third quarter, HSSP assisted the IRS Core Technical Group develop national IRS Operational Guidelines, IRS Training Manuals and IRS Storage Guidelines during a meeting in Kabwe. First drafts of these documents were produced.

Standardized forms for IRS recording and reporting developed

In the third quarter, HSSP also assisted in the development of standardized forms for the recording and reporting of IRS activities. Standard forms enable districts to report uniformly and improve overall data quality. A single Excel data sheet was designed with 15 districts that allows reporting of essential IRS data from spray men/women to supervisor and then to coordinators at district level. The standardized forms were tested during the district cascade training, revised as necessary, and given to all the districts for use during the 2007 spray campaign.

IRS database development begun

In the third quarter, HSSP assisted in the development of a national IRS database in collaboration with MRC in Durban. The look-up lists required for the initial development were sent to MRC. The data base will standardize the recording and reporting of the IRS operational data for the NMCC. However, the latest change is that NMCC has used simple version of a data base structured on an excel work sheet. This is now being converted to MS Access software package to be tried in districts in the next season.

Round 7 Global Fund Malaria proposals supported

In the third quarter, HSSP also assisted the MOH/NMCC in the development of round 7 GF Malaria proposals for Zambia.

Supplementary Environmental Assessment Report on DDT completed for 2007

In quarter three, a supplementary environment assessment report for use of DDT under USAID funds was completed and submitted to USAID.

2006 – 2007 Spray Season Report drafted

The first draft of the IRS report for the 2006/2007 spray season was produced in the fourth quarter. Finalization of the report was delayed due to the multiplicity of stakeholders involved in its development.

IRS ToT conducted: 72 IRS Master Trainers trained from 15 districts

In Year 3, a total of 72 Master Trainers were trained from 15 districts for the 2007-2008 IRS season. These included district coordinators, supervisors, and environmental health officers.

IRS IEC materials produced and disseminated

National IEC materials on IRS were produced centrally in various languages in the first quarter of the year, and disseminated with special targeting to critical districts. These included posters, leaflets and a spray operator's information brochure. HSSP provided technical assistance in reviewing the documents but not in any other form such as funding or facilitation.

4.4.2 Strengthened provincial and district capacities in IRS

The following strengthening activities in IRS were conducted on the provincial and district levels in Year 3:

1,300 Spray Operators trained

The national ToT was followed by a 21-day district cascade training in all 15 districts. In Year 3, a total of 1,300 men and women from IRS communities were trained for a period of 21 days to apply the proper spraying techniques during these sessions.

Storekeepers trained in 15 districts

During the district training cascade, storekeepers from all 15 IRS districts were also trained in the safe handling and storage of insecticides. Two store keepers from each district received 7 days of training. One of these is now working as the storekeeper for the district NMCP. His duties are shared but during the spray season he is primarily responsible for all aspects of store keeping of insecticides in the district. The other member is trained as standby since turn over of personnel at districts are high. Two central supervisors with NMCC in charge routinely check and monitor their activities.

District supervision of IRS activities facilitated

District managers were also supported to supervise and enumerate IRS activities. They were included in the training session for GPS/GIS training session in districts. Standard requirements stipulate that supervision and monitoring should be conducted at the beginning of the IRS campaign, midway and towards the end.

District supervision visits by ECZ for environmentally safe handling of insecticides supported

In quarter two, HSSP conducted district monitoring visits on the safe use and disposal of chemicals and insecticides. Kafue District was found to have adequate and suitable storage space and facilities for spray operators, including an extra space that could be temporarily used by Mazabuka District, which did not have adequate facilities. Drawings for Mazabuka's new building were reviewed. Monitoring revealed that empty sachets were appropriately stored although they needed to be collected in a central place for final disposal.

43 district personnel trained to use GPS/GIS for mapping of IRS areas

43 district personnel were trained to use GIS/GPS for geo-coding of household structures. Personnel trained included 15 district health information officers, 15 IRS managers, 3 provincial staff, 2 Konkola Copper Mines staff, 4 city council staff and 4 from NMCC.

IRS post spray meeting held in 15 districts

In the second quarter, HSSP also held a post-spray meeting for the 15 IRS districts. The meeting was attended by district health directors, IRS managers, NMCC and HSSP staff as well as personnel from KCM. The successes and challenges to the spraying program were discussed.

Storage/hygiene and waste management surveys conducted in 15 districts 30 participants trained in epidemiological and entomological monitoring

In the second quarter, HSSP in collaboration with the Ministry of Works and Supply architects and quantity surveyors completed the assessment of IRS infrastructure in all 15

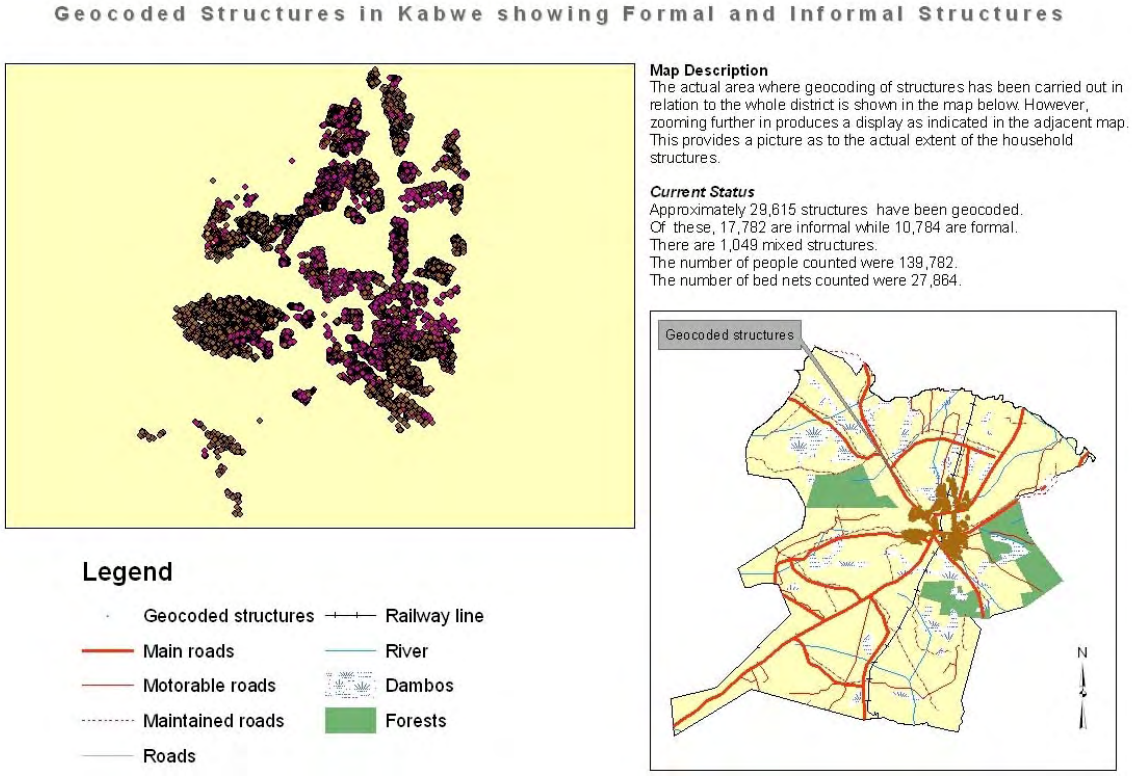
target districts. In the third quarter, HSSP monitored stock levels to prevent insecticides from expiring in districts, and monitored the collection and central storage of DDT and other pyrethroid waste material (empty sachets and containers). A priority list together with requirements for rehabilitation for storage/hygiene and waste management facilities was been developed. All insecticide waste material (empty sachets) from the 15 districts was found to have been collected and secured in a central point pending destruction.

45 IRS Supervisors trained in program management and data handling

Currently, IRS supervisors are only involved in the daily monitoring and supervision of the spray operation/operators in the field. Due to inadequate human resources, high staff turn in most districts, and the need for more district strengthening in program management and sustainability, it was decided that IRS supervisors would be given training in program and data management during their annual training/refresher sessions. Additional days of training were provided with appropriate theoretical lectures and practical training exercises.

IRS areas mapped and geo-coded in 11 districts

In the third quarter, HSSP assisted the MOH/NMCC to produce IRS maps for Solwezi, Chingola and Kabwe Districts. IRS maps were used in planning and implementation of IRS activities. HSSP also assisted in the geo-coding of household structures. Geo-coding is essential for enumerating structures, quantifying insecticide needs, calculating human resource requirements, planning spray operations and conducting field operations research. By the end of quarter, 11 districts had been mapped and structures geo-coded. Districts included Solwezi, Chingola, Kafue, Kabwe, Mazabuka, Kalulushi, Chingola, Luanshya, Mufulira, Chongwe, Chililabombwe and Livingstone. Maps show the distribution of formal and informal structures as well as the distribution of bed nets within the IRS areas. A sample map from Kabwe District is shown below:



District preparations began for the 2008-2009 spray campaign in 7 new districts

In the fourth quarter, a situation analysis visit was conducted to each of the 7 newly-selected districts to be included in the 2008-09 IRS season. Districts were given a preparation checklist for IRS operations.

4.4.3 Challenges in IRS

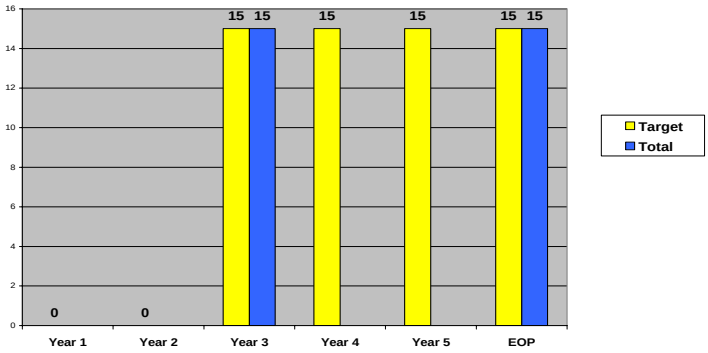
IRS faced the following challenges in Year 3:

- Delays in funding for implementation resulted in spraying during the rainy season posing logistical and compliance challenges
- Weak district support and planning
- Lack of adequate district storage and training facilities
- Delays in funding causing late awareness-raising activities

4.4.4 Improved IRS coverages and quality

Key indicators show the following results for IRS through Year 3:

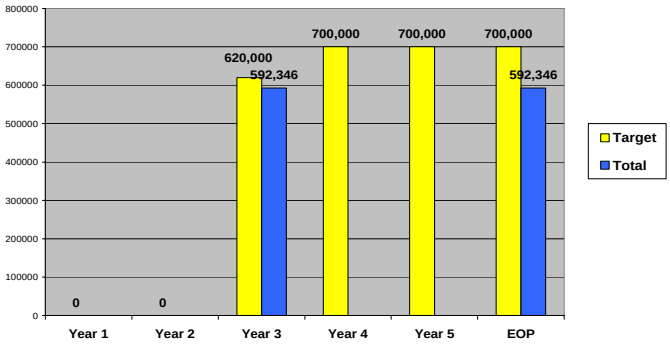
2.1 Number of districts implementing IRS by year



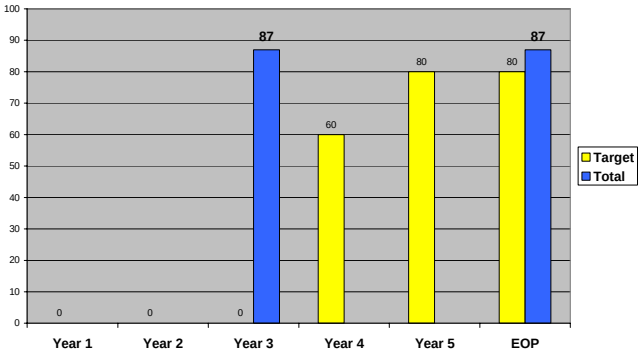
HSSP key indicator 2.1 shows 15 districts implementing IRS in Year 3, 100% of the third year target. HSSP will continue to assist the MOH/NMCC to meet its targets for this indicator each year through EOP.

