



USAID
FROM THE AMERICAN PEOPLE



Maternal and Child Health Integrated Program

MCHIP Democratic Republic of Congo (DRC)

**Final Report
1 April 2009 – 31 July 2011**

Submitted to:
United States Agency for International Development/DRC
under Cooperative Agreement # GHS-A-00-08-00002-000

Submitted to:
United States Agency for International Development
under Cooperative Agreement # GHS-A-00-08-00002-000

Submitted by:
Jhpiego in collaboration with
John Snow Inc.
Save the Children
Macro International Inc
PATH
Institute of International Programs/Johns Hopkins University
Broad Branch Associates
Population Services International

Table of Contents

Table of Contents.....	2
Table of Tables	4
Table of Figures	5
Acronyms 6	
INTRODUCTION	9
Context	9
History of MCHIP’s involvement.....	10
Goal and Objectives	11
Staffing	12
Organization of This Report	12
RESULTS AND RECOMMENDATIONS BY OBJECTIVE	13
1. <i>Child Health - Community Case Management of Childhood Illness</i>	13
Background.....	13
MCHIP’s Approach.....	16
Activities and Results.....	17
Challenges.....	41
Conclusions and Recommendations	43
2. <i>Child Health - ORT and Zinc in Diarrhea Case Management</i>	45
Background.....	45
MCHIP’s Approach.....	45
Activities and Results.....	46
Challenges.....	50
Conclusions and Recommendations	50
3. <i>Routine Immunization and New Vaccine Introduction</i>	52
Background.....	52
MCHIP’s approach	52
Activities and Results.....	53
Challenges.....	64
Conclusions and Recommendations	66
4. <i>Integrated Maternal and Newborn Health</i>	69
Background.....	69
MCHIP’s Approach.....	70
Activities and Results.....	71
Challenges.....	80
Conclusions and Recommendations	82
5. <i>Point of Use Water Treatment</i>	86
Background.....	86
MCHIP’s Approach.....	86
Activities and Results.....	87
Challenges.....	89
Conclusions and Recommendations	90

THE WAY FORWARD	91
ANNEX 1: Location of CHWs in health zones supported by AXxes	93
ANNEX 2: Inventory of trained CHWs and CCM sites established 2006-2010.....	95
ANNEX 3: Province, health zone, and partner who organized post training follow up of CHW ...	98
ANNEX 4: CCM Data Collection Forms	100
ANNEX 5: CCM supply report	105
ANNEX 6: Immunization Training and Orientation Sessions Supported Technically by MCHIP in FY'2010 and FY 2011	106
ANNEX 7: Family Planning training for providers and briefings for church leaders in six HZs .	107
ANNEX 8: Strengthening Provincial Immunization Interagency Coordinating Committees.....	108
ANNEX 9: SUCCESS STORY: MCHIP Provides Health Workers with Life-Saving Skills for Mothers and Babies.	115

Table of Tables

Table 1: History of CCM Introduction and Scale-up in DRC	14
Table 2: Expansion of CCM sites Fiscal Years 2008-2011	17
Table 3: Distribution of new CCM sites, CHWs and training dates by health zone and province	18
Table 4: Health zones organizing post-training follow-up sessions and CHWs participating by quarter, October 2009-September 2010, AXxes health zones only	22
Table 5: Sick child forms processed, nationally and from AXxes health zones, October 2009-July 2011	23
Table 6: Reasons for care seeking - Children seen by CHW who presented with fever, diarrhea, cough and other problems, through end of project	24
Table 7: CHW classification of children treated, FY'10	24
Table 8: Classification and treatment of symptoms, per CCM sick child forms, FY'10, nationally and in AXxes-supported health zones only	25
Table 9: CHW knowledge and practice as observed during follow-up session by rounds, FY'10 (National sample)	29
Table 10: Results of CCM/FP Integration in Six Health Zones, June-Sept 2010.....	34
Table 11: Contraceptive methods chosen during CHW practice training sessions	34
Table 12: Routine immunization coverage 2000-2010, DTP3.....	54
Table 13: DRC MNCH Mortality Data.....	69
Table 14: Policies, guidelines, training packages and other tools produced by the MOH since 2007, with BASICS, POPPHI and MCHIP	72
Table 15: MNH Training Coverage 2008-2010 (health zones and health workers).....	74
Table 16: ACHIEVEMENTS IN AXXES HEALTH ZONES.....	79

Table of Figures

Figure 1: Integrated Community Case Management Capacity Building Efforts at Various Levels of Health Systems in DRC (Jan/2006-July/2011)	20
Figure 2: CHW knowledge of danger signs in sick children by follow-up round	27
Figure 3: CHW knowledge of signs of dehydration by follow-up round	27
Figure 4: CHW knowledge of age thresholds and ability to correctly count.....	28
Figure 5: Comparison of DRC's reported DTP/HepB+Hib 3 coverage in 2009 and 2010	54
Figure 6: Comparison of numbers of infants vaccinated monthly in 2009 and 2010, with reasons for lower than expected coverage	55
Figure 7: Comparison of cumulative number of infants vaccinated with DTP/HepB+Hib 3 by quarter as reported in the USAID-assisted Health Zones, FY'10 and FY'11	59
Figure 8: Quarterly and annual DPT/HepB+Hib 3 coverage by province in 2010	61
Figure 9: Quarterly DPT/HepB+Hib3 coverage in the IHP Health Zones in FY'10 and FY'11	61
Figure 10: DPT3 coverage reported by zonal health offices compared to health center records (Source: MCHIP-led DQSA in selected health zones, FY'10).....	63
Figure 11: Changes in provider skills in 10 health zones.....	77
Figure 12: Skills of providers who gained competence through interaction.....	78

Acronyms

AMTSL	Active Management of the Third Stage of Labor
ARI	Acute Respiratory Infection
AXxes	USAID bilateral health project managed by IMA Global Health
BASICS	Basic Support for Institutionalizing Child Survival (USAID Global Project)
BCC	Behavior Change Communications
CCM	Community Case Management
CDD	Control of Diarrheal Disease
CHW	Community Health Worker (“Relais Communautaire”)
CIDA	Canadian International Development Agency
c-IMCI	Community-based Integrated Management of Childhood Illness
cMYP	Comprehensive Multi-Year Plan for Immunization
CRS	Catholic Relief Services
CS	Centre de Santé (Health Center)
CSO	Civil Society Organization
CSR	Centre de Santé Régionale (Regional Health Center)
DD	Diarrheal Disease
DHS	Demographic Health Survey
DQSA	Data Quality Self Assessment (also commonly referred as DQS)
DRC	Democratic Republic of the Congo
DTP3	Diphtheria Tetanus Pertussis third dose
ECC	Eglise du Christ au Congo (Church of Christ in Congo - Protestant)
ELS	État des lieux de la santé
EMRRP	Emergency Multisectoral Rehabilitation and Reconstruction Program (World Bank Program in DRC, 2002)
ENC	Essential Newborn Care
EPI	Expanded Program on Immunization
FP	Family Planning
GAVI	Global Alliance for Vaccines and Immunizations
GTZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Technical Corporation)
HBB	Helping Babies Breathe
HC	Health Center
HGR	Hôpital General de Référence (General Referral Hospital)
HSS	Health Systems Strengthening
HZ	Health Zone
ICC	Inter-Agency Coordination Committee (ICC) for immunization
IEC	Information Education Communication
IHP	Integrated Health Project (PROSANI-Projet des Soins Intégrés in DRC)
IMA	Interfaith Medical Association, now IMA Global Health (US-based, ecumenical, international health organization, primary recipient of AXxes project award)
IMCI	Integrated Management of Childhood Illness
IRC	International Rescue Committee
ISS	Immunization Services Support
JSI	John Snow, Inc. (MCHIP Partner Organization)
KMC	Kangaroo Mother Care
LAM	Lactational Amenorrhea Method for the spacing of births
LMS	Leadership, Management & Sustainability Program (USAID Global Project)
LQAS	Lot Quality Assurance Sampling or Survey

MAMA	Méthode d'allaitement maternel et d'aménorrhée (exclusive breastfeeding – method of birth control known as LAM in English)
MAO	Méthodes d'auto observation (natural form of birth control)
MCHIP	Maternal and Child Health Integrated Program (USAID Global Project)
MERLIN	Medical Experts on the Frontline (UK-based NGO)
MICS	Multiple Indicator Cluster Survey
MNH	Maternal and Newborn Health
MNTF	Maternal and Neonatal Task Force
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
NMCP	National Malaria Control Program
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PATH	Program for Appropriate Technology in Health (MCHIP Partner Organization)
PCIME-C	Prise en charge intégrée des maladies de l'enfant au niveau communautaire (French acronym for C-IMCI)
PCV-13	Pneumococcal Conjugate Vaccine - 13
PEC	Prise En Charge (case management)
PEV	Programme Elargi de Vaccination (national Expanded Program on Immunization)
PMI	President's Malaria Initiative
PNDS	Plan National de Développement Sanitaire (National Health Development Plan)
PNIRA	Programme National de Lutte Contre les Infections Respiratoires Aigues (National Program for Acute Respiratory Illness Control)
PNLMD	Programme National de Lutte Contre les Maladies Diarrhéiques (National Diarrheal Disease Control Program)
PNLP	Programme National de Lutte contre le Paludisme (National Malaria Control Program)
PNSR	National Reproductive Health Program
POPHI	Prevention of Post-Partum Hemorrhage Initiative
POU	Point of Use
POUZN	Point of Use Zinc Project
PPH	Post-Partum Hemorrhage
PRONANUT	Programme National de Nutrition (National Nutrition Program)
PROSANI	Projet des Soins Intégrés" (Integrated Health Program, IHP)
PSI/ASF	Population Service International/l' Association de Sante Familiale (the PSI local affiliate in DRC)
PTC	Provincial Technical Committees
RDT	Rapid Diagnostic Test for malaria
REC	Relais Communautaire (Community Health Worker)
RECO	Registry for Community Health Workers
RED	Reaching Every District
SANRU	Santé Rurale (former USAID bilateral Rural Health Project, now local NGO)
SASDE	Stratégie d'Accélération pour la Survie et le Développement de l'Enfant (UNICEF's Accelerated Child Survival and Development Strategy)
SNIS	write out in French (National Health Information System)
SPS	Strengthening Pharmaceutical Systems Project (USAID Global Project)
TRO	Thérapie par la réhydratation orale (Oral Rehydration Therapy)
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Acknowledgements

This program and report was made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the Leader with Associates Cooperative Agreement GHS-A-00-08-00002-000. The contents are the responsibility of the Maternal and Child Health Integrated Program (MCHIP) and do not necessarily reflect the views of USAID or the United States Government.

The Maternal and Child Health Integrated Program (MCHIP) is the USAID Bureau for Global Health flagship maternal, neonatal and child health (MNCH) program. MCHIP supports programming in maternal, newborn and child health, immunization, family planning, malaria and HIV/AIDS, and strongly encourages opportunities for integration. Cross-cutting technical areas include water, sanitation, hygiene, urban health and health systems strengthening.