2.2 Number of households/structures sprayed with insecticide

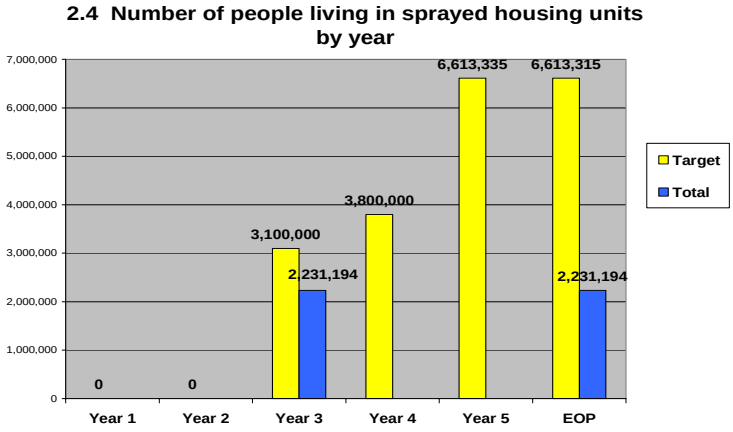
HSSP key indicator 2.2 shows 592,346 households/structures to have been sprayed with insecticide this year, 96% of the third year target. HSSP will continue to assist the MOH/NMCC to meet its targets for this indicator each year through EOP.



2.3 Percent of targeted housing units/structures sprayed in the last 12 months



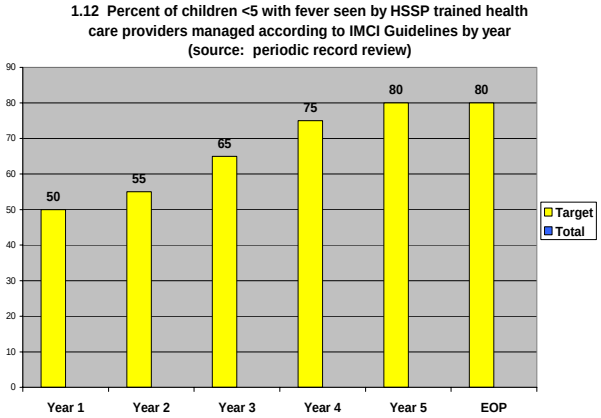
HSSP key indicator 2.3 shows 87% of targeted housing units/structures to have been sprayed in Year 3. There was no target for this indicator this year. HSSP will continue to assist the MOH/NMCC to meet its targets for this indicator each year through EOP.



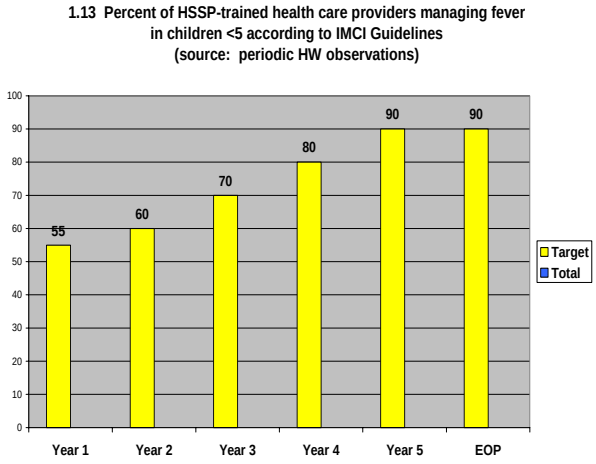
HSSP key indicator 2.4 shows 2,231,194 people living in sprayed housing units this year, 89% of the target for Year 3, and 34% of the EOP target

4.5 Malaria and Child Health

HSSP plays a central role in assisting to maintain and increase coverage of malaria interventions in child health. For detail on support provided this year to child health and malaria, refer to the CHN section of this report. Key indicators show the following results for malaria and child health through Year 3:



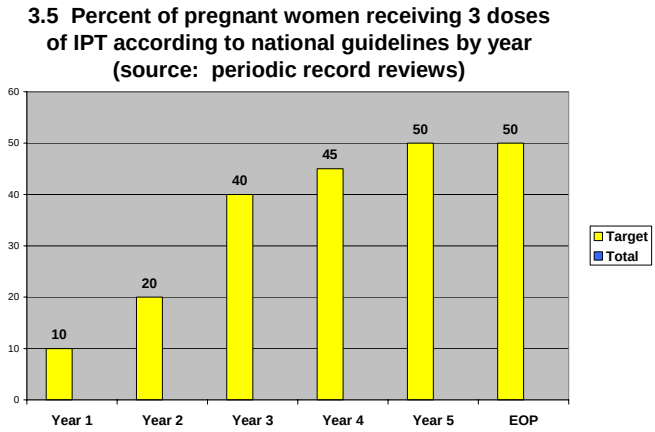
HSSP key indicator 1.12 shows a target for Year 3 of 65% of children under 5 with fever seen by HSSP-trained health care providers managed according to IMCI guidelines. HSSP will collect data on this indicator in the coming period through case record reviews for children under 5 who presented with fever and were seen by HSSP-trained health care providers.



HSSP key indicator 1.13 shows a target for Year 3 of 70% of HSSP-trained health care providers managing fever in children under 5 according to IMCI guidelines. HSSP will collect data on this indicator in the coming period through systematic observations of case management behavior of HSSP-trained health care providers.

4.6 Malaria and Reproductive Health

HSSP also plays a central role in assisting to maintain and increase coverage of malaria interventions in IRH. For detail on support provided to malaria and reproductive health this year, refer to the IRH section of this report. Key indicators show the following results for malaria and reproductive health through Year 3:

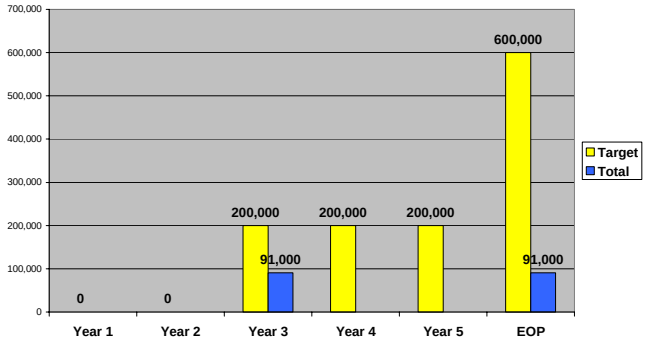


HSSP key indicator 3.5 shows a target for Year 3 of 49% of pregnant women receiving 3 doses of IPT according to national guidelines. HSSP will collect data on this indicator through case record reviews for pregnant women.

4.7 Improved capacities of national, provincial, district levels and partners in malaria

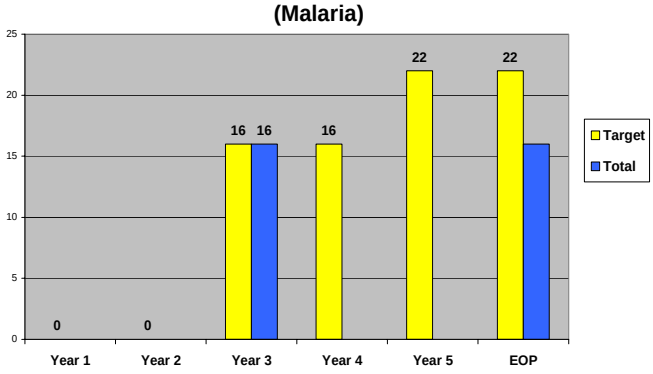
Key indicators show the following results for improved capacities on national, provincial and district capacities in malaria through Year 3:

2.5 Value of pharmaceuticals and health commodities purchased (Malaria)



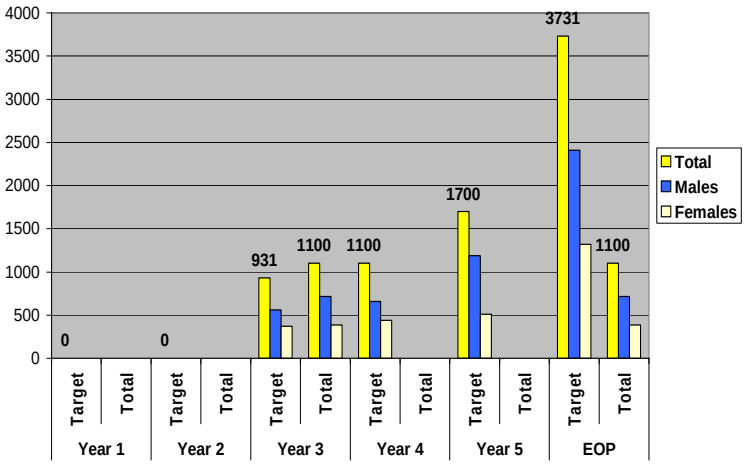
HSSP key indicator 2.5 shows US$91,000 to have been spent on pharmaceuticals and health commodities related to malaria in Year 3, 46% of the US$200,000 expected for the year and 15% of the cumulative $600,000 expected for EOP.

2.6 Number of host country institutions with improved management information systems (Malaria)

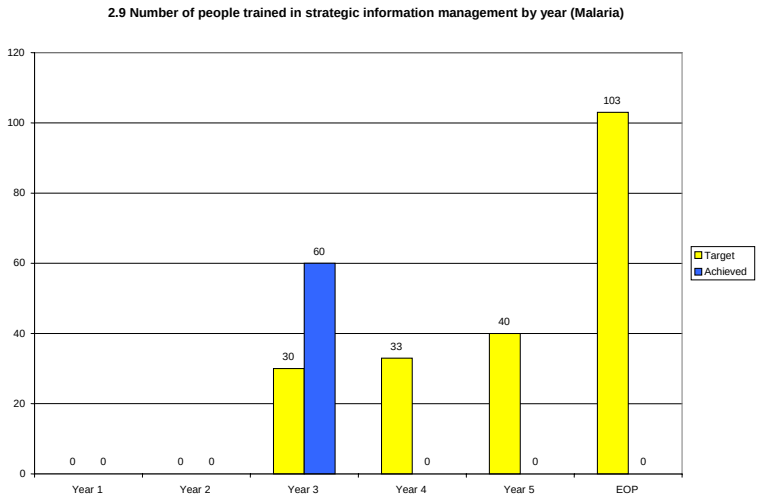


HSSP key indicator 2.6 shows 16 host country institutions with improved management information systems related to malaria in Year 3, 100% of the target for the third year.

2.7 Number of people trained in malaria treatment or prevention by sex and year



HSSP key indicator 2.7 shows 1,100 people to have been trained in malaria treatment or prevention in Year 3, exceeding the target of 931 for the third year, and reaching 29% of the cumulative EOP target.



HSSP key indicator 2.9 shows 60 people have been trained in strategic information management related to malaria in Year 3, far exceeding the third year target of 30 people.

5 HIV/AIDS and Systems Strengthening

5.1 Related Project Objectives

1. Achievement and maintenance of high coverage for key HIV/AIDS interventions
2. Improvement of the quality of key HIV/AIDS interventions
3. Strengthening of health systems in the delivery of key HIV/AIDS interventions

5.2 General Strategy

This component of the program includes strengthening systems for HIV/AIDS and assisting public and private sector partners to achieve and maintain high coverage and quality of key interventions. By 2010, all districts in Zambia should have at least one facility offering a minimum package of HIV/AIDS services, defined as including ART, CT, PMTCT, palliative care and laboratory services. The specific technical areas involved in this component include ARV drugs; reports from the provincial Clinical Care Specialists, retention of physicians, nurse tutors and other health workers, performance improvement and accreditation, planning and strategic information, pre- and in-service training, and HIV/AIDS coordination through a sector-wide approach (SWAp).

5.3 ARV Drugs

HSSP's original program description included support to the MOH in the area of ARV drugs and logistics. However, in 2006 ARV logistics was assumed by JSI/DELIVER, leading

to a shift in HSSP's support towards the establishment of a pharmacovigilance center and development of a national framework for monitoring ARV drug resistance. The position of Drugs and Logistics Advisor in HSSP was eliminated. Pharmacovigilance and HIV drug resistance monitoring activities are expected to end in year four and be institutionalized within the PRA to ensure sustainability.

5.3.1 Strengthened national capacities in ARV drugs

The following strengthening activities in ARV drugs on the national level took place in Year 3:

HIV Drug Resistance Monitoring Framework and Plan finalized and adopted

In the first quarter, the HIV Drug Resistance (HDR) Monitoring Framework was finalized and adopted by the Technical Working Group. The framework will enable the health sector to monitor antiretroviral drug resistance in the population in order to support the move towards expanded access to HIV treatment and better inform national policy and programmatic decisions. HIV drug resistance will be monitored under the national pharmacovigilance system overseen by the Pharmaceutical Regulatory Agency (PRA).

HIV Drug Resistance Monitoring Implementation Plan finalized

The HDR Monitoring Implementation Plan and budget were finalized in the second quarter, including information on financing sources and gaps. Resource mobilization from partners continued to be the mainstay for antiretroviral drug resistance activities given the limited funding from GRZ. In the third quarter, the HIV Drug Resistance Monitoring Plan was sent for printing. 500 copies of the plan were printed and disseminated to provincial and district level health facilities.

60 members of various professional bodies trained in pharmacovigilance (PVC)

HSSP also assisted the PRA to train 60 people in pharmacovigilance from key national bodies including the Zambia Medical Association, General Nursing Council, the Medical Council of Zambia, private practitioners and traditional healers. The three-day training included concepts of pharmacovigilance, guidelines, roles and responsibilities of health workers and reporting tools.

Equipment provided to PRA

HSSP procured two desktop computers, two printers and one LCD projector for the PRA. This equipment was provided to the PRA to support pharmacovigilance activities.

Strengthened provincial and district capacities in ARV drugs

The following strengthening activities in ARV drugs took place on provincial and district levels in Year 3:

Review of PVC activities in 5 provinces

In the fourth quarter, supportive supervision of pharmaco-vigilance activities was conducted in five provinces: Lusaka, Central, Copperbelt, Northern and Southern. Two experts in pharmacovigilance were recruited by HSSP for this task. Key findings were as follows: Health workers had not been trained in PVC, there was inadequate support from PRA to districts, and the NPVU was not fully functional.

256 district health workers trained In PVC from nine provinces

Assessments of pharmacovigilance activities were conducted in five provinces (Northern, Copperbelt, Lusaka, Southern and Eastern). Findings revealed general lack of support from the PRA for training and funding of pharmacovigilance activities. In response, HSSP trained 256 district health workers in the concepts of pharmacovigilance systems and adverse drug reactions/events and reporting.

5.3.2 Challenges in ARV Drugs

ARV drug challenges this year were as follows:

- National Pharmacovigilance Unit not fully functional
- Slow pace of rolling out PVC to districts

5.4 Clinical Care Specialists

With support from HSSP, 9 Clinical Care Specialists (CCSs) were recruited and placed in each of the nine Provincial Health Offices. All of the CCSs are Zambian physicians, four of whom were recruited from abroad. They are responsible for improving the quality of clinical care and technical support supervision (TSS), with a special emphasis on HIV/AIDS. The CCSs are supervised by the Provincial Health Director (PHD), with administrative support from HSSP. Monthly activity reports are submitted to HSSP. Each CCS is teamed with a counterpart CCS supported by government. Together they provide most clinically-oriented supervision that takes place with DHMTs and district hospitals. To a large extent, the CCSs have become the local level "eyes and ears" of HSSP and the Ministry as a whole. They are clinical problem-finders and problem-solvers. Until their arrival, provincial supervision of DHMTs was primarily an auditing function to monitor compliance with regulations, check equipment, and monitor supplies. CCSs are now enabling the PHOs to offer more comprehensive technical support to the DHMTs. CCSs also support MOH efforts to provide HIV/AIDS services in small, rural, and hard-to-reach areas where HIV-infected individuals lack access to critical care. They are providing training, forming linkages, and in some cases establishing monthly clinics to provide services where these did not formerly exist.

5.4.1 Overview of CCS activities in all 9 provinces

CCS activities in Year 3 are summarized below.

Coordination of ART Services

- Provincial ART Committee meetings twice a year
- HIV/AIDS program coordination, integration, pooling of resources, networking
- Clinical updates, dissemination, interpretation of HIV/AIDS guidelines
- Technical guidance to health facilities during monthly clinical meetings

Technical backstopping and supervision of junior health workers in ART

- Physicians, clinical officers and nurses
- During in-service training, ward rounds, clinical meetings
- Bi-annual performance assessments:
    - Exponential increase in institutions providing CTC, PMTCT, ART and HBC: 200 ART, 483 PMTCT and over 700 VCT sites nationwide
    - Slow expansion in some districts with insufficient trained personnel and weak supportive structures
    - No ART guidelines in some districts

Provincial ART training
766 health workers trained with ZPCT, CIDRZ, CRS
162 patients assessed and managed

Scale up of ART mobile clinics in hard-to-reach areas
2 districts in 2 provinces
Training of local health workers in ART
Strengthening of district hospitals and clinical programs, referral systems
Participation in the 2008-2010 National Planning Launch
Technical assistance to provinces and districts in annual planning
Clinicians from 26 districts trained in case management observations and record reviews

Monitoring and supervision of private sector ART provision
Trained as ART accreditation inspectors by the Medical Council of Zambia
Assisted in the assessment of 29 private ART sites in four provinces this year (8 accredited)
Assistance to sites not accredited to enable them to meet the required standards

5.5 Human Resources

HSSP works to ensure that districts are planning for HR requirements to deliver a minimum package of HIV/AIDS services and employs a combination of short and long term HR management and development strategies in order to accomplish set targets each year. These focus on strengthening the national system for HR planning and management, assisting districts to retain staff with critical skills, Strengthening the capacity of training institutions to train critical cadres, and establishing a national in-service training coordination system.

5.5.1 Strengthened national capacities in HR retention, planning and management

The following strengthening activities in HR were conducted on the national level in Year 3:

Progress Report on HIV/AIDS and human resources completed, pledges obtained
In the first quarter of this year, HSSP supported the development of a progress report on HR and HIV/AIDS for cooperating partners. As a result of this report, JICA pledged to support the training component of the plan while HSSP, Sida and the Netherlands Government will support physicians and expansion of the health workers under the ZHWRS.

MOU for the Zambia Health Workers Retention Scheme (ZHWRS) developed and approved
HSSP also worked with the MOH to prepare a Memorandum of Understanding (MOU) for the ZHWRS, which was then approved by the Department of Justice and Cabinet.

ZHWRS Guidelines developed, finalized and disseminated
In the second quarter, ZHWRS draft operational and administrative guidelines were developed and reviewed by the Human Resources Technical Working Group. These guidelines outline the cadres and numbers to be supported under the expanded retention scheme. The guidelines also outline the retention allowances and other conditions of service, roles and responsibilities for headquarters, PHO and DHMT administration. In the third quarter, HSSP worked with 9 PHO HR Specialists, MOH central staff and cooperating partners to finalize the operational guidelines. The ZHWRS contract was revised to include nurse tutors and other cadres. In order to strengthen the ZHWRS support system, roles and responsibilities at the centre, provinces and districts, were included in the appendices. A Completion Certificate was developed to be completed by a scheme member at the end of the 3-year contract. A scale-up action plan was also developed that provides milestones for implementing the expanded ZHWRS. In the fourth quarter, HSSP disseminated the HIV/AIDS HR planning guidelines to all 72 districts. This activity was implemented jointly with the dissemination of the ZHWRS.

ZHWRS operations documents developed, reviewed and scale-up plan disseminated
HSSP also assisted the MOH to strengthen the ZHWRS support system through the development and implementation of operational documents including the ZHWRS contract, application form, schedule of payments, loan application form and the certificate of completion. These documents were reviewed during a workshop attended by 103 participants including 9 PHDs, 9 PHO HR Specialists and 72 HR officers and Manager Administrators. The workshop provided an opportunity for national, provincial and district HR officers to interact and review the national guidelines, operational documents and the scale-up plan. During the same workshop, the MOH disseminated the scale-up plan for the ZHWRS.

ZHWRS database cleaned
In the fourth quarter, HSSP assisted the MOH to clean up the retention scheme database. There was a drop in the number of physicians currently working in C&D districts from 117 to 65. The database contained information on physicians ever on the retention scheme and not the current numbers on the scheme. The payroll for physicians was never updated to current numbers and hence, the drop from 117 to 65.

12 Doctors, 33 Nurse Tutors recruited to the ZHWRS
In Year 3, HSSP also supported the MOH in the recruitment of doctors and nurse tutors to the retention scheme. Of the 23 doctors and 33 tutors targeted for recruitment, HSSP recruited 12 and 33 respectively. There remain 11 slots to be filled for doctors, and the recruitment process is nearly complete.

Recruitment and distribution of the 12 doctors:
During the second quarter the MOH provided HSSP with a list of 25 doctors to be recruited. HSSP conducted field visits to the doctors in their respective districts to sign

contracts, however only 10 had reported. The remaining 15 had either not reported or were already signed up on the Dutch-supported scheme. In the third quarter, an additional 2 doctors were recruited, bringing the total to 12. Field visits highlighted a number of shortcomings in the current scheme: doctors already on the scheme informed the team that their retention allowances had been erratic in the last six months; others reported that they were making arrangements for post-graduate training instead of remaining on the scheme. Doctors play a critical role in the expansion of ART services in rural C and D districts. All the 12 doctors are still at their stations and therefore, we can report that 100% of the 12 doctors recruited by HSSP have been retained to date. There are 10 districts that have benefited from HSSP support to the retention scheme.

The following districts are currently being supported by HSSP:

Distribution of HSSP-supported doctors on the Retention Scheme by District			
No.	**District**	**Category**	**# of Doctors**
	Gwembe	D	1
	Siavonga	C	1
	Sinazongwe	C	1
	Chongwe	C	1
	Lufwanyama	D	2
	Petauke	C	2
	Lukulu	D	1
	Nakonde	C	1
	Kasempa	D	1
	Itezhi-Tezhi	C	1
	Total		**12**

Recruitment and distribution of the 33 nurse tutors

With the pronouncement by the Minister of Health that nurse tutors should be included in the ZHWRS by 30 June 2007, recruitment began in the third quarter. The PHO HR Specialists played a crucial role in expediting the signing of contracts. HSSP is supporting 33 of the 67 tutors. The remaining tutors will be supported through the retention scheme basket fund at the MOH. The retention of tutors is critical to the MOH to expansion of student enrollment in nurse training institutions.

HIV/AIDS HR Planning Guidelines finalized and disseminated to districts

In the first quarter, HSSP assisted in finalizing the HIV/AIDS HR Planning Guidelines, including reproduction and dissemination to five Central Level and 18 Provincial Level HR and HMIS staff. Provincial staff is expected to orient the districts. HSSP assists the MOH to ensure implementation of the guidelines through support supervision and performance assessments.

Training schools supported by HSSP		
Training School	**Category**	**# of Tutors**
Macha	B	3
Kasama	B	4
Mansa	B	5
Chikankata	B	5
Monze	B	6
Lewanika	C	5
Chilonga	C	5
Grand Total		**33**

National and Provincial Action Planning launches supported

In the third quarter, HSSP provided technical support to the MOH for national and provincial planning launches. Specific support was provided to Copperbelt Province. The emphasis of the support was on expansion of the retention scheme to tutors and other cadres.

Review of daily staff-client ratios in 54 C and D districts conducted

In the first quarter, a desk review of daily staff–client ratios was conducted to extract baseline information needed to monitor improvements resulting from health worker deployment and retention. The results of the study showed that 43% of C and D districts demonstrated either an improvement or maintained their daily staff client ratios. It is important to note, however, that the indicator of staff-client ratios has been found to reflect factors other than the presence of additional healthcare staff or retention of staff in a given facility. While the addition of health workers or improved retention of health workers in rural facilities was meant to reduce the staff-client ratio, the indicator has been impacted by the recent change in MOH policy regarding user-fees. This change in policy has shifted client demand to rural areas, resulting in an increase in staff-client ratio in those facilities with additional health workers, rather than a decrease. In the third quarter, HMIS data on staff-client contacts was collected from the Directorate of Planning at MOH. The information was used to update the internal database within HSSP. The results showed that the health centre staff load contacts was 17 in 2004, 17 in 2005, and 18.2 in 2006. As mentioned above, this increase may be due to the removal of user fees in rural areas, which may have increased the demand for services in rural areas.