DRC Contact Person:

Dr. KANZA NSIMBA
Country Team Leader
MCHIP-DRC
33 Avenue Comité Urbain, Commune de Gombe
Kinshasa, Democratic Republic of Congo
Email: kanzansimba@hotmail.com

Country Team:

Dr. Kanza Nsimba	Country Team Leader
Dr. Papy Luntadila	iCCM Advisor
Ms. Lucie Zikudieka	Newborn Advisor
Dr. Celestin Nsibu	Newborn Consultant
Dr. André Tonda	Immunization Advisor
Mr. Derek Kahongo	Data Management Specialist
Mr. Adam Mbongo	Finance and Administration Manager

Support Team:

Ms. Patricia Taylor	MCHIP Country Support Team Leader
Dr. Emmanuel Wansi	Child Health Advisor
Dr. Indira Narayanan	Newborn Health Advisor
Dr. Michel Othepa	Immunization Advisor
Ms. Susheela Engelbrecht	Maternal Health/FP Advisor
Ms. Nathalie Albrow	Senior Program Officer
Ms. Fiker Befekadu	Finance/Admin Coordinator
Ms. Heather Casciato	Program Coordinator

INTRODUCTION

Context

With a population of over 60 million and well over three million births each year, the Democratic Republic of Congo (DRC) experiences more than half a million deaths in children under five years of age and from 20,000 to 30,000 maternal deaths each year. The country's maternal, newborn and under-five mortality rates have improved over the past decade,¹ however, they are still among the highest in sub-Saharan Africa and the country will not achieve either MDG4 or MDG5 by 2015.

As in many developing countries, the causes of maternal and child death are largely preventable. Children die most frequently of malaria, pneumonia, diarrhea, and newborn causes (prematurity, sepsis, birth asphyxia) and the majority of maternal deaths are the result of hemorrhage, eclampsia, sepsis and complications of abortion.

DRC has relatively high rates of institutional birth (70%) and delivery with a skilled birth attendant is common (74%), but the quality of antenatal, obstetrical, newborn and postpartum care is poor. Most women (85%) seek antenatal care, but less than half report attending four or more ANC visits during their last pregnancy, and even women delivering in health facilities report no postpartum/postnatal care (87%). The country's total fertility rate (6.3 births per women), adolescent fertility rate (24%) and unmet need for family planning (24%) are all high, while contraceptive prevalence continues to be very low (6% modern methods). There has been very little improvement in any of these indicators over the past decade.

Immunization coverage improved dramatically after 1995, but data quality is poor and for a variety of reasons coverage has been over reported in recent years. According to the most recent household surveys, DTP3 was 45% in 2006 and 61% in 2009.² Official coverage estimates were 80% or higher for all of the traditional vaccines during this same period, but over the past three years routine immunization coverage appears to have fallen and the country continues in the throes of a continuing polio outbreak.

DRC's rates of malaria (31%), diarrheal disease (16%), and pneumonia (15%), as reported during household surveys, are similar to those in other countries, but access to and use of appropriate care for children are limited. An underlying cause of child death is malnutrition. DRC has a high rate of stunting (46%), low rate of exclusive breastfeeding (36% to 6 months of age), and the proportion of children 6-23 months of age receiving a minimum acceptable diet is one of the lowest in the world.³

¹ The maternal mortality ratio (MMR) fell from 1,289 to 549 deaths per 100,000 live births, infant mortality from 126 to 92, and under-5 mortality from 213 to 148 per 1,000 live births according to the Enquête Démographique et de la Santé (EDS-RDC) 2007 - DHS 2007 and the Multiple-Indicator Cluster Survey 2001 (MICS 2001).

² DHS 2007 and MICS 2010 – household survey's measure immunization coverage in the year prior to the survey

³ DHS 2007 findings used in all of the above.

The country's poor health infrastructure, lack of human resources, and difficult access to existing health services--for reasons of geography, culture, gender, poverty and continuing insecurity--all contribute to DRC's unacceptably high rates of maternal, infant and child death. The need to increase the coverage of high impact maternal, newborn and child health interventions, while also addressing the quality of existing health services is evident. On a positive note, the DRC has the support of many different donors and agencies in the health sector including USAID, UNICEF, WHO, UNFPA, the World Bank, the European Union, the GAVI Alliance, and many different non-governmental (NGO) and faith-based organizations (FBOs) and networks. All of these support the Ministry of Health's programs in some way and MCHIP has been fortunate to work with many of them on the program described below.

History of MCHIP's involvement

MCHIP has been active in DRC since April, 2009, when activities started by several earlier global projects—BASICS, IMMUNIZATIONbasics, POPPHI and POUZN—and the staff who had worked for those projects in DRC and the U.S. were brought together under the MCHIP umbrella. The project was completed in July 2011. Information about the work of the earlier projects and how MCHIP continued and expanded it is contained in the individual chapters of this report.

MCHIP worked at the national level with the Ministry of Health and its integrated management of childhood illness (IMCI), immunization (Expanded Programme on Immunization, EPI) and reproductive health (PNSR) programs. We also collaborated on an on-going basis with the international and NGO partners that support these programs and have worked hand in hand with USAID's AXxes and Leadership, Management and Sustainability (LMS) projects for a number of years to improve the coverage and the quality of specific maternal, newborn and child health (MNCH) interventions in the health zones that these projects assisted. MCHIP staff were also active participants on the many different steering committees, interagency coordinating committees and technical working groups that engage the international partners in planning and implementing the initiatives of the national programs and the MOH overall.

In Fiscal Year 2009 (FY'09), MCHIP's work was co-funded by the Health, Infectious Disease and Nutrition office of USAID's Global Bureau (G/HIDN) and the Africa Bureau's office of Social Development (AFR/SD). MCHIP received Field Support from the USAID Mission for the first time at the end of FY'09. To support the full range of activities in which the earlier projects had been involved, however, HIDN and AFR/SD also continued to co-fund MCHIP's work in Fiscal Year 2010 (FY'10). MCHIP fully expended the Mission's Field Support by the end of July, 2011. HIDN and AFR/SD approved the use of up to \$270,000 of child health core funding and \$152,000 in immunization core funding in Fiscal Year 2011 (FY'11). This allows MCHIP to continue support to immunization activities in the country and has facilitated an orderly transition of a number of strategic activities described in this report to the new USAID bilateral health project—IHP/PROSANI.

Goal and Objectives

MCHIP's **goal** in DRC was to contribute to improved maternal, newborn and child health by providing technical support to the Ministry of Health and strengthening the capacity of USAID-supported projects to deliver evidence-based MNCH interventions at scale.

MCHIP had five specific **objectives** for its work in DRC:

- Objective 1: To increase access to child health services through the strengthening and scale up of **Community Case Management**. MCHIP worked toward this objective by supervising existing CCM sites and trained Community Health Workers (CHWs) and working with the MOH and other partners to establish new CCM sites. In the past year, the project team has also introduced family planning counseling and services at CCM sites and documented results and lessons learned for future expansion.
- Objective 2: To strengthen case management of diarrhea through the promotion of **ORT and introduction of zinc**. MCHIP worked toward this objective with the Ministry of Health, UNICEF, and other partners by revitalizing ORT corners in hospitals and health centers, increasing the awareness of families and health providers about diarrheal disease prevention and treatment through a multimedia communications strategy and training CHWs and health providers to correctly assess and treat diarrheal disease.
- Objective 3: To improve declining **immunization coverage** rates in high-burden health zones and support **new vaccine introduction**. The project has been providing technical assistance to improve the systems that are required to deliver high quality, routine immunization services. The focus was on assisting low-performing health zones to increase their immunization coverage and working with the national level technical working groups that formulated policies, produced annual plans, monitored performance, and prepared for the introduction of pneumococcal conjugate vaccine (PCV-13), which began in March 2011.
- Objective 4: To improve maternal and newborn health through expansion of an integrated package of **Essential Newborn Care (ENC)** and the **Active Management of the Third Stage of Labor (AMTSL)** and other maternal health interventions. MCHIP worked with AXxes, LMS, UNICEF, the MOH and other partners to roll-out this integrated strategy and monitor the quality of care provided by facility-based and community-based health workers. MCHIP also worked to increase attention to family planning (FP) and raise fistula awareness; and to train trainers, update policies and establish a number of Kangaroo Mother Care (KMC) training units in conjunction with the AMTSL/ENC intervention.
- Objective 5: To expand the promotion and distribution of **point of use water purification** products (i.e., PUR and Aquatabs) and **improve hygiene practices** in cholera-endemic health zones in South Kivu.

Under each of these objectives, the DRC team assisted the MOH in updating relevant national policies and convening and mobilizing national and international partners to improve program coverage and quality. In FY'10, MCHIP also worked hand in hand with USAID's bilateral health project, AXxes, and with the global Leadership, Management and Sustainability (LMS) project to rollout updated policies, train and supervise health providers in hospitals, health centers and communities, and improve the quality of care provided in the 80 Health Zones where these two projects have worked.

Staffing

The MCHIP/DRC team of eight technical and administrative staff was based in Kinshasa, on the grounds of the MOH. MCHIP/DRC was supported at MCHIP headquarters by child health, immunization, maternal and newborn health advisors. John Snow, Inc. was the MCHIP lead organization in DRC, while also providing technical leadership in child health and immunization. Other MCHIP partners providing technical support included PATH (maternal and newborn health), PSI (point of use water purification) and Save the Children (Kangaroo Mother Care).

Organization of This Report

The primary purpose of this report is to document and share MCHIP's approach, results and lessons learned over the past two years. As a new bilateral project team takes the reins of IHP/PROSANI project, MCHIP carried out a number of workshops and meetings to promote an understanding of the work that has come before and to help the bilateral team build on the successes and avoid some of the pitfalls of the past. In the spirit of transition, this report describes MCHIP's work and offers recommendations that the USAID Mission and the bilateral project team may find helpful.

The following sections of the report are organized under the five MCHIP/DRC objectives. Each section presents 1) a quick background on the situation and the work of earlier projects that has been continued and in several cases expanded by MCHIP; 2) a description of MCHIP's approach, or the technical priorities and implementation strategies that have been at the heart of our work; 3) the specific activities that MCHIP carried out with the MOH and its partners in FY'10 and their results; 4) the challenges faced; and 5) our recommendations to USAID and the new bilateral project team, which we hope will help to set the stage for future USAID investments in each intervention area.