5.5.2 Challenges in HR retention

HR faced the following challenges in Year 3:

- Planned activities were postponed due to delays in ZHWRS implementation
- A lack of clear roles and responsibilities for ZHWRS national level management delayed recruitment and resulted in poor management
- ZHWRS suffered great attrition of physicians. The HSSP-supported retention scheme could suffer the same if causal factors are not effectively addressed.
- The transition from the CBOH to the MOH negatively affected concentration and commitment of MOH counterparts

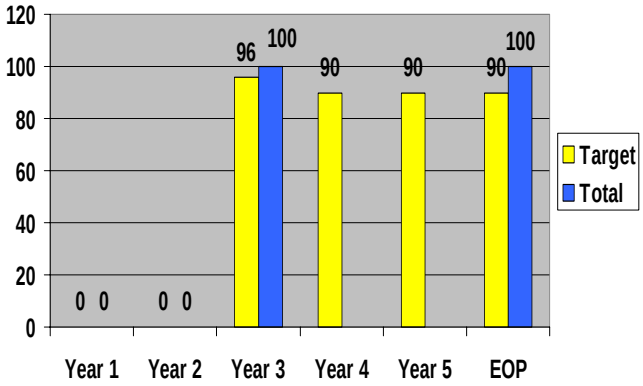
- Competing activities at the national level led to the delays in implementing the ZHWRS

5.5.3 Improved national, provincial and district capacities in HR for HIV/AIDS

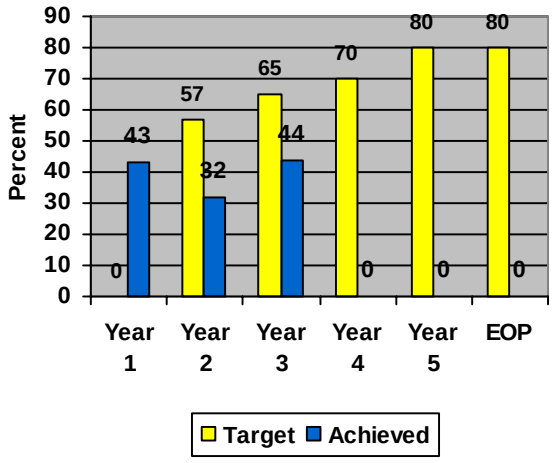
Key indicators show the following results for improved HR through Year 3:

4.1: Percent of physicians retained in C&D district hospitals under the HSSP rural retention scheme

HSSP key indicator 4.1 shows 100% of doctors who have been contracted to have been retained in C and D district hospitals under the HSSP supported retention scheme in Year 3, exceeding the third year target of 90%.



4.2 Percent of C & D Districts that Maintain or Reduce their Average Daily Staff Contacts

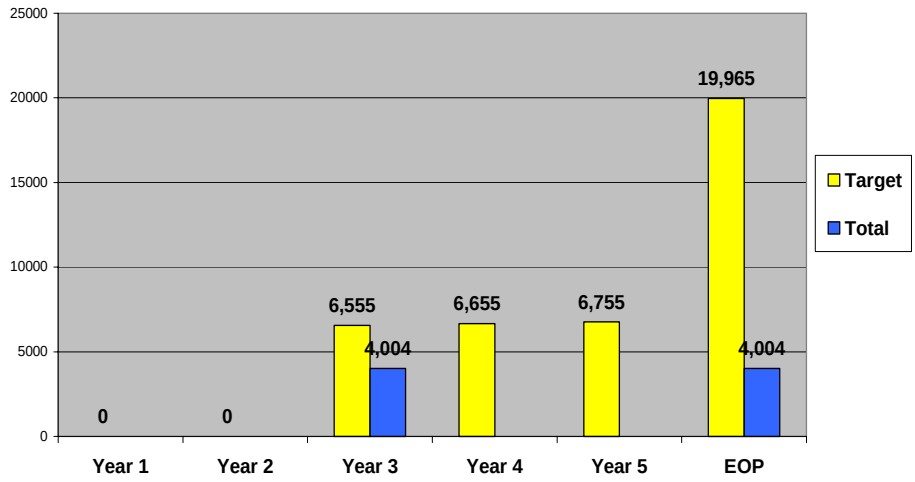


HSSP key indicator 4.2 shows the percent of C and D districts that maintain or improve the daily staff-client ratio to have risen from 32% in Year 2 to 44% in Year 3, though less than the Year 3 target of 65%.

HSSP key indicator 4.3 shows 4,004 patients on ART in the ten C and D districts in which HSSP has posted a doctor (NAC, Quarter 1, 2007). These figures constitute the baseline for

those districts where HSSP posted a doctor this year. New patients will be added each quarter to this baseline to obtain data for these districts. As additional doctors are added to the scheme, baselines will be obtained and new patients added each period.

4.3 Number of patients ever started on ART in C&D districts in which HSSP has posted a physician by year



5.6 Pre and In-service training

To achieve scaling up for provision of ART services and HIV/AIDS care and services, health workers need to receive the necessary skills.

5.6.1 Strengthened national, provincial and district pre- and in-service training capacities in HIV/AIDS

The following strengthening activities took place in pre- and in-service training in HIV/AIDS on all levels in Year 3:

Support to National and Provincial Action Planning launches/in-service training

The first quarter of this year, HSSP supported Central Province and in the fourth quarter Eastern Province to plan in-service training for HIV/AIDS and other priority areas during the Provincial Action Planning meeting.

The emphasis of the support was on in-service training coordination and formation of Human Resource Development Committees (HRDCs).

COG curriculum revised and implemented, Lecturer's Activity Guide, Student Learning Guide, Procedures and Evaluation Manuals finalized

In the first quarter, the COG curriculum was revised and implemented in the second quarter; the procedures manual for the revised COG curriculum was developed in the same quarter.

In the first quarter, the first drafts of the COG Lecturers Activity Guide and Student Learning Guide and Evaluation Manual were also developed with support from HSSP. In the fourth quarter, the Student Learning Guide and Procedures and Evaluation Manual were finalized for COG training. The Lecturer's Activity Guide was completed.

Curriculum and training materials for Health Care Assistants developed

Assistance was also provided to the MOH to develop curriculum and training materials for Health Care Assistants, a new cadre being introduced by the MOH to ameliorate the current HR crisis. This cadre will provide basic care to patients, allowing more highly trained professionals to provide more complex care.

HIV/AIDS component of the Enrolled Nurse and Registered Nurse curricula strengthened

HSSP also assisted in strengthening the HIV/AIDS component of the EN and RN curricula. This is to ensure that all nursing graduates using the strengthened curriculum are trained in the provision of HIV/AIDS and other priority health services. Although the EN and RN curricula were revised in 2003, they did not fully incorporate information on HIV/AIDS treatment. With support from HSSP, GNC reached consensus on the HIV/AIDS and priority services (e.g. malaria) components in the curricula that need strengthening. A consultative meeting with nine teaching institutions revealed that the teaching of HIV/AIDS and IMCI was not standardized, primarily owing to lack of capacity among faculty and preceptors, and lack of teaching and learning materials. In addition HSSP conducted technical updates in HIV/AIDS and IMCI for 32 tutors and preceptors in the fourth quarter as a first step towards building capacities of training institutions.

In-service training package for nurses in ART reviewed

Technical Assistance was also provided to MOH to review and strengthen the in-service training package for nurses working in ART sites. Pilot sites have shown that this training benefits clients seeking ART and HIV/AIDS care and services, through improved screening, referral and treatment.

Nurses' authorization to prescribe ARVs defined

HSSP also supported the MOH/GNC to establish the authorization for nurses to prescribe ARVs in Zambia. This additional role was identified in the essential competencies for ART. The consensus reached was that prescribing should be allowed by nurses, but with caution given that ARVs are considerably toxic. Nurses who prescribe ARVs will require additional knowledge and skills to enable them to perform this additional role in the delivery of HIV/AIDS care and services.

Three subcommittees were formed and began working on a review of the curricula, formulary, and roles and responsibilities for nurses prescribing ARVs. Terms of reference for the three subcommittees were developed.

Malaria Handbook for Nurses and Midwives developed and printed for distribution

Support was given in the second quarter to the MOH/GNC to develop a Malaria Handbook for Midwives and Nurse Tutors. This effort was aimed at standardizing pre-service IMCI training. The handbook was developed through a consultative process involving a wide range of stakeholders such as GNC, ZNA, MOH, WHO, National Malaria Control Center and training institutions. In the third quarter, HSSP supported a review of the handbook on malaria to principal tutors, tutors and preceptors. Comments from this review meeting were incorporated into the handbook by participants. In the fourth quarter, HSSP supported the printing of 3,000 copies of the Nurses Handbook on Malaria.

MB ChB Curriculum review roadmap for Surgery, Obstetrics and Gynecology, Medicine, Pediatrics, Psychiatry, Community Health, and Basic Sciences developed

In the second quarter, HSSP initiated the review of the MB ChB curriculum with the School of Medicine. The basic sciences component review began with support from Management Sciences for Health (MSH). Due to competing demands on time, HSSP's support to this activity focused on assisting the SoM with resource mobilization. The process of revising the full curriculum is expected to last more than two years as the curriculum has not been reviewed for almost 10 years. Therefore, new trends in diagnosis and treatment for emerging diseases such as HIV/AIDS/TB/STI and other priority health services are not adequately taught. In the third quarter, HSSP supported development of a curriculum review roadmap for Surgery, Obstetrics and Gynecology. This involved rearrangement of the entire MB ChB program, strengthening HIV/AIDS, communication skills content, and standardization of transfer of practical skills to students. In the fourth quarter, HSSP supported development of a curriculum review roadmap for Medicine, Community Health, Pediatrics and Psychiatry. The meeting recommended a hybrid model of a curriculum and strengthening of the following components: Management and Leadership, Medical Administration, Information Technology/Communication, Health & Professional Ethics, Genetics, Restructure CBE, and considering Psychiatry as a 5th force in the Curriculum

Supported development of proposal for GNC for training of 660 graduating nurses/midwives from 21 training institutions to ZNAN for funding

HSSP also assisted the GNC to develop a proposal to ZNAN for the training of 660 graduating nurse/midwives from 21 training institutions. The total amount required was K654, 864,204. The proposal was submitted in February 2007, but fell through as ZNAN wanted the TIs to submit individually.

Proposals for training students in Management of ARVs, OIs, Paediatric ART and PMTCT developed

In the third quarter, HSSP assisted 20 key training institutions to develop proposals to train 734 students and 60 tutors/preceptors. The proposals were submitted to ZNAN and UNICEF. ZNAN planned to fund training in management of ARVs and OIs, while UNICEF planned to support training in Paediatric ART and PMTCT.

ZNAN funded the training of 242 persons from 4 training institutions in the management of ARVs, OIs

As a result of these efforts, by the end of Year 3 ZNAN had funded four training institutions to train a total of 242 persons in the management of ARVs and OIs. This included 30 RNs, 125 COGs, 62 ENs, 8 EN students, 3 nurse tutors, 14 preceptors.

UNICEF funded the training of 529 health professionals in Paediatric ART and PMTCT

And, by the end of Year 3 UNICEF had funded the training of 529 health professionals in Paediatric ART and PMTCT, including 157 RN, 3 COG, 74 EM, 206 EN, 61 Tutors and 28 Preceptors. HSSP's role was in proposal writing for resource mobilization and ensuring the utilization of National Trainers and training packages.

Follow up of graduates trained in provision of HIV/AIDS services conducted

In the first quarter, HSSP designed a follow up assessment of graduated nurses/midwives trained in the provision of HIV/AIDS services. In the third quarter of this year, the questionnaires and training manual were finalized and piloted. In the fourth quarter, data was collected, analyzed and a draft report compiled. The following were the key findings:

- A total of 192 graduates were interviewed
- 83% of the graduates were deployed in public health institutions
- 85% of those were engaged in providing HIV/AIDS services.

Written examinations given during the follow-up demonstrated a high level of retention of HIV/AIDS knowledge, and the majority of the graduates reported that they were adequately prepared in relevant areas of ART, OI management and CTC.
Some graduates could not be traced

NITCS and NTGs disseminated to PHO, DHO, TIs GNC, and MCZ

In the second quarter, the GNC, Medical Council of Zambia (MCZ), and UTH were oriented on the use of NITCS and NTGs. The meeting was attended by 12 participants who received the two documents. The main purpose of this dissemination was to assist TIs to begin planning within the NITCS and NTGs framework. During the orientation meeting, it was revealed that there is lack of coordination between TIs and districts. An inventory of active HR Development Committees was developed for the nine provinces through the CCSs. Copperbelt, Central, Lusaka and Eastern Provinces were found to have established provincial HRDCs, but only Central Province has had meetings with the MOH head office, while Lusaka Province held their first HRDC meeting on 19th June 2007. In the fourth quarter, HSSP supported the MOH in the dissemination of the NITCS and NTGs to PHO and district HR Managers at a meeting held at Mulungushi Conference Centre in August. All 9 provinces and 72 districts were represented. The aim of the meeting was to ensure that PHOs and districts understand their roles in coordination and standardization of training and the functions of the HRDCs.

Comprehensive assessments of training institutions conducted in readiness for support from increased basket funding

In the fourth quarter, HSSP also provided technical support to the MOH during comprehensive assessments of all mission and public nurse training institutions in Southern and Eastern Provinces for the purpose of providing information to the MOH related to a possible increase in basket funding that could be used to enable training institutions to increase intakes, improve infrastructure and introduce day schooling.

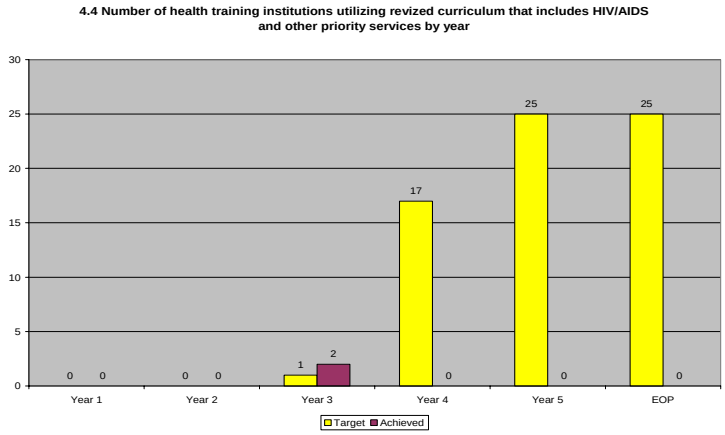
5.6.2 Challenges in pre- and in-service training for HIV/AIDS

Pre- and in-service training in HIV/AIDS faced the following challenges this year:

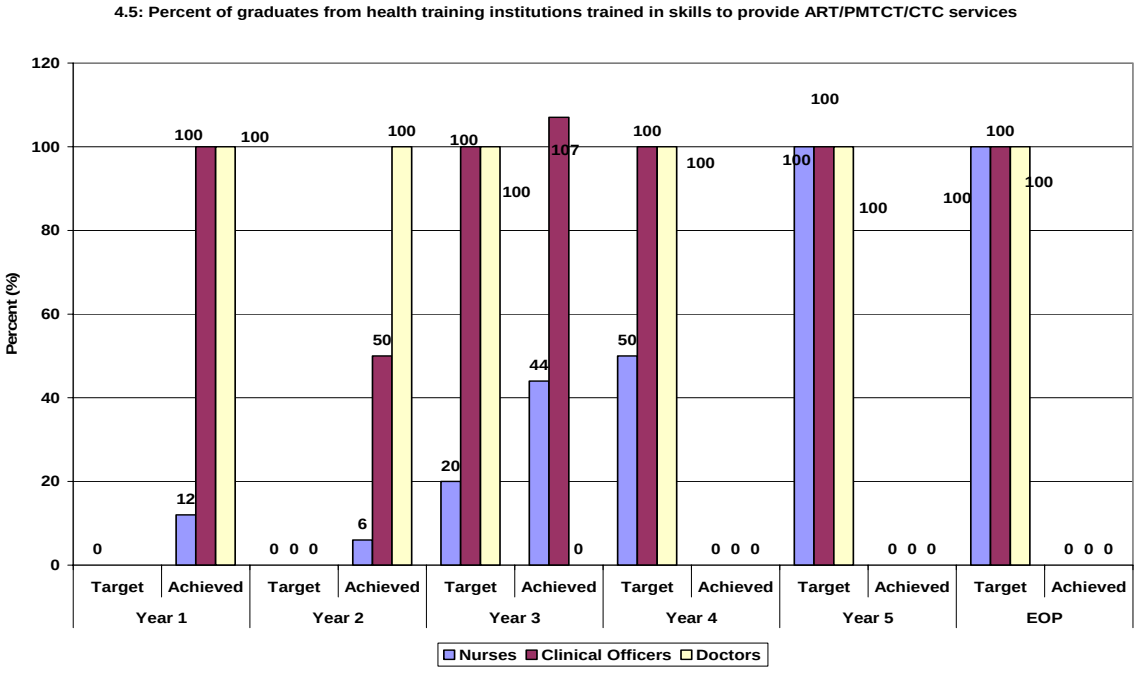
- Activities delayed due to scheduled activities in training institutions and statutory bodies
- Financial constraints resulted on dependence on external funding, delaying implementation particularly in relation to the MB ChB curriculum review
- Partners competing for MOH counterpart's time

5.6.3 Improved pre- and in-service training capacities in HIV/AIDS

Key indicators show the following results for improved pre- and in-service training in HIV/AIDS through Year 3:



HSSP key indicator 4.4 shows two training institutions utilizing a revised curriculum that includes HIV/AIDS and other priority services (Chainama) in Year 3, exceeding the third year target of one institution.



HSSP key indicator 4.5 shows the percent of nurses, COGs and doctors graduating from health training institutions trained to provide ART, PMTCT and CTC. Although targets were not set for Years 1 and 2, data shows that in Year 1, twelve percent (12%) of nurses were trained while 100% of clinical officers and doctors, respectively, were trained. In year 2, six percent (6%) of nurses, 50% of clinical officers, and 100% of doctors were trained to provide ART, PMTCT and CTC. In Year 3, fourty-four percent (44%) of nurses were trained out of the expected 20% while no doctor was trained out of the expected 100%. However, a 100% target was achieved for the clinical officers expected to be trained.

5.7 Performance Improvement and Accreditation

Twenty-three of the 72 districts were expected to conduct case management observation and record reviews during at least 80% of supervisory visits to health workers managing cases related to HIV and AIDS this year. Case management observations and record reviews were conducted in 26 districts.

5.7.1 Strengthened national performance improvement and accreditation

The following strengthening activities in performance improvement and accreditation took place on the National Level in Year 3:

Performance Assessment tools revised, piloted and rolled out

During the first quarter, HSSP assisted the MOH to review Performance Assessment tools for supportive supervision to incorporate HIV/AIDS information, and ensure case management observation and record review. Draft tools were sent to the provinces, and all PHOs and technical specialists provided comments that were taken into consideration during a review workshop held in Lusaka 18-20th October, 2006. The workshop resulted in the development of a roadmap for finalization of the tools by a 15-member core team that included representatives from the MOH, NFNC, HSSP and 5 Senior Provincial Health Advisors. Consensus to adopt the tools was reached during a PHD consultative meeting held on the 13th of December. The draft PA tools were then submitted to the MOH and feedback from the provinces was received in January 2007. In the second quarter, the core-team sent the final Performance Assessment tools to the Ministry of Health, Directorate of Technical Support Services (DTSS). The DTSS forwarded the tools to all the nine provinces for piloting in at least two districts. The pilot phase in quarter two included orientation of selected DHMTs, institutions and health facilities on the new PA tools. The facilities then conducted self-assessments using the new tools and submitted pilot assessment reports. The provincial Health Office concluded the pilot phase during their biannual performance assessment of DHMTs and relevant institutions. The PHOs submitted the PA pilot reports

to the DTSS/HSSP in April 2007. During this phase, HSSP provided technical assistance to Southern Province PHO in the orientation of revised tools.

ART accreditation guidelines developed, launched and disseminated

In the first quarter, HSSP continued to provide technical support to the MOH and Medical Council of Zambia (MCZ) in the implementation of the ART accreditation system. All draft documents and the implementation guide were finalized through a series of consultative meetings with various partners. The document was printed by WHO and took effect in January 2007. In the second quarter, HSSP printed the Accreditation Guidelines to enable dissemination and training of surveyors. The Guidelines were disseminated at a well attended meeting to officially introduce and launch the document titled *"Accreditation of Sites for Provision of Antiretroviral Therapy - Guidelines, Inspection Tools, and Implementation Plan"* held on February 23rd 2007 at the Mulungushi Conference Centre in Lusaka. Stakeholders from the public/ private health sectors, the mining industry, health related NGOs, provincial health administration (all the Provincial Health Directors), Ministry of Health directors, the National AIDS Council, and the WHO attended the meeting.

30 National Accreditation Surveyors trained from four provinces

The first national training of surveyors took place in Lusaka in the second quarter, from February 19th to 22nd 2007. The workshop was funded by HSSP. The 30 surveyors were drawn from Lusaka, Central, Copperbelt and Southern Provinces. Selection of these provinces was based on the high presence of facilities providing ART services. The accreditation of facilities began in the third quarter, with Lusaka Province.

Performance Assessment Tools Revized

During the third quarter, feedback and recommendations made by two pilot districts in each province were analyzed and incorporated, and the tools finalized and disseminated to provinces. HSSP also participated in the mini-quarterly PHD meeting on 13th June 2007 to discuss the new PA tools. The outcome of the meeting was the development of a Guide on Performance Assessment and Technical Support which provides directions on how PA should also be reviewed.

MCZ 2008-2013 Strategic Plan supported

HSSP supported the development of the Medical Council of Zambia's 2008-2013 Strategic Plan. This support is aimed at strengthening MCZ as a regulatory body so that it is able to provide quality health services including HIV/AIDS, and contribute to improved performance by clinicians in both public and private health institutions. During this strategic plan formulation, various organizational, environmental and policy assessments revealed that the MCZ is facing many challenges which hinder quality service provision. The strategic plan will be disseminated to stakeholders and partners.

Analysis of the quality of ART supervision

In the first quarter of this year, HSSP also analyzed the frequency of case observation and record review during supervisory visits. The exercise considered the 40 HSSP Baseline Survey districts and included interviews with DHMTs and a desk review of HSSP baseline survey reports and other documents. Although 34 out of the 40 districts provide case management, only three (9%) were found to have conducted case management observation and record review during at least 80% of supervisory visits. In order to gather additional

information on supervision, interviews were also conducted with two non-implementing districts (Lusaka and Chibombo) and one of the districts said to have conducted case management observation/record review (Kafue). The districts were sampled on a convenience basis. Qualitative interviews were conducted with the District Director of Health and Manager of Planning and/or Administration. Major hindrances to adequate supervision included staff shortages, inadequate transportation and a poor working environment. A follow-up discussion was conducted with 11 districts in Southern Province on the importance of strengthening case management during supervisory activities outlined in their action plans.

5.7.2 Strengthened district and provincial performance improvement and accreditation

The following strengthening activities in performance improvement and accreditation took place on provincial and district levels in Year 3:

48 ART delivery sites assessed for accreditation (29 private and 19 public)

Accreditation of ART sites began in quarter three with 19 of the targeted 21 private institutions assessed for accreditation (13 in Lusaka, 3 in Southern and 2 on the Copperbelt). The accreditation exercise continued in the fourth quarter in Lusaka, Central and Copperbelt Provinces. A total of 48 sites were assessed, 29 private and 19 public this year.

8 private and 6 public ART sites accredited

Out of the 48 total sites assessed, 14 were accredited (29%). Of the private sites assessed, 8 were accredited (28%). Of the public sites assessed, 6 were accredited (47%). The number of facilities accredited is low because the facilities could not meet the set standards mostly due to the absence of the national protocols and guidelines. The other reason for not being accredited was that the facilities did not have HMIS and trained ART health workers in place.