RESULTS AND RECOMMENDATIONS BY OBJECTIVE

1. *Child Health - Community Case Management of Childhood Illness*

Objective 1: To increase access to child health services through the strengthening and scale up of Community Case Management (CCM) of pneumonia, diarrhea, malaria and malnutrition

Background

The DRC is one of six countries that, together, contribute to over half of all child deaths in the world each year (the others are India, Pakistan, China, Nigeria, and Ethiopia). Although there has been progress in reducing infant and child death since 2000, DRC's infant and child mortality rates are still amongst the highest in the world and the country is not expected to achieve Millennium Development Goal #4 by 2015. Approximately 70% of DRC's population does not access medical services, according to a 2003 study led by the University of Kinshasa's School of Public Health. Financial and geographic barriers (terrible roads, the Congo River & thousands of lakes, dense forests and savanna), a dramatic shortage of qualified medical personnel nationwide, and continuing conflict in the East all seriously compromise a family's access to health care. These factors and DRC's high rates of child mortality were important in the Government of DRC's (GDRC) decision, in 2005, to officially adopt and encourage the further expansion of Community Case Management (CCM) for childhood illness, specifically pneumonia, diarrhea, malaria and malnutrition.

Following the establishment of the transitional government in 2003, the Government of DRC adopted both facility-based and community-based IMCI (C-IMCI) strategies. As shown below, experiences from Senegal were instrumental in the Ministry of Health's decision to form a CCM Steering Committee in September 2005. Shortly thereafter, DRC developed a CCM implementation strategy, a training package and job aids and was ready to begin the initial learning phase of the activity. The first CCM sites were established in December 2005, with GTZ, UNICEF and other partners instrumental in supporting them. A pivotal event in 2007 was DRC's hosting of an international conference on CCM. In conjunction with the conference, a national review of the CCM program was carried out. The results were very positive, and as a result, the Government made the decision to move ahead with program expansion.

GTZ, UNICEF, WHO, IRC and BASICS were among the first partners in DRC to support the MOH in its c-IMCI and CCM efforts. USAID's AXxes project adopted the CCM approach in 2008 and the USAID LMS came on board later, both during the effort to scale up the initial CCM approach. The events and policy decisions leading to the adoption, expansion and scale up of CCM in DRC are listed in Table 1.

Table 1: History of CCM Introduction and Scale-up in DRC

2003

- DRC's transitional government is established after five years of intense conflict and the Ministry of Health begins searching for up-to-date solutions to improve the health status of the population
- Facility-based, integrated management of childhood illness (IMCI) is adopted by the MOH to maximize the interventions of health professionals; the use of community volunteers is considered to fill gaps and maximize results through community-based or c-IMCI.
- The National Program for Diarrheal Disease Control (PNLMD) is given the task of managing the introduction of C-IMCI.

2004

- Findings from Senegal research on community-based treatment of ARI is presented during C-IMCI coordination meeting chaired by the Secretary-General. (October)
- Consensus is reached for the introduction of iCCM to (1) train community volunteers, who were at the time in charge of communication and social mobilization only; (2) assign their supervision to the "infirmiers titulaires" (head nurses); (3) start with an initial implementation phase, primarily targeting the population with limited geographic access to health care, but plan for scaling-up from the beginning; and (4) integrate the management of four diseases--malaria, diarrhea, acute respiratory infections and malnutrition--in community care sites.

2005

- CCM tools are developed by the PNLMD Program, and the adoption of the tools was done within the Coordination Unit, with technical and financial support from WHO, UNICEF, GTZ, BASICS, SPS, IRC, SANRU, CRS, EMRRP, and HORIZON SANTE.
- The PNLMD Program and partners finalize a 5-day iCCM training to pre-test the module with the "relais promotionnels" of the health zone (HZ) of Makala in the Ngaba Hospital in Kinshasa.
- Ministry of Health (MOH) Secretary-General establishes Steering Committee, in charge of implementing the CCM strategy; the Steering Committee immediately develops an implementation plan, establishes scale-up criteria and conducts and uses the findings from field surveys to choose first sites for program launch.
- MOH and partners begin training a pool of national trainers. Community sites in Kenge HZ, Bandundu province are established with support from GTZ.

2006.

- Community sites are established and trainers trained in Demba HZ in Kasai Occidental province (supported by IRC) and in Mt Ngafula2, Binza Meteo, and Makala Selembao HZs in Kinshasa province (supported by UNICEF).
- Representatives from the DRC attend the Sub-Regional Conference on Community-ARI in Senegal and present their integrated CCM experience. (March 2006)

2007

- Sixteen HZs of Oriental and South Kivu provinces receive funding from WHO and technical support from WHO and BASICS for the establishment of new community CCM sites.
- USAID's BASICS project develops a computerized tool for use in recording and analyzing the quality of case-management provided by the community health workers (CHWs).

Table 1: History of CCM Introduction and Scale-up in DRC

- Based on lessons learned from two years in the field, the Ministry of Health finalizes the "Implementation Guidelines for the Community CCM Sites," to standardize the process and prepare to scale up the program (July).
- A sub-regional Review of Community-Based Care and Inter-Country Exchange on c-IMCI is held in Kinshasa. DRC's Minister of Health chairs the event, which is attended by eight African countries and delegates from the United States. By this time, DRC partners have already trained 421 community health workers and there were 224 functioning community treatment sites in 30 health zones. (October)

2008

- Scaling-up of c-IMCI/CCM begins. Strengthening of provincial managerial capacity is at the center of the approach. Child Health Commissions are established within Provincial Technical Committees in Kinshasa, Bandundu and Kasai Oriental. Two provincial ministers visit the field and conduct discussions with community health workers and beneficiary villagers.
- With funding from UNDP and the Global Fund, a study is initiated in the HZ of Kimpese of the Bas-Congo province to test the feasibility of the use of Artesunate-Amodiaquine and rapid diagnostic test (RDT) for the management of uncomplicated malaria at community sites. The Congolese School of Public Health, PNLMD, the NMCP and USAID/BASICS participated in this study. Although results are positive, there is no exit plan and activities do not continue after the end of the study (June).
- 163 delegates from 22 countries in Africa, Asia and America attend the Review of Community-Based Care and Inter-Country Exchange on C-IMCI Conference in Madagascar, which was sponsored by the BASICS project, UNICEF and other partners. The positive experience of the DRC in integrated community approach generates keen interest around the world.(August)
- The USAID bilateral health project, AXxes, adopts CCM. AXxes is implemented by a consortium of NGOs led by IMA including the Protestant Church of Congo (ECC), World Vision, Catholic Relief Services (CRS) and MERLIN.

2009

- AXxes plans to establish 200 community sites in 40 HZ already covered by its other interventions.
- Given the important role played by the churches in influencing public opinion, churches are mobilized to disseminate key messages on child health with emphasis on raising awareness of danger signs and promoting immediate care seeking when they occur. This occurred in some AXxes-supported areas as well as in 5 HZ in Kinshasa supported by UNICEF.
- Lot Quality Assurance Sampling (LQAS) methodology is used for the first time to document the experience with the churches in the HZs of Makala and Binza Meteo in Kinshasa. This was supported technically and financially by IRC and BASICS and preceded by a training of the central team on the LQAS methodology.
- BASICS closes its operations in DRC (March); MCHIP assumes responsibility for the former BASICS staff and continues work to improve the coverage and quality of child health, immunization and maternal/newborn interventions. (April)
- MCHIP begins work to improve the computerized CCM monitoring system (e.g. case management and supervision report databases) initially developed under BASICS.

Table 1: History of CCM Introduction and Scale-up in DRC

- CCM scale up continues, with AXxes and MCHIP advisors working hand in hand to (1) increase coverage, (2) monitor the quality of CCM provided by trained CHWs, and (3) improve the effectiveness of the CHW supervisors. DRC's CCM strategy reaches 10 of the 11 provinces and 78 of the 515 HZ by September 2009.

2010

- CCM expansion continues with AXxes and MCHIP advisors focusing increased attention on post-training follow-up and quality monitoring. By September 2010, CCM is implemented in 94 of 515 HZ, among them 46 HZ supported by USAID including 41 AXxes HZ and 5 LMS HZ.
- MCHIP develops family planning/CCM protocols with PNSR and trial of integrated strategy is carried out in six districts. (protocols developed in Feb 2010; training of health workers and supervisors conducted in June 2010)
- USAID awards its new bilateral health project to a consortium led by MSH and IRC. IMA and its partners begin close out of AXxes. (September 2010).
- MCHIP and partners document (September/October 2010) the process of CCM introduction, expansion and scale up in DRC as part of a multi-country effort. The team focuses on policies, partnerships, technical issues, challenges, results achieved, lesson learned and recommendations for further institutionalizing and taking DRC's integrated CCM approach to scale. The initial documentation findings are presented in feedback sessions with MOH and stakeholders. Documentation report was finalized in June 2011 and a dissemination workshop was conducted in the DRC in July 2011. MCHIP transitions all of its CCM activities to the new USAID bilateral

MCHIP's Approach

On April 1, 2009, MCHIP assumed responsibility from BASICS for continuing CCM technical support to the MOH and its partners. Since that time, MCHIP worked with the CCM Steering Committee at the national level and with AXxes, UNICEF, LMS CIDA/PSI, and others in the health zones they support, with the goal of expanding CCM coverage, and monitoring and improving the quality of care provided by trained CHWs (Relais du Site).

When BASICS ended in March 2009, AXxes and BASICS had worked in partnership to provide CCM training to CHWs in 29 health zones. However, because of problems with drug supply, the CHWs were fully functional in only four of the 29 zones.

MCHIP's FY'10 workplan called for providing technical support to AXxes to continue its CCM work in all 29 of the initial health zones and expand the CCM approach to all of its remaining health zones. MCHIP also proposed to continue working with the MOH and its larger network of partners to scale up, monitor and improve the quality of the CCM services in other parts of the country. Development of provincial capacity to coordinate the resources of multiple partners, supervise and monitor the coverage and quality of CCM was another of MCHIP's priorities in 2010.

Activities and Results

Expansion of CCM sites and training of CHWs

By September 2009, DRC's CCM strategy had reached 10 of the 11 provinces and 78 of the country's 515 health zones. From October 2009 through June 2011, MCHIP worked with the MOH, AXxes and other partners to introduce CCM sites in 23 new health zones and expand CCM training and support to new communities in 9 health zones where CCM treatment sites had already been established. As shown below (Table 2), by the end of June 2011, this brought the total number of health zones providing CCM services to 101 (19.6%) of the total 515 health zones in the country. It also resulted in the creation of 513 new treatment sites (including 44 sites in health zones that already had some CCM activity) and raised the total number of CCM sites with trained CHWs to 1,357 by the end of June 2011.