TSS to 26 districts conducted in case management and observation/record reviews

In the second quarter, HSSP in collaboration with the Lusaka PHO began providing technical assistance aimed at improving case management to Lusaka, Kafue and Chibombo DHMTs. Several preparatory meetings were held with these districts. Lusaka developed an action plan to reintroduce major rounds and clinical/mortality meetings in its facilities. The staff also began participating in University Teaching Hospital (UTH) clinical meetings. In the third quarter, HSSP in collaboration with the Provincial Health Offices through the Clinical Care Specialists provided technical assistance focusing on case management and record review to DHMTs and hospitals in Luapula, Eastern, Southern and Central Provinces. TA was also provided to Kalabo, Senanga, Ndola Central Hospital, Mufumbwe and Solwezi DHMTs, for a total of 26 districts receiving TSS this year.

5.7.3 Challenges in performance improvement and accreditation

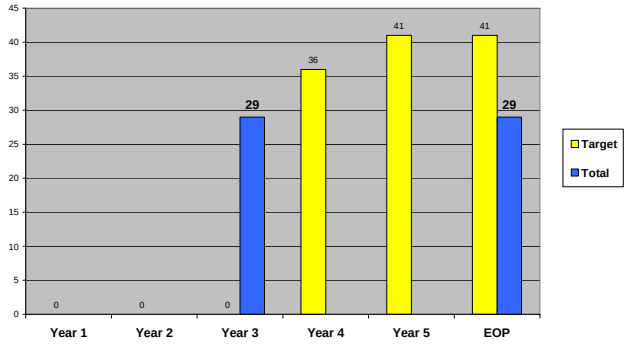
Improvement and accreditation faced the following challenge in Year 3:

- Consensus-building in review and finalization of PA tools took time as it was difficult to gather all PHOs and Senior Health advisors together

5.7.4 Improved performance improvement and accreditation

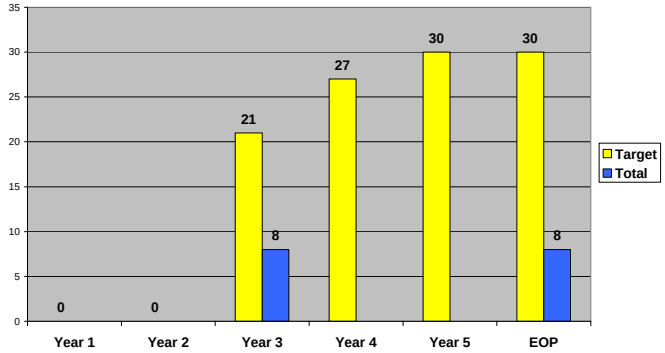
Key indicators show the following results in performance improvement and accreditation through Year 3:

Number of private sites delivering PMTCT, CTC or ART services that are assessed by MCZ



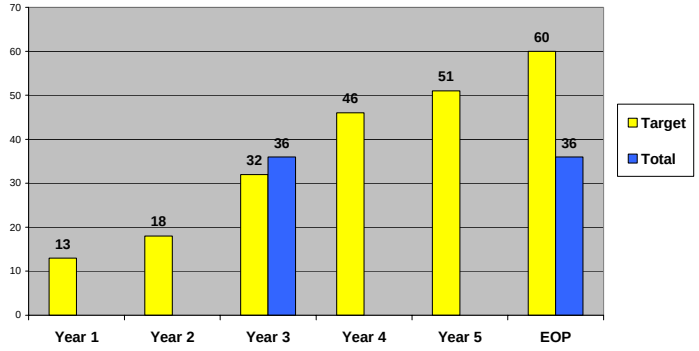
In Year 3, 29 private sites delivering PMTCT/CT/ART services were assessed by MCZ, 63% of the EOP target of 41 sites.

5.1 Number of private sites delivering PMTCT/ CTC/ART services that are accredited by MCZ



HSSP key indicator 5.1 shows 8 private sites delivering PMTCT/CT/ART services that accredited by the Medical Council of Zambia, 38% of the target of 21 accredited sites for Year 3. Although 15 sites were initially accredited in Year 3 by MCZ, upon further review this was reduced to 8. HSSP will provide TA to private facilities to assist them with accreditation in the next period.

5.2 Percent of districts conducting case management observation/record review in at least 80% of supervision visits



HSSP key indicator 5.2 shows 36% of districts to be conducting case management/record review during at least 80% of supervisory visits. This is equal to 26 districts, and exceeds the target of 17 districts or 23% for Year 3. It is also 60% of the EOP target of 80 districts.

5.8 HIV/AIDS Coordination through a Sector-Wide Approach (SWAp)

HSSP also works to improve HIV/AIDS coordination through a sector-wide approach (SWAp). This includes defining the Basic Health Care Package (BHCP), developing a mechanism for coordinating HIV/AIDS activities within the MOH structures, ensuring that HIV/AIDS services are integrated into the SWAp and that districts offer a minimum package of HIV/AIDS services; ensuring that plans are developed and resources are mobilized, and that partnerships and the referral system are strengthened. In 2005 HSSP conducted a desk review of the 2005 Zambia HIV/AIDS Services Assessment Survey conducted by the MOH and the Central Statistical Office. Key findings from the 2005 Survey included: the widespread coverage of clinical care and support services for HIV/AIDS clients (TB, STI and malaria), the lack of protocols and guidelines for CTC, ART, PMTCT, OIs and laboratory in health facilities where services are offered, and the concentration of HIV/AIDS services in urban districts and hospitals.

5.8.1 Strengthened national HIV/AIDS coordination through SWAp

The following strengthening activities in HIV/AIDS coordination through SWAp were conducted on the national level in Year 3:

ART partners' database updated

During the first quarter of the year, the ART database was updated to generate reports describing the type of support (technical, financial or material) being provided by each partner, types of services offered and where, and details of financial assistance for ART programs in the country. The database is used to assist policy makers and program managers to more effectively coordinate ART program activities and prioritize resources. Following the establishment of the ART partners' database in the MOH, HSSP focused on updating the database annually. A structured questionnaire was developed for this purpose and sent to 20 ART partners.

2006-2008 ART Implementation Plan disseminated to PHOs, DHMTs and partners

Following the finalization of the 2006/8 ART Implementation Plan, in the first quarter HSSP supported the printing of 1000 copies. An additional 1000 copies were printed by WHO. By the end of the quarter, districts had already begun using the Plan to develop district-specific ART operational plans.

TA to the four principal recipients of the Global Fund to review status of GFATM, develop an M and E framework and Round Seven Proposals

HSSP also continued to provide assistance to the Ministry of Health and the National HIV/AIDS/STI/TB Council to review the status of the GFATM. The results of the review and recommendations were provided to the Country Coordinating Mechanism (CCM) to respond to the public's concerns related to the management of the Global Fund and outcome of Round Six proposals. In March, 2007, HSSP HIV/AIDS and M&E specialists provided technical assistance to the four principle recipients of the Global Fund in the

development of M&E systems for HIV/AIDS. The following were identified as priority areas for an effective and efficient M&E system: Improved capacity at all levels; data harmonization and alignment; more timely submission of data; use of data for planning; improvement in the feedback system; and strengthening of working partnerships established to date. In May 2007, HSSP was appointed to the steering committee of the Country Coordinating Mechanism for GFATM to support the development of Round Seven proposals under Churches Health Association of Zambia (CHAZ) and the Zambia National AIDS Network (ZNAN), the only principle recipients eligible to receive funding in this round. The Steering Committee agreed that HIV/AIDS and Malaria would not submit requests, while the TB component would submit a request even though some funds from Round 1 for phase 1 and 2 had not yet been disbursed.

Basic Health Care Package (BHCP) reviewed and developed and roadmap completed

In the first quarter, assistance was also provided to the completion of the BHCP. HSSP contracted a consultant to strengthen the BHCP as the central guiding framework in public health. The BHCP identifies the key interventions prioritized for funding and service delivery. Key interventions in HIV and AIDS were identified for all levels with emphasis placed on promotion and prevention. A report was then completed which presented the first version of the BHCP. The revised BHCP is a synthesis of the previous essential health care package, and takes into account the context of HIV/AIDS, renal diseases, cancer and cardiovascular disease. The consultant also developed a roadmap defining steps to be taken aimed at finalizing the package. In the second quarter, all directors, specialists and advisors in the Ministry of Health and officials from University Teaching Hospital were updated on the revised BHCP focusing on HIV/AIDS, renal disease, cancer and cardiovascular diseases to advocate for support to accelerate completion and approval of the package. During these updates, it was noted that many guidelines exist in different institutions and departments which need to be integrated in the BHCP. Participants to the dissemination recognized the need for the MOH to own the development and implementation of the Package.

Supported MOH to develop HIV/AIDS Program Sustainability Assessment Tool (HAPSAT)

In the second quarter, HSSP also worked with the MOH, UNZA, and HS 20/20 to develop a concept paper and data collection tools for a sustainability framework for HIV/AIDS funding in Zambia. Zambia has been receiving external HIV/AIDS funding for the last 5 years. Major initiatives financing the expansion of services have included: the USG President's Emergency Plan (PEPFAR), the Zambia National Response to HIV/AIDS Project (ZANARA), and the Global Fund. Zambia needs to devise a sustainability framework that will ensure continued HIV/AIDS service provision to its citizens. In the third quarter, HSSP engaged 7 data collectors to gather country specific information on the cost of providing HIV/AIDS services from key partners and stakeholders including the MOH, NAC, CHAZ, ZNAN, health institutions and selected donors. The information was provided to HS 20/20 for entry into the HIV/AIDS Program Sustainability Analysis Tool (HAPSAT) model. The Tool has been finalized and will be presented to MOH and cooperating partners next year. Subsequently, a team of MOH specialists from Planning and Development Directorate, University of Zambia and HSSP will be trained in its use.

Existing HIV/AIDS coordination mechanisms reviewed and new coordination mechanism drafted

In the second quarter of the year, HSSP assisted the MOH to assess existing coordination mechanisms including roles and responsibilities of health providers in HIV/AIDS services at

all levels in Lusaka, Luapula, Copperbelt and Southern Provinces, selected based on rural and urban differentiation. This consultative process enabled discussions on ways to improve coordination. HSSP then assisted the MOH to develop a draft coordination mechanism for HIV/AIDS services, which was subsequently reviewed and consolidated. In the fourth quarter, HSSP submitted the final version of the coordination mechanism document to the MOH after incorporating comments from partners and institutions providing HIV/AIDS services. The MOH through the office of the Director, Public Health and Research has made comments on the draft and suggested that a team comprising the Human Resources Unit and program managers meet to discuss roles of individual positions suggested in the draft document in view of the new MOH structure. As soon as this meeting is held and roles identified, the document will be printed and distributed to all districts.

Assessment of existing referral systems conducted in four provinces

In the third quarter, HSSP provided support to the MOH to strengthen the referral system for the delivery of HIV/AIDS services. Preliminary consultative meetings were held with the MOH and NAC on current referral systems. A plan was developed to assess existing referral systems at all levels of care. An assessment of the existing referral systems was then conducted in Southern, Eastern, Central and Copperbelt provinces. Findings show a sharp contrast between systems followed in government and private institutions. The assessment team found a number of institutions referring clients without referral forms while those that used referral forms had different formats. Interestingly, only Kabwe District has developed a referral network with support from ZPCT. This network is made up of private and public health institutions including HBC organizations involved in the provision of HIV/AIDS services in the district. Contributions and voluntarism sustain the operations of this network.

To consolidate findings from the assessment, a meeting was held involving MOH, DHMTs, partners and stakeholders. The key recommendation from this meeting was that the MOH develop a national HIV/AIDS referral guide. A team comprising MOH and partners involved in the delivery of HIV/AIDS services has been constituted to draft national referral guidelines which will be guided by CDC, FHI and the Kabwe District models of referral systems. HSSP will assist the MOH and partners with the development of this document.