Table 2: Expansion of CCM sites Fiscal Years 2008-2011

National CCM Indicators	FY'08	FY'09	FY'10	June 2011
Provinces with CCM sites	9	10	10	10
Total health zones with CCM sites	52	78	94	101
Number of new CCM sites established	286	206	401	138
Number of new CHWs trained in CCM	508	429	715	213
Cumulative number of CHWs trained end of Fiscal Year	929	1358	2073	2286

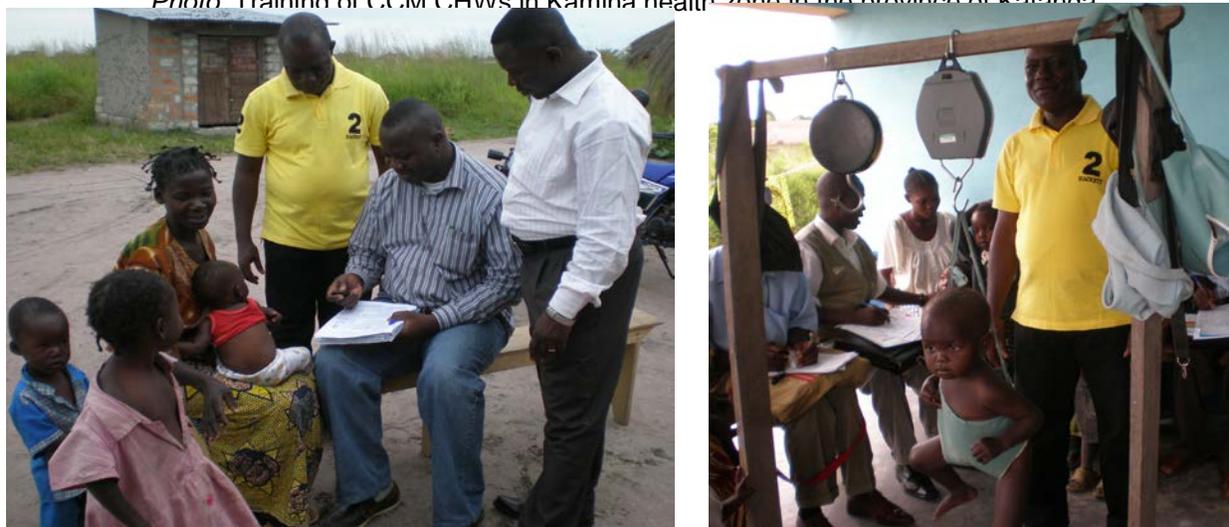
The AXxes project was responsible for establishing CCM sites in most of the new health zones (65%) in FY'10. However, a significant number of new sites were also added in the six health zones in Equateur province that are part of the CIDA-funded, PSI-implemented project to measure the impact of community case management for malaria on infant and child mortality. Table 3 shows the provinces where the new CCM sites and health zones are located, as well the dates of the CHW training courses that were conducted in each of the health zones in FY'10.

Table 3: Distribution of new CCM sites, CHWs and training dates by health zone and province

CCM training courses with MCHIP support - new health zones in FY'10				
PROVINCE	HEALTH ZONE	DATE OF TRAINING	NUMBER OF CHW TRAINED	NUMBER OF new CCM SITES
EQUATEUR	1. NDAGE	12/09/2010	83	37
	2. BOKONZI	16/09/2010	76	46
	3. BWAMANDA	08/08/2010	111	52
	4. BULU	27/09/2010	116	50
	5. MAWUYA	27/09/2010	89	52
	6. TANDALA	08/08/2010	113	52
SUD KIVU	7. MWENGA	13/05/2010	5	5
	8. KAMITUGA	21/07/2010	5	5
	9. KITUTU	26/07/2010	5	5
	10. LEMERA	18/06/2010	5	5
	11. NYANGEZI	26/05/2010	5	5
KATANGA	12. KAYAMBA	06/05/2010	11	11
	13. LWAMBA	07/05/2010	10	10
	14. MUKANGA	10/05/2010	9	9
	15. DILALA	02/04/2010	7	7
	16. LUBUDI	18/04/2010	6	6
TOTAL			656 CHWs	357 Sites
CCM Training with MCHIP support – Expansion in existing CCM health zones in FY'10				
PROVINCE	HEALTH ZONE	DATE OF TRAINING	NUMBER OF CHW TRAINED	NUMBER OF new CCM SITES
KASAI-OCC	1. LUBONDAIE	28/03/2010	5	5
	2. BULAPE	01/04/2010	5	5
KASAI-ORIENTAL	3. VANGAKETE	16/02/2010	10	5
	4. OMENDJADI	16/02/2010	10	5
	5. LODJA	16/02/2010	10	5
	6. PANIAMUTOMBO	27/03/2010	6	6
	7. BIBANGA	25/03/2010	3	3
	8. LUSAMBO	26/03/2010	5	5
SUD KIVU	9. MUBUMBANO	08/05/2010	5	5
TOTAL			59 CHWs	44 Sites
Total NUMBER OF new CCM SITES in Year 2010				401 Sites

In selecting new communities for CCM expansion, health centers were asked to provide information on their catchment areas and communities, including population estimates and distance to the health center. MCHIP stored this information in a dedicated database that currently holds information for 1,001 of the total 1,117 CCM sites. Using this information, MCHIP estimates that an additional ~ 95,000 children under 5 years of age gained access to community case management through the new treatment sites established in FY'10. This increased access to care and brought the total number of children served by all CCM sites (based on extrapolation from data available) to approximately 290,000 by the end of FY'10.

Photo: Training of CCM CHWs in Kamina health zone in the province of Katanga

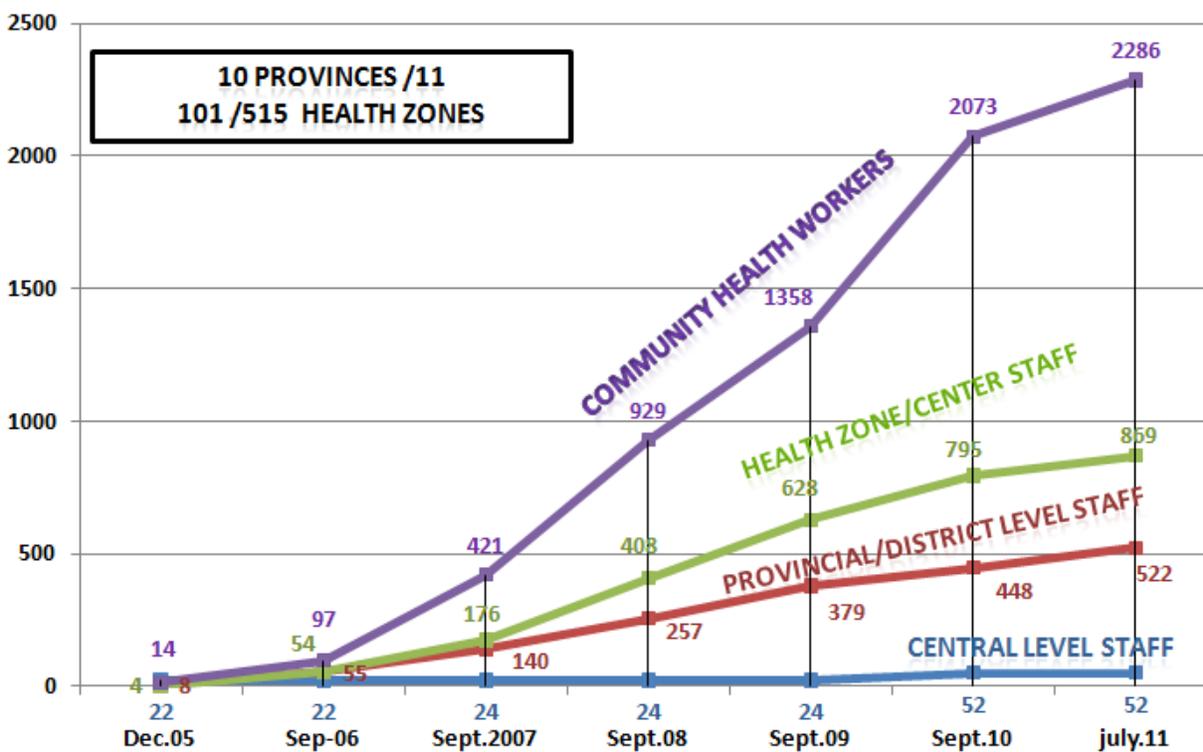


Developing human resources to support CCM

The expansion of the C-IMCI program, and CCM as an element of it, required the development of human resources at all levels of the health system. Figure 1 shows the progression of the capacity building effort from 2005, when CCM training started, through the end of project.

In FY'10, the CIDA/PSI research project contributed for the first time in four years to a substantial increase in capacity building at the national level with the training of 28 new trainers. This increased the total number of national CCM trainers to 52, as shown in Figure 1 (see central level staff).

Figure 1: Integrated Community Case Management Capacity Building Efforts at Various Levels of Health Systems in DRC (Jan/2006-July/2011)



Supporting CCM in AXxes-assisted health zones

AXxes adopted CCM in 2008 and introduced CCM sites for the first time in 2009. The project continued to expand into new health zones and to add new CCM sites throughout FY'10. However, after the initial training courses in 2009, the expansion of CCM sites and post training support to CHWs stalled.

To address this problem, MCHIP met with AXxes management and organized a workshop in December 2009 for AXxes field supervisors and coordinators. This activity, which was fully funded by MCHIP but organized and facilitated by the larger CCM Technical Working Group, focused on: a) increasing participants' knowledge of CCM and the tasks to be carried out to support CCM workers after training; b) solving problems that the supervisors and coordinators were facing in the field; and c) developing a detailed workplan for the next semester.

After the workshop, MCHIP maintained regular communication with the AXxes supervisors and coordinators. Although time consuming, this approach paid off with the rapid expansion of CCM sites, beginning in late March. Post-training support to CHWs improved, as well, and by the end of FY'10, AXxes had added a total of 68 treatment sites in 10 new health zones and 44 new sites in 9 other health zones where CCM activities had begun earlier. Annex 1 includes a list of the AXxes provinces and health zones, the number of CCM sites in each and the dates of CHW training and numbers of CHWs trained in CCM in FY'10.

Next steps? *With the end of the AXxes project and the start of the new USAID/DRC bilateral health activity, there is a need to continue follow-up support in those health zones with established CCM sites. To protect past investments, MCHIP encourages USAID and the IHP/PROSANI team to ensure that the established CCM sites continue to receive support and that new ones are added to increase CCM coverage. Support will also be needed in those health zones (if any) that do not transition to the new USAID bilateral. Advocacy with current and potential CCM partners and with the MOH, itself, is needed to guarantee the necessary support for existing sites and for expansion, particularly where USAID is not involved. An up-to-date mapping of CCM sites, in both USAID-assisted and non-USAID assisted health zones, should also be undertaken as an important step in planning for future CCM expansion.*

Revision of CCM tools and job aids

DRC's CCM guidelines are determined by the MOH's specialized programs that deal with the prevention and treatment of childhood illnesses (i.e. PNLMD, PNIRA, PRONANUT and EPI). In 2010, national standards and guidelines were updated by several of these national programs based on scientific advances and the MOH's desire for greater integration of services. MCHIP facilitated a Kinshasa-based workshop that was co-funded with MOH partners in early August 2010, with the goal of revising CCM tools in accordance with these program changes. There was also a desire to take greater advantage of the potential synergies between CCM and other preventive services. Also, after four years implementing CCM, there were many lessons learned that needed to be incorporated into the revised guidelines and tools.

During the tools workshop, participants:

1. Reviewed changes introduced by several national programs (malaria, acute respiratory infection, immunization and nutrition) and their implications for CCM;
2. Sought consensus on solutions to identified problems and changes needed in the implementation tools;
3. Determined how best to integrate changes in the CCM tools, particularly those used by CHWs at the CCM site;
4. Formulated recommendations to improve CCM implementation based on lessons learned; and
5. Determined next steps.

The workshop recommendations were adopted and have already resulted in revisions to several of the CCM tools. By the end of the project, the case management sheet for CHWs, the trainers' guide and the CHW manual were all revised.

Next steps? *Work remains to revise the implementation guide and other CCM tools. Specifically, guidelines and job aids on Rapid Diagnostic Testing and treatment of malaria with ACTs must be added in the next revision. Once more definitive findings are available from the CCM/family planning integration trial (described below), guidelines and tools for integrating these two community-based services should be incorporated. Finally, the linkages between CCM and immunization outreach should be strengthened to encourage better use of outreach visits to support the CCM-trained CHWs.*

Post-training support and supervision of CHWs

Newly trained CHWs should participate in a minimum of three post-training, follow-up sessions, beginning six to eight weeks after the completion of their initial training and scheduled at least four weeks apart. During these events, CHWs are interviewed and observed managing actual or simulated cases of childhood illness, their records are reviewed, problems are discussed, and they share CCM work experience with their supervisors and each other. According to the CCM guidelines, CHWs who have been working for a year or longer should attend two such sessions per year, as well.

Follow-up sessions reinforce CCM skills, and one of the goals of the program is to ensure that they are carried out according to the established guidelines and that all CHWs attend them. In FY'10, a total of 99 post training sessions were organized in the 45 health zones. Of the CHWs who were expected to participate in these post-training sessions, an average of between 46% and 70% attended each quarter. This means that a large number of CHWs missed one or more opportunities during the fiscal year to reinforce their skills. Nonetheless, a total of 482 CHWs participated in at least one follow-up session during the year.⁴

Table 4: Health zones organizing post-training follow-up sessions and CHWs participating by quarter, October 2009-September 2010, AXxes health zones only

INDICATORS	Oct –	Jan-	Apr-	Jul–	Fiscal
	Dec 2009	March 2010	June 2010	Sept 2010	Year 2010
Number of health zones	5	31	30	23	89
Number of post-training follow-up sessions held	5	40	30	24	99
CHWs participating in follow-up sessions	17	310	313	252	892
CHW who should have participated in follow-up sessions	37	470	421	416	1,344
Proportion of CHWs expected who participated in follow-up sessions	46%	66%	70%	60%	66%

⁴ Table 4 - Fewer follow-up sessions were held and fewer CCM sick child forms and supervision checklists collected in the last quarter of FY2010 than expected. This was because the AXxes staff and those in the health zones supported by AXxes turned their attention to project close out and had little time for other activities.

Monitoring the quality of CCM services (CHW classification, treatment and referral of sick children)

MCHIP monitored the knowledge and skills of CHWs by compiling and analyzing the case management forms completed by CCM-trained CHWs and by interviewing, observing and testing CHWs during group follow-up and one-on-one supervision sessions. The findings of both analyses in FY'10 up to the end of MCHIP are presented below.

A. Analysis of sick child forms: Reasons for care seeking and classification of cases treated by CHWs

CHWs completed a case management form for each sick child. The number of children assessed and treated, the conditions for which they were treated, their symptoms and the treatments prescribed were computed by MCHIP from the sick child forms. These forms were gathered from the CCM sites and brought to Kinshasa for data entry and analysis. This occurred in one of two ways--either they were collected from CHWs attending post-training follow-up meetings, or the non-clinical CHWs (Agents Communautaire) collected them from the CCM sites. Since the national CCM review in 2007, there have been no special efforts to collect sick child forms from the majority of CCM sites. Therefore, the sick child forms analyzed in the sections below are mostly from areas that had post-training meetings in FY'10.

Number of children treated in CCM sites: From FY10 until the end of project sick patient forms were collected and data entry was completed for 15,741, using a computer application designed by BASICS and MCHIP for this purpose (see description below). MCHIP estimates that the sick child forms processed were from approximately 53% of all registered CCM sites in the country. If the number of sick children seen in these sites is representative of those seen in all CCM sites, then it is possible to conclude that over 28,000 sick children were managed by CHWs nationally during the fiscal year (Table 5).

Table 5: Sick child forms processed, nationally and from AXxes health zones, October 2009-July 2011

INDICATORS	Oct –	Jan-	Apr-	Jul–	Fiscal
	Dec 2009	March 2010	June 2010	Sept 10	Year 2010 and transition
Number of sick child forms processed nationally	4,726	5,304	3,297	2,414	15,741
Forms from AXxes-supported health zones only	2,682	3,157	1,471	938	8,248
Proportion of forms from AXxes-supported health zones	57%	60%	45%	39%	52%

Reasons for care-seeking: Fever, cough and diarrhea were the most common symptoms in children treated by CHWs (Table 7). The overwhelming majority of children sought care for fever (73%), followed by cough/cold (44%) and diarrhea (31%). Less than 5% presented with other symptoms (Table 7). The pattern in AXxes zones stayed the same, as the zones are transitioning to the IHP/PROSANI project and up-to-date data is not yet available.

Table 6: Reasons for care seeking - Children seen by CHW who presented with fever, diarrhea, cough and other problems, through end of project

	National N=15,741		AXxes N=8,248	
	Number of children	% of children seen	Number of children	% of children seen
Fever	11,503	73%	6,136	74%
Cough or cold	6,931	44%	2,601	32%
Diarrhea	4,937	31%	3,524	48%
Other problems	778	5%	480	6%

Classification of cases seen by CHWs: Of the 15,741 cases analyzed nationally, 63% were classified by CHWs as having malaria, 25% diarrhea, 19% cough or wheezing, and 17% pneumonia. Just under 1,00, or 7% of all cases reported in the national sample showed danger signs warranting immediate referral. Fifty-seven percent of the total cases analyzed in FY'10 (8,248 cases) were from AXxes health zones, where the reasons for care-seeking varied slightly from the national sample (more children presenting with diarrhea and less with cough cold symptoms in the AXxes zones than in the national sample), but the proportional classification of cases by the CHWs was more or less the same (Table 7).

Table 7: CHW classification of children treated, FY'10

	National N=15,741		AXxes N=8,248	
	Number of cases*	% of cases seen for	Number of cases	% of cases seen for
Malaria	9,889	63%	5,197	63%
Diarrhea (simple)	3,963	25%	1,983	24%
Cough or wheezing	3,017	19%	1,574	19%
Pneumonia	2,711	17%	1,136	14%
Moderate malnutrition	1,167	7%	613	7%
Danger signs	1,100	7%	702	9%

Correct classification of childhood illness by CHWs: Sick child forms were assessed for correct classification and treatment, using algorithms that are built into the computer application. All case records with incomplete data were discarded from the analysis since one cannot tell whether a form has been incorrectly completed by the CHW, or information from the form was incorrectly entered into the database (see Annex 4 for a copy of the child health form, the monthly supervision form and data sheet for analysis). By the end of the project, CHWs achieved high scores (94%-99%) on the classification of the five most common conditions treated, and equally high scores in providing or recommending the appropriate treatment for

malaria (94%), malnutrition (81%) and pneumonia (92%). Scores were lower on the correct treatment for diarrhea (62%), cough (60%) and danger signs (63%). However, CHWs achieved almost perfect scores when assessed on providing the appropriate dosage of medicine based on the age of the child being treated. Again, the results in AXxes-supported health zones were very similar to the national results. (Table 8)

Table 8: Classification and treatment of symptoms, per CCM sick child forms, FY'10, nationally and in AXxes-supported health zones only

a. Correct classification of symptoms as recorded on sick child forms

	National sample N=15,741			AXxes N=8,248		
	Total number of cases	Total number of cases correctly classified	Percent of cases correctly classified	Total number of cases	Total number of cases correctly classified	Percent of cases correctly classified
Malaria	9,889	9,700	98%	5,197	4,996	96%
Diarrhea (simple)	3,963	3,912	99%	1,983	1,952	98%
Pneumonia	3,017	2,832	94%	1,136	1,110	98%
Cough or wheezing	2,711	2,644	98%	1,574	1,505	96%
Moderate malnutrition	1,167	1,154	99%	613	569	93%

b. Correct treatment of illness as classified and recorded on sick child forms

	National sample N=15,741			AXxes N=8,248		
	Total number of cases	Total number of cases given correct treatment	Percent of cases correctly treated	Total number of cases	Total number of cases given correct treatment	Percent of cases correctly treated
Malaria	9,889	9,344	94%	5,197	4,903	94%
Diarrhea (simple)	3,963	2,464	62%	1,983	1,491	75%
Pneumonia	2,711	2,503	92%	1,136	1,065	94%
Cough or wheezing	3,017	1,818	60%	1,574	936	60%
Moderate malnutrition	1,167	942	81%	613	378	62%
Danger signs	1,100	695	63%	702	428	61%

c. Correct dose of medication given according to the age of the child as recorded on sick child forms

	National sample N=15,741			AXxes N=8,248		
	Total number of cases	Total number of children given correct dose for age	Percent of children given correct dose for age	Total number of cases	Total number of children given correct dose for age	Percent of children given correct dose for age
Malaria	9,344	8,786	94%	4,903	4,639	95%
Diarrhea (simple)	2,464	2,123	86%	1,491	1,453	98%
Pneumonia	2,503	2,320	93%	1,065	992	93%
Moderate malnutrition	942	942	100%	378	378	100%

B. Direct observation and analysis of data collected during follow-up meetings with CHW

848 supervision checklists were collected and analyzed in FY'10, and additional 360⁵ from April – July 2011. Over 63% (762) were from the AXxes-supported health zones. The number of the follow-up session was recorded for each individual CHW, even when the sessions were conducted for a group, in order to track attendance and measure improvement in skills.

CHW knowledge and skill in assessing and treating sick children improved in every category with each subsequent follow-up session, clearly demonstrating the need for and value of such sessions. Other key findings from the analysis of the supervision checklists are as follows:

- CHW knowledge of at least two danger signs was high in all follow-up rounds⁶, but knowledge of all danger signs was initially quite low. Although this improved with additional follow-up contacts, it also seemed to fluctuate more than other variables. Questioning and looking for danger signs in the children who were assessed was also high post-training and in all subsequent follow-up sessions (89% in Round 1 to 95% in Round 5). (see Figure 2 and Table 10a).
- CHW knowledge of two of the four signs of dehydration in children with diarrhea—sunken eyes and skin lacking elasticity—was good following training and 100% of CHWs were able to cite these by the time of their fifth follow-up session. The other two signs—thirst and irritability/restlessness—were not as frequently mentioned during any of the rounds, but 90% and 86% of CHW respectively demonstrated knowledge of them by Round 5.
- CHW ability to correctly count respiratory rate requires attention. Counting and interpreting respirations is one of the CCM competencies which need repeat practice in the presence of a trainer or supervisor. While this competency improved with multiple follow-up sessions, it clearly deserves more attention during future CCM trainings and follow-up sessions. (see Figure 4 and Table 10b).
- During their first follow-up sessions, about two thirds of CHWs correctly assessed immunization and Vitamin A status. This number grew to over 70% by the third follow-up and to 91% for immunization and 86% for Vitamin A by the fifth. (see Table 10d).