5.8.2 Strengthened provincial and district HIV/AIDS coordination through SWAp

The following strengthening activities in HIV/AIDS coordination through SWAp on provincial and district levels took place in Year 3:

Technical Support Supervision conducted to seven districts to assess status of service provision

In the second quarter, HSSP provided technical support supervision to seven districts in Northwestern Province. The purpose of the TSS was to determine the status of ART services, offer on-site support, and disseminate the 2006/8 ART Implementation Plan. The team also assessed Chitokoloki Mission Hospital as a new ART site using the new accreditation guidelines. Only Mukinge and Kabompo Hospitals met most of the standards for the provision of ART. Inadequate human resources, lack of laboratory equipment, poor community involvement and inadequate data management were the main challenges in Solwezi, Zambezi and Chavuma Districts. Although Solwezi General Hospital had over

1,700 patients on ART, it lacked the key laboratory equipment such as CD4 and chemistry machines. It was also discovered that coordination between private institutions providing ART and the PHO/DHMT was inadequate in some critical areas. For instance, patients on ART in two private clinics were not captured in the HMIS.

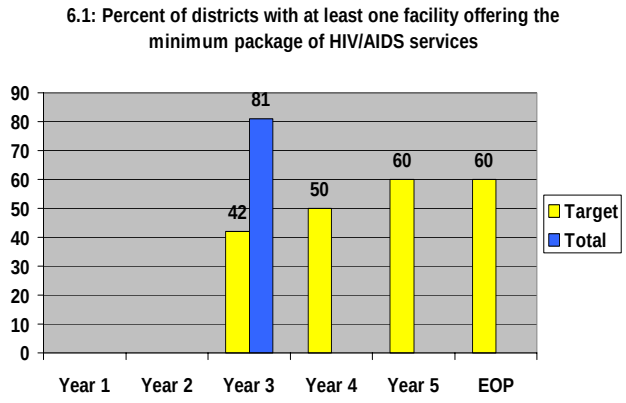
5.8.3 Challenges in HIV/AIDS Coordination through SWAp

HIV/AIDS coordination through SWAp faced the following challenges this year:

- Coordination among stakeholders needs improvement
- Difficulties achieving the active participation of MOH counterparts to enable timely completion of the BHCP

5.8.4 Improved national, provincial and district coordination through SWAp

Key indicators show the following results for improved HIV/AIDS coordination through SWAp through Year 3:



HSSP key indicator 6.1 shows a third year target of 42% of districts (30) with at least one facility offering the minimum package of HIV/AIDS services. What was achieved in Year 3 (81% of districts i.e. 58 districts) is even higher than the EOP target of 60% of districts with at least one facility offering a minimum package of HIV/AIDS services.

5.9 Planning and Strategic Information

HSSP supports the MOH on the national, provincial and district levels in the use of the Routine Health Information System (RHIS) to plan and manage HIV/AIDS services; strengthen ARTIS; and strengthening the HMIS. The project also assists the MOH to improve planning on all levels, ensure that all district plans include the minimum package of HIV/AIDS services and are using revised planning guidelines during planning; and to improve the use of data for planning.

5.9.1 Strengthened national planning and strategic information

The following strengthening activities in planning and strategic information took place on the national level in Year 3:

Health Sector Plan 2007-2009 finalized

In the second quarter, HSSP participated in the final consolidation of the Health Sector Plan which includes activities for HIV/AIDS services. The plan was approved and subsequently became operational at various service delivery levels.

Concept paper for review of the current planning process developed

HSSP also assisted the MOH to develop a concept paper to be used to review the current planning process, with the aim of strengthening planning for HIV/AIDS at district and hospital levels.

2008-2010 Medium Term Expenditure Framework document updated and disseminated

HSSP supported the update of the 2008-2010 Medium Term Expenditure Framework (MTEF). The document was compiled and disseminated and subsequently used by districts and hospitals in the development of 2008 action plans. Additional support was provided to the MOH in production of the planning guidelines for use at the Central Plan Launch, whose contents mainly focused on HIV/AIDS and IRS services. Districts are guided through planning guidelines when making their action plans. The HIV/AIDS and IRS components were missing in the District Action plans but have now been included.

Training institutions Planning Handbook revised

HSSP also supported the MOH in the review of the Planning Handbooks for Training Institutions and the accompanying reviewer's checklist. This handbook was subsequently used by training institutions in the development of the 2008 action plans.

HMIS Planning Companion developed and field tested

During the first quarter, HSSP began a review of the planning process. Opinions were requested from key stakeholders, and HSSP staff experience during past reviews of action plans and visits to provinces during planning meetings was documented. A draft guide was developed to assist with the planning process and discussed with planning team members. In the third quarter, the HMIS guide was to have been finalized after the review of the planning process and the HMIS. Due to the urgency attached to improving the quality of district plans, however, the MOH decided to split the guide into two parts. One part covers support to districts in the use of data for planning, and the other is a Planning Companion for districts. The Planning Companion was completed and field tested in the fourth quarter.

93 district hospital health managers trained using the HMIS Planning Companion and given the 2008-2010 MTEF

In Year 3, 48 district/hospital managers were trained in the use of the HMIS Planning Companion during the field test. An additional 45 health managers from 11 districts, two hospitals, four training institutions and PHOS were also oriented to the Companion during the Central Plan Launch, and were given the first edition to use during planning for 2008-2010 MTEF making a total of 93 managers oriented to the Planning Companion.

2007 planning support provided to NMCC

HSSP also provided technical support to NMCC during the development of the 2007 Malaria Action Plan which includes IRS Activities.

Budgeting and Costing Guide for District/hospital level planners developed

Responding to weaknesses identified through the Desk Review of the 2006-08 District Action Plans, HSSP assisted the MOH to develop a Budgeting and Costing Guide for District and Hospital Level planners this year. By the end of the year, the draft document was ready for field testing and finalization.

PMTCT/VCT data collection, reference and training materials revised, finalized and printed

PMTCT/VCT data collection and reference materials were completed in the fourth quarter of year two. However, protocols for PMTCT were subsequently changed, requiring a revision of the entire package. During the first quarter of this year, HSSP edited the data collection tools, reference and training materials to reflect these changes. By the end of the quarter, all registers, tally sheets aggregation forms, Procedures and Indicators Manuals had been finalized and circulated for final review. In the second quarter, PMTCT/VCT data collection tools and training manuals were finalized and sent to the printers. TB was not integrated into the tools as this was being handled under the MOH HMIS review process with European Union support.

166 Health workers trained in the use of the revised PMTCT/VCT tools with supplementary funding from UNICEF and CDC

A total of 81 health workers was initially targeted for training in the use of the new PMTCT/VCT tools. As HSSP funding was insufficient, however, the project successfully leveraged additional funding in the third quarter of the year from UNICEF and CDC. As a result of this funding, a total of 166 health workers were trained. Training included DHIOs and MCH Coordinators from each district, seven representatives from KCM, two from Boston University, two from Linknet, one from CHAMP and staff from 10 provincial health offices

Concept paper on the use of GIS in analyzing information developed with the MOH and circulated

A concept paper for piloting the analysis of health information using GIS was developed with the MOH and circulated for peer review.

Stakeholders meeting on the use of GIS in analyzing information

A meeting was held with stakeholders including WHO, CDC, the Ministry of Land, Ministry of Finance, and Central Statistical Office to discuss the use of GIS. Stakeholders agreed that M0H would lead this initiative. The objective is to improve data analysis, reporting, and presentation.

TB data collection tools revised to fit the upgraded HMIS
Data tools for tuberculosis designed by the TB Working Group were also revised to fit the HMIS. Data elements for ART and VCT were included in the upgraded version of the HMIS.

Draft action plan assessment tool developed
Work also began towards improving assessments of all district action plans. The final tool was used in the review of district action plans for 2007.

Draft version of the revised HMIS developed
Re-programming of the HMIS database to include HIV/AIDS was based on the existing HMIS. HSSP participated in the HMIS review in the third quarter to ensure that HIV/AIDS was adequately included. The activity was funded by the EU. A draft version of the revised HMIS was developed for pilot testing. During the fourth quarter, the revised HMIS was pilot tested in Copperbelt Province. HSSP was actively involved in the process to ensure that HIV/AIDS services (PMTCT/VCT, ART) are included in the final revised tool. Similarly, the upgrading of the HMIS database and redeployment are part of the HMIS review process. HSSP will not fund the cost of programming the HMIS database, but will continue providing TA in ensuring that the electronic version of the HMIS matches with the protocols in the paper system.

5.9.2 Strengthened provincial and district planning and strategic information

The following strengthening activities in planning and strategic information took place on the provincial and district levels during Year 3:

Support provided to provinces to produce statistical bulletins
In the second quarter, HSSP developed a Provincial Health Data Report Template which was sent to provinces to help them produce statistical bulletins that would make district-specific information available for planning and monitoring.

5.9.3 Challenges in planning and strategic information for HIV/AIDS

Planning and strategic information faced the following challenges this year:

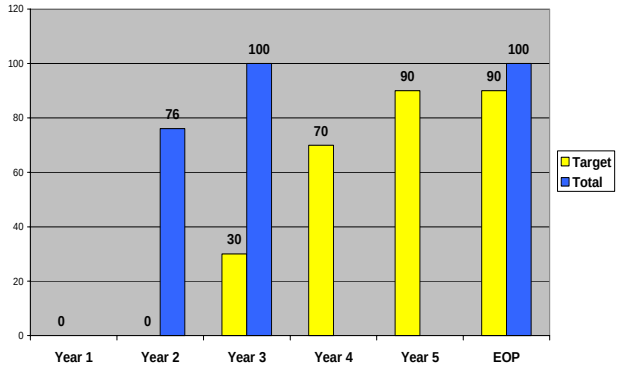
- Most planning activities required active involvement by the MOH and partners. This caused delays in the development of consensus
- The pilot of the new planning toolkit in nine districts alongside the existing planning process was a major challenge (MBB)
- The sudden push for implementation of the Decentralization Policy and the creation of a mechanism for the devolvement of PHC functions to local government were major challenges, especially as they related to planning
- Inadequate coordination of planning by the MOH across all program areas within the MOH posed serious questions for sustainability.
- Delays by the MOH in finalizing the HMIS delayed the implementation of planned activities

- Planning between district and health centre levels needs further strengthening or it will remain a major challenge.

5.9.4 Improved planning and strategic information for HIV/AIDS

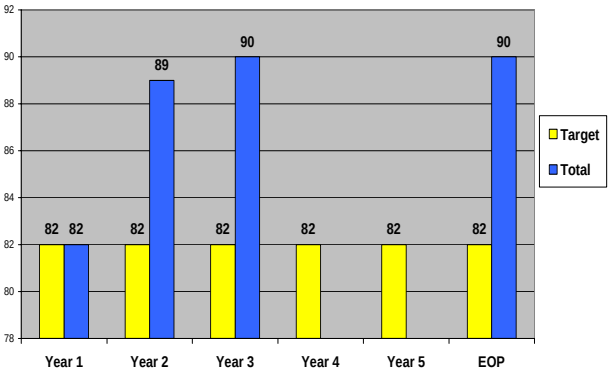
Key indicators show the following results for improved planning and strategic information for HIV/AIDS through Year 3:

7.1 Percent of public facilities reporting HIV/AIDS services through the RHIS



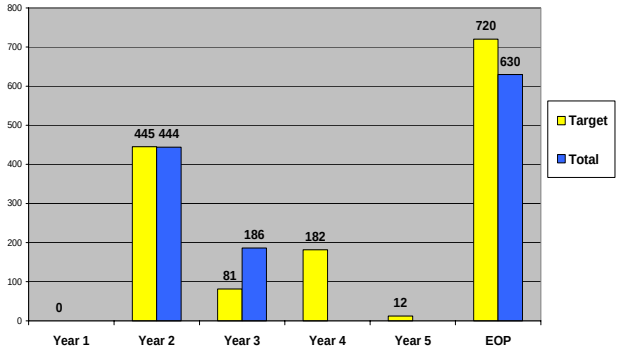
HSSP key indicator 7.1 shows an increase in the percentage of public facilities reporting HIV/AIDS services through the RHIS from 76% in year two to 100% in Year 3, exceeding the third year target of 60% of facilities, and exceeding the EOP target of 80%.

7.3 Number of local organizations provided with technical assistance for strategic information activities



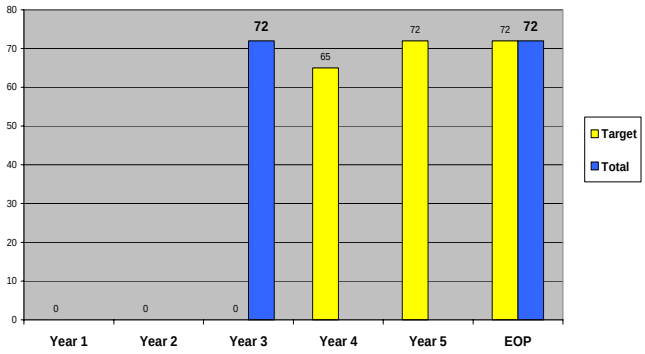
HSSP key indicator 7.3 shows an increase in the number of local organizations provided with technical assistance for strategic information activities from 82 in year one to 90 in Year 3, exceeding both the third year target and the EOP target of 82.

7.4 Number of individuals trained in strategic information by year



HSSP key indicator 7.4 shows 186 individuals trained in strategic information in Year 3, far exceeding the third year target of 81, and over 87% of the cumulative EOP target of 720 individuals trained.

7.5 Number of districts using HIV/AIDS Planning Guidelines in the development of their Action Plans



HSSP key indicator 7.5 shows all 72 districts to be using HIV/AIDs Planning Guidelines in the development of their action plans, which equals 100% of the EOP target. There was no Year 3 target for this indicator.

6 HSSP Program Administration and Finances

6.1 Planning and budgeting

HSSP 3-Year Plan completed
The HSSP 3-Year Plan (2006-2009) was successfully developed in the first quarter of the year. It is in harmony with the MOH's Central Level and PHO plans. Close collaboration was emphasized when developing the plan. Implementation of the plan is being closely monitored through biweekly and quarterly program reviews, in addition to management guidance.

Quarter 1 report submitted to USAID
The Yr 3 Q1 Report was prepared and submitted to USAID.

Quarter 2 review successfully conducted and quarterly report submitted to USAID
The Yr 3 Q2 Review was completed, and the report was submitted to USAID

Quarter 3 review successfully conducted and quarterly report submitted to USAID
The Yr 3 Q3 Report was written and submitted to USAID

2008 Country Operation Plan (COP) submitted to USAID
The 2008 COP was finalized and submitted to USAID. Further revision may be done upon receipt of latest guidance. Funding allocations may also change.

6.2 Financial Performance

As at September 30, 2007 HSSP spent a cumulative total of $24.4 million. This amount is made up of $23.4 million actual billing up to August 31, 2007 plus $1.0 million in accrued expenditure for the month of September 2007. The cumulative obligated amount for the same period to September 30, 2007 was $26.9 million. Total cumulative expenditure to September 30 2007, was therefore 10.2% below target. Specific to fiscal year under review, HSSP was obligated $11.3 million against which a total amount of $9.0 million was spent as at September 30, 2007. The under-spending is due in part to:

The Rural Retention Scheme not being fully operational as at September 30, 2007
Activities under the Family Planning sub-component had not been fully carried out due primarily to the shortage of long term family planning commodities (Jadelle).

6.3 Human Resources

HSSP has 47 staff, of which 31 are male and 16 are female. HSSP is headed by a Chief of Party and is assisted by two Deputy Chiefs of Party and two Senior Resident Advisors.

Of the total staff, 30 are technical and senior management staff and the remaining 17 fall under Finance and Administration. A gender breakdown for technical staff shows that females comprise 43% and males 57% of the staff.

Technical Area	Technical Staff	Female	Male
Malaria - IRS	4	0	4
CHN	3	3	
IRH	3	2	1
Planning/HMIS	2	1	1
HRH	2	0	2
Performance Improvement	1	1	0
HIV/AIDS Coord/SWAp	1	0	1
CCS	9	4	5
M&E	2	1	1
COP and DCOPs	3	1	2
Total technical/senior management	30	13 (43%)	17 (57%)

6.4 HSSP Internal M and E

Program Monitoring and Evaluation Plan reviewed to incorporate emerging changes
The Monitoring and Evaluation Framework was reviewed in the first quarter to align it with the restructured program. This was done with STTA from Abt Associates.

Review of program indicators
HSSP's program indicators were revised twice in the first quarter of the year. The first review was to accommodate the restructuring of the project and the incorporation of the IRS component, while the second was to incorporate new USAID indicators based on the Country Operation Plan (COP) approach. USAID has introduced the COP approach to CHN and IRH and malaria. The approach previously only applied to HIV/AIDS work funded through PEPFAR.

Indicator Definition Manual developed
The indicator definition manual was developed and reviewed.

Clinical Care Specialists Reporting Forms revised
Clinical Care Specialists Reporting Forms were revised to improve efficiency in reporting. A Monthly Reporting Template and an Indicators Reporting Form were developed and are in use.

Support to the development of success stories
The CCS in Northern Province provided information on EmOC work in Mporokoso to produce a success story and other team members have suggested topics. In the fourth quarter, the IRH unit documented success stories related to the provision of adolescent reproductive health services in Southern Province.

Challenges in M and E
HSSP experienced the following challenges in its internal M and E this year:

- Documentation and dissemination of success stories and best practices requires more focused attention in the year to come, including further clarification and training for staff on how to effectively identify, document, photograph and disseminate these stories.
- There is a continuing need to assist program staff to understand indicators clearly, and determine methods for systematic data collection, data entry, analysis and presentation
- Baseline data for some indicators is lacking. The project needs to determine which indicators are affected and decide the way forward.
- Mid-term data needs to be collected for some indicators using surveys, record reviews or observations. Planning for this should begin soon.
- Delay in submission of required documents continues to delay the completion of reports and their timely submission.

Annex 1: Summary of Indicators by Year, Target and Achievements

No.	Indicator	Year 1 (2004/05)		Year 2 (2005/06)		Year 3 (2006/07)	
		Target	Achieved	Target	Achieved	Target	Achieved
1	**Child Health and Nutrition**						
1.1	Number of districts implementing F-IMCI	N/A	38	50	54	62	62
1.2	Number of districts with at least one health worker trained in C-IMCI	40	40	40	45	57	72
1.3	Number of facilities with at least one health worker trained in C-IMCI	N/A	N/A	N/A	16	140	378
1.4	% of districts offering 6 Key Family Practices	N/A	63	63	76	69	96
1.5	Number of people trained in Child Health Care and Child Nutrition **(Total)**	N/A	80	168	677	120	1,521
	Males	N/A	38	67	352	48	892
	Females	N/A	42	101	325	72	629
1.6	Number of people trained in maternal/newborn health through USG-supported programs **(Total)**	N/A		198	61	210	599
	Males	N/A		76	6	75	257
	Females	N/A		122	55	135	342
1.7	Number of districts with at least 80% of children fully immunized by age 1 year	36	33	45	37	48	45
1.8	Number of children less than 12 months of age who received DPT3 in the last 1 year	N/A		520,000	519,285	520,000	515,249
1.9	Number of children under 5 years of age who received Vitamin A from USG-supported programs	N/A		1,502,521	1,703,941	2,295,000	2,462,377
1.10	% of children aged between 6 and 59 months receiving Vitamin A supplementation in the last 1 year	65	67	70	74	76	86
1.11	Number of children under 5 years of age who received de-worming tablets in the last 1 year	N/A		N/A		2,295,000	2,006,815
1.12	% of children under 5 with fever seen by HSSP trained Health Care providers managed according to IMCI Guidelines	50		55		65	
1.13	% of HSSP-trained health care providers managing fever among children under 5 according to IMCI guidelines	55		60		70	
2	**Malaria**						
2.1	Number of districts implementing IRS	N/A		N/A		15	15
2.2	Number of housing units sprayed with insecticide with USG support	N/A		N/A		620,000	592,346
2.3	% of housing units in targeted area for IRS that have been sprayed in the last 12 months	N/A		N/A		0	87
2.4	Number of people living in the sprayed housing units	N/A		N/A		3,100,000	2,231,194
2.5	Value of pharmaceuticals and health commodities purchased by USG-assisted governmental entities through competitive tenders	N/A		N/A		200,000	91,000

No.	Indicator	Year 1 (2004/05)		Year 2 (2005/06)		Year 3 (2006/07)	
		Target	Achieved	Target	Achieved	Target	Achieved
2.6	Number of host country institutions with improved management information systems as a result of USG assistance	N/A		N/A		16	16
2.7	Number of people trained in malaria treatment or prevention with USG funds (**Total)**	N/A		N/A		931	1,100
	Males	N/A		N/A		559	715
	Females	N/A		N/A		372	385
2.9	Number of people trained in monitoring and evaluation with USG assistance	N/A		N/A		15	30
2.10	Number of people trained in strategic information management with USG assistance	N/A		N/A		30	60
3	**Reproductive Health**						
3.1	Number of districts with at least 1 functioning PAC site/centre	4	4	10	6	25	17
3.2	Number of districts with at least 2 providers trained in PAC and working in facilities providing PAC	4	4	10	6	25	17
3.3	Number of districts with at least 1 functioning EmOC site/centre	4	0	10	0	25	13
3.4	Number of districts with at least 2 providers trained in EmOC and working in facilities providing EmOC	4	0	10	0	25	13
3.5	% of pregnant women receiving two or three doses of IPT	10		20		40	
3.6	Couple years of protection (CYP) in USG-supported programs	N/A		104,750		111,750	
3.7	Number of women receiving Active Management of the Third Stage of Labor (AMSTL) through USG-supported programs	N/A		N/A		N/A	
3.8	Number of USG-assisted service delivery points providing FP counselling or services	N/A		13	13	57	57
3.10	Number of people trained in FP/RH with USG funds (**Total)**	N/A		61	132	100	162
	Males	N/A		6	34	10	59
	Females	N/A		55	98	90	103
3.11	Number of health care providers trained in Long-Term FP methods with HSSP support	N/A	41	20	49	100	75
4	**Human Resources for Health**						
4.1	% of physicians retained in C & D district hospitals under the HSSP rural retention scheme	N/A		90	48	90	100
4.2	% of C&D districts that maintain or improve Daily Staff-Client Contact Ratio	N/A	43	57	32	65	44
4.3	Number of patients Ever Started on ART in C&D districts in which HSSP has posted a physician under the Rural Retention Scheme	N/A		N/A	3,005	6,555	4,004
4.4	Number of health training institutions utilizing revised curriculum that includes HIV/AIDS and other priority services	N/A		N/A		1	2

No.	Indicator	Year 1 (2004/05)		Year 2 (2005/06)		Year 3 (2006/07)	
		Target	Achieved	Target	Achieved	Target	Achieved
4.5	% of graduates in health training institutions trained to provide ART, PMTCT, and CTC services **Nurses**	N/A	12	N/A	6	20	44
	Clinical Officers	N/A	100	N/A	50	100	107
	Doctors	N/A	100	N/A	100	100	0
5	**Performance Improvement**						
5.1	Number of private sites delivering PMTCT, CTC, or ART Services that are assessed by MCZ	N/A	N/A	N/A	N/A	N/A	29
5.2	Number of private sites delivering PMTCT, CTC, or ART Services that are accredited by MCZ	N/A		N/A		21	8
5.3	% of districts conducting case management observation/record review in at least 80% of supervision visits	13		18		32	36
6	**HIV/AIDS Coordination**						
6.1	% of districts with at least one facility offering the Minimum Package of HIV/AIDS services	N/A		31		42	81
7	**RHIS* and Planning**						
7.1	% of public facilities reporting HIV/AIDS services through the RHIS	N/A		N/A	76	30	100
7.3	Number of local organizations provided with technical assistance for strategic information activities	N/A	82	82	89	82	90
7.4	Number of individuals trained in strategic information	N/A		445	444	81	186
7.5	Number of districts using HIV/AIDS Planning Guidelines in the development of their Action Plans	N/A		N/A		0	72

NOTE:
A blank cell indicates that data is not available