Next step? *Multiple follow-up sessions are needed to reinforce and improve the CCM knowledge and skills of the CHWs. Group sessions are currently recommended because of the costs (money and time) involved in making even one visit to each CHW in his or her site. According to the national CCM guidelines, all CHWs should participate in at least three structured follow-up sessions with supervisors during the year following their initial training. Thereafter, trained CHWs should participate in at least two such sessions per year. To reinforce training and maintain/improve CHW knowledge and skills over time, health zones that have*

⁵Of the 360 checklists, 352 came from PSI supported Health Zones, where only compiled result of all checklist were received.

⁶All case records with incomplete data were discarded from the analysis, since one cannot tell whether a form has been incorrectly completed by the CHW or if information from the form was incorrectly entered into the database. This explains the decrease in the number of CHWs participating in round 2 from round 1 for this topic.

trained CHWs in CCM also must be funded and provided technical support to conduct follow-up sessions. Group follow-up sessions allow for rich exchanges between colleagues, which further motivate the CHWs and their supervisors alike.

Figure 2: CHW knowledge of danger signs in sick children by follow-up round

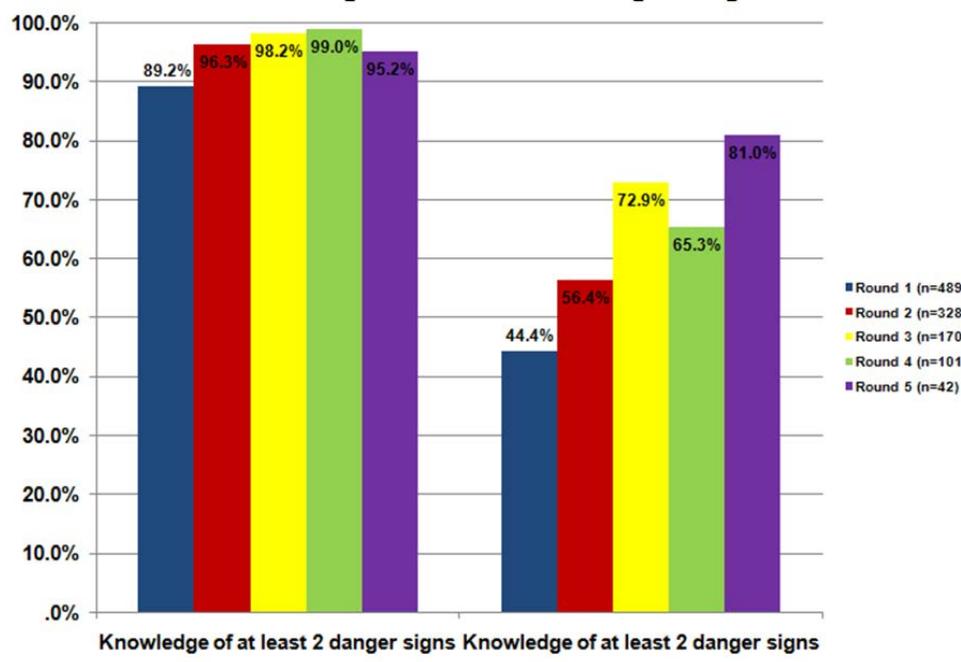


Figure 3: CHW knowledge of signs of dehydration by follow-up round

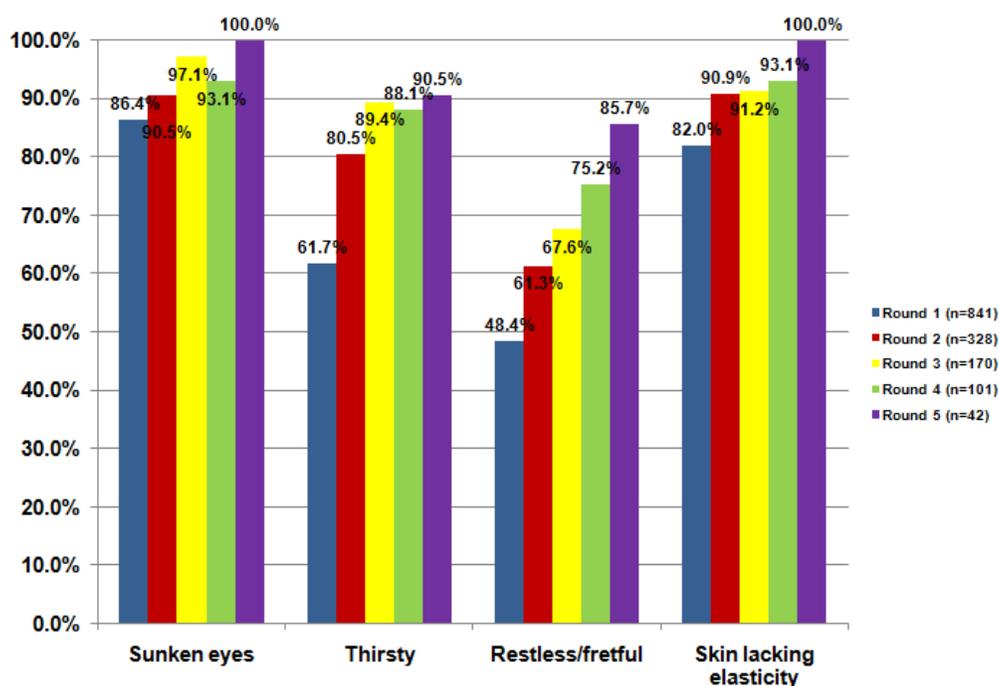


Figure 4: CHW knowledge of age thresholds and ability to correctly count respirations by follow-up round

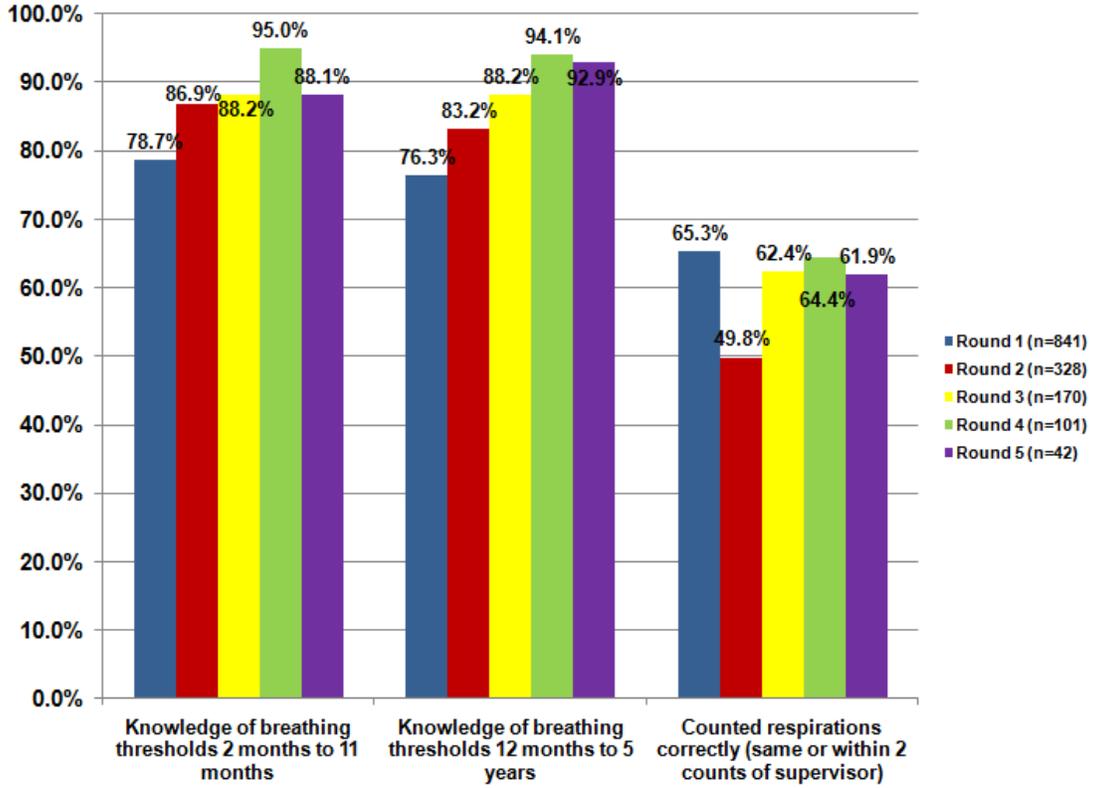


Table 9: CHW knowledge and practice as observed during follow-up session by rounds, FY'10 (National sample)

a. CHW Recognition of Danger Signs

	Round 1 (n=489)	Round 2 (n=328)	Round 3 (n=170)	Round 4 (n=101)	Round 5 (n=42)
Knowledge of at least 2 danger signs	89.2%	96.3%	98.2%	99.0%	95.2%
Knowledge of at least 2 danger signs	44.4%	56.4%	72.9%	65.3%	81.0%

b. CHW knowledge of respiration thresholds by age of child

	Round 1 (n=841)	Round 2 (n=328)	Round 3 (n=170)	Round 4 (n=101)	Round 5 (n=42)
Knowledge of breathing thresholds 2 months to 11 months	78.7%	86.9%	88.2%	95.0%	88.1%
Knowledge of breathing thresholds 12 months to 5 years	76.3%	83.2%	88.2%	94.1%	92.9%

c. CHW knowledge of signs of dehydration

	Round 1 (n=841)	Round 2 (n=328)	Round 3 (n=170)	Round 4 (n=101)	Round 5 (n=42)
Sunken eyes	86.4%	90.5%	97.1%	93.1%	100.0%
Thirsty	61.7%	80.5%	89.4%	88.1%	90.5%
Restless/fretful	48.4%	61.3%	67.6%	75.2%	85.7%
Skin lacking elasticity	82.0%	90.9%	91.2%	93.1%	100.0%

d. CHW ability to correctly assess a sick child

	Round 1 (n=841)	Round 2 (n=328)	Round 3 (n=170)	Round 4 (n=101)	Round 5 (n=42)
Assessed for general danger signs	90.8%	91.6%	91.8%	95.0%	97.6%
Asked caretaker about symptoms of cough/cold	90.4%	92.4%	89.4%	97.0%	97.6%
Prepared the child to count respiration rate	77.3%	74.7%	81.2%	93.1%	90.5%
Assessed for chest in-drawing	57.0%	60.3%	70.0%	82.2%	85.7%
Correctly assessed age/weight	68.7%	84.1%	82.9%	90.1%	92.9%
Correctly assessed vaccination status	74.0%	79.2%	75.3%	79.2%	90.5%
Correctly assessed vitamin A status	70.7%	74.8%	72.4%	77.2%	85.7%
Counted respirations correctly (same or within 2 counts of supervisor)	65.3%	49.8%	62.4%	64.4%	61.9%

Upgraded the CCM computer application and database

MCHIP used the CCM data management software application--first developed in 2007 by BASICS--to generate the analysis presented in the section above entitled "Monitoring the quality of CCM services." The application includes a database for archiving data from surveys, sick child forms and supervision checklists. It also includes functions that permit the rapid analysis of information, disaggregated by health zone, province, CCM site and CHW, and by period of time.

Specifically, the CCM data management application includes interfaces that:

1. Capture case management data
2. Capture supervision data
3. Capture geographical information and population data on CCM communities
4. Capture information on individual CHWs
5. Generate reports and graphs for analysis

MCHIP refined and upgraded the CCM application in the course of its use and to reflect changes in the CCM guidelines and tools. For example:

- The case management or "sick child" form was modified following the introduction of new treatment guidelines, and this necessitated both changes in the application and the merging of new and old datasets.
- Unique health facility, health zone and province HIS codes were added to the CCM site code, making it easier to link CCM sites to their respective health facilities and health zones for analysis.
- A module was added to capture the management and use of medicine and supplies at health facilities.
- An automated reporting function was added and is currently being tested to provide information and feedback on the:
 - ✓ Completeness of the sick child form (looking for missing data)
 - ✓ Agreement between the symptoms reported and the CHWs' classification of childhood illness
 - ✓ Agreement between the classification of a child's illness and the treatment or course of action recommended by the CHW
 - ✓ Agreement between the age of the patient and the dose of medication prescribed or given
 - ✓ Recommended follow-up with the patient

MCHIP developed these revised algorithms in collaboration with the MOH tested them at small scale. MCHIP also developed guidelines on data entry to give all users a common understanding of the software application.

The original intent of the software was to decentralize CCM data collection and management to the provincial and zonal health offices. As explained earlier in this document, the routine collection and analysis of data from the CCM sites and supervisors has been one of the program's biggest challenges. Although the CCM software application is still being managed at

the central level, once testing is finished and final refinements are made, the current version should be ready for piloting at province and zonal level and by the other organizations that are engaged in training and supporting CHWs in the field.

Next Steps? *Work remains to polish the computer application before piloting it at provincial or zonal level. Future enhancements to the software should include the: (1) addition of an automatic graphing function; (2) expansion of the report generation function to produce additional reports; (3) addition of cross checks to eliminate errors during data entry; and (4) development of simple data cleaning procedures and algorithms.*

Developed the CCM capacity of provincial health offices

After the national CCM program review in 2007, the MOH and its partners made the decision to expand CCM. At that point, the small group of national trainers and managers who had been leading CCM recognized that they would no longer be able to be as involved in every training and follow-up activity as they had been during the introductory phase. Fortunately, there were many potential partners in the health zones who had been advocating for the adoption of CCM. Most had not yet established a working relationship with the national CCM Steering Committee, but they were recognized as an important resource.

To engage them as new partners and enable the provincial level to play a larger role during the expansion phase, MCHIP spearheaded the development of a strategy to build the CCM management capacity of provincial trainers and health officers. The goal was not only for them to master the CCM process, but also to mobilize new resources for CCM expansion through improved coordination of partners working in their health zones.

MCHIP's approach to building CCM management capacity in the provinces included:

1. Making the existing Provincial Technical Committees (PTC) functional and creating subgroups for child health in each PTC to oversee CCM activities
2. Mobilizing partners to participate in and fund priority CCM activities;
3. Advocating for the inclusion of CCM funding in the provincial budget
4. Holding planning meetings and monitoring implementation with partners.

Three provinces took action on this front in FY'10--Kinshasa, Bandundu and Kasai Oriental. In each case, the provincial Ministers of Health visited CCM sites and held discussions directly with CHWs and villagers. CCM line items were included in their provincial budgets and NGOs and other partners working in these provinces started supporting CCM implementation. MCHIP also convinced two international partners--UNICEF and GTZ--to fund provincial technical meetings in Kinshasa and Bandundu provinces. Moreover, Bandundu held child health subgroup meetings, kept the provincial Minister of Health engaged in CCM, and successfully convinced the Memisa project to fund CCM in five new health zones. At the time that MCHIP completed its mandate, preparation for implementation was ongoing in these sites and taking longer than expected. The MCHIP team was hopeful that this effort would pay off in the coming year.

In the province of Kinshasa, which has been supported by UNICEF, MCHIP provided initial support to launch similar provincial activities, but stopped when it was clear after six months that UNICEF's funding for CCM was not coming through. Despite real interest and initial action in

this and other provinces, the lack of funding for provincial meetings impeded progress. See Challenges below.

Next steps? *The importance of increasing provincial involvement in CCM cannot be overstated. Provinces must be encouraged to create dedicated budget line items in support of their CCM sites and to better coordinate and pool resources with their partners. They should also be assisted in working with their political and administrative authorities to establish community CCM sites as an immediate response—although temporary—to urgent requests by the population for costly new health facilities. Finally, the management and continuing expansion of CCM must be decentralized to the provincial health offices, so that those at the national level are able to focus on mobilizing resources for further expansion, monitoring coverage, evaluating the quality of CCM, and adjusting policies and guidelines based on evaluation findings and lessons learned.*

Tested an integrated CCM and family planning (FP) model

In 2008, one of the recommendations coming from the regional CCM workshop in Madagascar was that countries take greater advantage of the potential synergies between CCM and other community-based interventions, including community-based distribution of family planning (FP) information and methods. The Government of DRC embraced this recommendation, and in 2009, it started moving toward greater integration of all services and interventions, and at all levels.

In FY'10, MCHIP successfully advocated (through the National Reproductive Health Program) for the provision of FP services at CCM sites, and the MOH approved. MCHIP then worked closely with the MOH and the CCM technical working group partners (including AXxes, UNICEF and WHO) to develop and test a combined CCM/FP service delivery model. The model called for training the CHWs who were already providing CCM for childhood illness to:

1. Provide counseling on family planning in their communities;
2. Ensure community-based distribution of contraceptive methods, including non-clinical methods, such as LAM (Lactation Amenorrhea Method), cycle counting for periodic abstinence, condoms, the pill;
3. Recruit users for clinical contraceptive methods and refer them to the health center's head nurse for services during community outreach sessions
4. Collaborate with the CHWs working on health promotion (versus CCM) to promote and conduct educational talks on FP in areas around the CCM sites.

Activities included a field trial of this integrated CCM/FP model, with the idea that lessons learned would be applied in FY'11 and beyond. The initial field trial took place in six health zones, including one in Kinshasa that was supported by UNICEF (Binza served as a test zone) and five supported by AXxes (Songa, Lualaba, Tshikijaji, Lubondaie and Bibanga). MCHIP support included providing technical assistance to:

1. Train the CHWs (Relais du Site) in FP counseling, distribution of non-clinical methods, and recruitment and referral of client couples for clinical methods;
2. Improve the capacity of head nurses to supervise community-based activities and organize outreach activities, including administration of Depo-Provera;

3. Increase the involvement of community leaders, particularly church leaders, in informing the population about FP and the counseling of client couples to seek the FP services available to them, whether through Health centers or CCM sites; and
4. Produce FP tools in collaboration with the NPRH to support CHWs in carrying out their FP tasks—including a FP manual for CHWs, a trainer’s guide, and counseling cards.
5. Produce a discussion guide and counseling cards for church leaders to use in increasing their members’ awareness of FP.

Forty four (44) CCM sites in six health zones and four provinces (Kinshasa, Kasai Oriental, Kasai Occidental and Katanga) were involved in the integration field trial (Table 10). In these areas, 81 CHWs and head nurses from 31 health centers received training in FP counseling, community-based distribution of contraceptives and, in the case of the head nurses, refresher training in clinical FP methods. CHW training in FP was conducted in June 2010. It was practical and included counseling and distribution of contraceptives and referral of clients to head nurses during training sessions.

To raise awareness and improve the population’s perception of family planning, in addition to training CHWs and nurses in the six health zones, MCHIP also briefed 125 church leaders who, in turn, briefed 2,536 parishioners in their respective churches. All of these people were then asked to educate their neighbors on the advantages of FP.



Photo: Religious leaders in Tshikaji zone, with Family Planning counseling cards.

Results during the first three months of the field trial were encouraging, with the trained CHWs and nurses registering a total of 802 acceptors (Table 11). Although information is not available for the full three-month period, method mix appeared to be fairly diverse. During the CHW training sessions, for example, the condom, cycle-days method, Depo-Provera and oral contraceptives were the most frequently chosen after counseling (Table 12).

MCHIP/DRC continued to support the CCM program in monitoring the work of the CHWs and nurses in the initial CCM/FP sites. Although this integrated approach produced promising results, the trial CCM sites were plagued by a protracted stock-out of FP commodities; in fact, one of the health zones never received products at all. This was despite assurances that contraceptives would be made available.

Table 10: Results of CCM/FP Integration in Six Health Zones, June-Sept 2010

Indicators	June – Sept 2010
Number of provinces where training conducted	4
Number of zones where training conducted	6
Number of sites where training conducted	37
Number of CHWs trained	81
Number of head nurses trained	31
Number of health providers of province, district and HZ trained	37
Number of health providers at central level trained	9
Number of acceptors recorded	802
Number of leaders briefed	125
Number of church parishioners briefed	2,536

Table 11: Contraceptive methods chosen during CHW practice training sessions

Health zone	BIBANGA	SONGA	TSHIKAJI	LUALABA	LUBONDAIE	BINZA METEO	TOTAL
Condom	1	21	12	4	4	1	43
Cycle Method	9	14	8		7	1	39
Depo-Provera	9	4	11		4	3	31
Pill	7	1	1		5	10	24
LAM	3	2	3	6	4		18
Spermicide						5	5
Pill				2			2
IUD	2	0	0		0		2
T-Ligation	0	0	0		0	1	1
Implant	0	0	1		0		1
Total Acceptors	31	42	36	12	24	21	166

Next steps? Although this approach appears to have been successful where contraceptives were available, additional work is required to refine it. For example, MCHIP recommends that the head nurses who supervise CCM sites be given additional FP training--both to improve their ability to support the CHWs and to enable them to provide high quality FP counseling and clinical services to the clients who are referred to them. A guaranteed supply of contraceptives must also be available before further expansion.

Integrated CCM and Family Planning (FP) by training religious leaders to provide FP information and counseling.

Taking advantage of the synergies between CCM and the community-based distribution of family planning information and methods, MCHIP collaborated with UNICEF to provide BCC training to 62 religious leaders from 44 churches in the Binza Meteo health zones, during which they gained skills and materials. The aim was to raise awareness of family planning among parish members, and 1370 church members were briefed before the end of project.

Support the workshop to advance the development of National MNCH Norms and Standards.

This workshop enabled the country to have, for the first time, MNCH standards and guidelines for community case management. MCHIP provided technical and financial support to develop this document.

Support the LQAS training of the national pool of trainers

The General Secretary had chosen MCHIP to support capacity building of the 5th Directorate in the LQAS implementation in the country. It was first important to elaborate on the questionnaire for the survey in order to help data collecting during the training of trainers in LQAS. MCHIP supported the workshop convened by the MOH and its partners to develop the survey design or questionnaire. The questionnaires developed included key indicators related to malaria, diarrhea, pneumonia, HIV/AIDS and tuberculosis, and is meant to be used while training a pool of national trainers.

In July 2011, 40 staff of the MOH and its partners (WHO, UNICEF and others) were trained as trainers in LQAS. MCHIP took an active part in this training by providing technical and financial support. During the practice session, trainees participated in an exercise with a stratified and random sampling, during which they effectively collected the MNCH data in 3 Health Zones in the Kinshasa Province, namely: Binza Meteo HZ, Selembao HZ and Mont Ngafula2 HZ.

Training religious leaders on hand washing and family planning activities

MCHIP supported the MOH through its National Diarrhea Control Programme and Provincial Health Inspection of Kinshasa to promote hand washing activities. A pool of 70 religious leaders in Makala HZ were first educated on the danger signs, and then capitalized on the dissemination of this message in 4 health areas (Bagata, Malala, Mabulu I and II). The religious leaders then trained 1516 volunteers from their churches, who helped to convey the messages to their neighbors.

Apart from hand washing, key messages related to family planning continued to be disseminated through churches and households in the Binza Méteo HZ. Monitoring activities were carried out between April and June 2011 and 1927 households were recorded as educated.

Training Mothers on hand washing steps in Makala HZ.



Resources mobilized for CCM expansion and documentation

DRC's CCM implementing partners successfully mobilized resources to support the teams of trainers and supervisors who were responsible for the expansion of CCM sites. MCHIP was a lead advocate in mobilizing resources for CCM program expansion and coordinating partner contributions to CCM-related events. MCHIP's approach included actively meeting with potential CCM partners and asking them for their support. The project also co-financed key activities to encourage the investment of other partners. Examples of successful advocacy and resource mobilization by MCHIP in FY'10 included:

- Mobilizing multiple partners including AXxes, GTZ and UNICEF to provide financial support for the national workshop for revision of the CCM implementation guide and tools;
- By AXxes, UNICEF, CIDA/PSI and CCISD/PARSS supporting the training of new CHWs, supervisors and managers and organizing post-training follow-up activities in the health zones, MCHIP was able to use its limited resources to stimulate innovations, such as the integrated CCM/ FP trial in six health zones described above.
- Raising multi-partner support for the sites visits that were part of the global CCM documentation exercise of which DRC was a part (described below).

Although sometimes later than anticipated, all partners honored their commitments to joint CCM activities. However, continuous advocacy was an important ingredient in making sure that

partner resources were available when needed. This was true both when commitments were made and included in approved budgets in advance and when activities requiring support were not foreseen at the beginning of the planning cycle. The multi-partner CCM documentation exercise was a good example of the latter; plans for this exercise were confirmed in early 2010, after most partner organizations already had approved budgets. Nonetheless, MCHIP was successful in convincing the MOH, WHO, UNICEF, AXxes, IRC and GTZ to contribute staff, transport and funding to the documentation exercise.

Coordination with UNICEF

UNICEF has been an important CCM partner. In addition to continuing work with AXxes, LMS and UNICEF on the CCM expansion this year, MCHIP also participated in two related activities with UNICEF:

1. Accelerated Child Survival and Development Strategy (SASDE): This strategy targets two health zones (Mont Ngafula in Kinshasa and Nzanza in Matadi/Bas-Congo) and includes capacity building at provincial level and support to the health zones for high impact interventions including immunization, facility-based IMCI, CCM, newborn care (including KMC) and others. MCHIP participated with UNICEF in a large SASDE briefing and planning meeting in Matadi province, where ten new CCM sites were selected in the Nzanza health zone during the development of the 2011-2012 UNICEF plan with the Ministry of Health. The general option selected by UNICEF was to strengthen capacity of the provinces and empower them to support interventions at the operational level.
2. Co-financing by UNICEF and MCHIP of a study tour to Mali for the training of five master trainers in Kangaroo Mother Care. Although not directly related to CCM, this collaboration with UNICEF (described in the Integrated Maternal and Newborn Health section of this report) is another indication of the close working relationship between the two organizations and some of the issues that have come up along the way. The KMC study tour took place in September 2010. Those activities and follow up activities included the training of a group of national trainers, and the establishment of two UNICEF-supported KMC training sites in hospitals in the SASDE health zones.

MCHIP spent considerable energy in collaboration with UNICEF in FY'10 because prospects for UNICEF investment in CCM expansion and KMC appeared to be good. However, a change in leadership in the health section at UNICEF and protracted negotiations with the MOH around the National Health Development Plan (NHDP) combined to slow the implementation of planned activities.

Next steps? *Advocacy with UNICEF, the MOH and other partners will continue to be required for expansion of CCM and KMC. There is also a need to better define, with UNICEF's new health sector leadership, the degree of investment the organization is likely to make in CCM and KMC, and then to plan accordingly, with or without significant UNICEF investment.*

Global documentation of CCM scale up

At the global level, MCHIP has been engaged in an effort to document the experiences of several countries with the introduction, expansion and scale up of integrated CCM for malaria, pneumonia and diarrhea. The overall goal of the documentation is to “inform the design of programs and monitoring during the anticipated expansion of CCM in priority MCH [Maternal and Child Health] and PMI [President’s Malaria Initiative] countries.” The five specific objectives across countries are to:



1. Document promising practices implemented by the MOH and its partners which have contributed to the success of CCM;
2. Document past and current bottlenecks and difficulties in CCM program implementation and the approaches that have been used to overcome them;
3. Draw lessons learned from country experiences to build a basic model for developing future programs and for reorienting existing programs;
4. Document evidence that demonstrates the effectiveness of the CCM programs in different countries; and
5. Document links between CCM and activities for the prevention of diarrhea, pneumonia.

Photo: Delegation of international experts are received by the MOH and accompanied by both department officers and local partners.

The DRC was selected as one of three countries for participation in the CCM documentation exercise because CCM has been introduced and shown to be an effective approach to expanding access to life-saving care for malaria, pneumonia and diarrhea during childhood. Although faced with a very large population and its own unique geographical and conflict-related barriers to case management at community level, the MOH has embraced the CCM approach and successfully mobilized its partners to introduce and expand it in 10 of the country’s 11 provinces. Although not yet at national scale, lessons learned in DRC are both significant and transferable to other countries that are fighting to reduce child mortality. It was in this spirit that DRC was nominated and agreed to participate in the MCHIP-led documentation exercise of its CCM experience.

A joint team of international (WHO and USAID) and national (MOH and partners) experts worked together to complete the documentation exercise, which in the DRC’s case focused on CCM experience from 2005 to 2010, and included the following activities:

1. Collection of data on the CCM experience
2. Identification of lessons learned
3. Vetting the report and lessons learned with key stakeholders
4. Leveraging lessons learned for scaling

The documentation exercise succeeded in mobilizing government agents at all levels as well as partners. MCHIP, WHO, UNICEF, AXxes, IRC and GTZ collectively contributed the necessary resources to fund the activity.

The documentation methodology included an extensive literature review and the collection of qualitative and quantitative data in the field. The literature review focused on all available documents regarding CCM in DRC. The collection of data in the provinces and health zones started September 22, 2010 and ended October 2, 2010. Field data collection for the documentation exercise was carried out in 6 provinces, 9 health zones and 18 CCM sites.

<u>Province</u>	<u>Health Zones</u>
Kinshasa	Binza Meteo Biyela Makala
Bas-Congo-	Kimpese
Kasaï Occidental	Tshikaji Demba
Kasaï Oriental	Bibanga
Katanga	Lualaba
Bandundu	Kenge



Photo: The Bandundu Provincial Health Minister (in jacket), Madam District Commissioner, and the traditional chief accompany the documentation team on a field visit to the Kenge Health Zone in the Bandundu province

A committee, led by the MOH, used a defined set of criteria to select health zones for data collection including the duration of the program in the health zone, the partner(s) supporting the work, any logistical considerations (i.e., investigators' access to the location), security concerns, and other characteristics of the health zone.

Key informants were interviewed from the government and partner organizations, including MOH officials, provincial and district doctors, zonal medical directors and zonal health teams and partner staff involved in CCM implementation. At the end of the exercise, a data validation meeting was held in Kinshasa, where international experts presented and solicited feedback from key stakeholders on the documentation's findings.

Findings were organized according to the key elements or factors affecting implementation of the CCM program: (1) national level coordination and the enabling environment; (2) financing; (3) human resources; (4) supply chain management; (5) service delivery and referral systems; (6) communication/social mobilization; (7) monitoring performance, quality assurance and supervision; and (8) health information systems.

An outstanding collaboration between the Ministry of Health, its national and inter-agency team (WHO, UNICEF and USAID) and others partners was achieved under the leadership of MCHIP/USAID during this exercise, and some bottlenecks that warranted reflection in order to develop remedial solutions in the country were identified. Accordingly, a critical review of the

initial report compiled by the MOH and in-country partners was done during a workshop co-funded by MCHIP and WHO and held in Kinshasa in July, 2011. Forty-five (45) representatives from the MOH, and partners, including the provincial team, the national team, and delegates from MCHIP/Washington participated, and their output was sent to HQ for finalization. During the workshop, the country representatives also carried out in-depth analysis of the level of achievement in the benchmarks, and solutions and recommendations were determined in order to improve iCCM implementation in the country. Key indicators were analyzed in relation to the benchmarks, and decisions were made about which key indicators to collect in the country, taking into account the international standards and in-country needs.



A view of the attendees during the



Dr. Serge, a MCHIP HQ Executive, during the workshop



Souvenir photo with the Secretary General of Health. The ceremony coincided with the closing of the MCHIP project in DRC

Challenges

Drug supply issues

Regrettably, there were stock-outs of drugs and case management forms at the operational level, and as noted above, contraceptives were also unavailable or in short supply in the six health zones where the CCM/FP trials were conducted. These stock-outs occurred in almost all health zones, with some experiencing shortages of medicines for 100 days or more--Lualaba and Fungurume health zones in Kolwezi province were without key CCM drugs for over four months; Lusambo health zone went without one or more drugs for three months; and, there were stock-outs of ORS and Zinc for over 60 days in Kabongo health zone. Case management forms were also reported out of stock in many sites. The frequent stock-outs of medicines in the AXxes Zones made it difficult for some CHWs to prescribe necessary treatment and, as a result, MCHIP had to exclude more of the AXxes-generated CCM case management forms than desirable from the CCM quality of care analysis reported above.

Lack of support for capacity building at province level

Provincial support and involvement are critical in planning, leveraging, coordinating partner inputs and monitoring the coverage and quality of CCM. Holding regular provincial coordination meetings is important. Every meeting held in DRC requires some funding and, even though provincial coordination meetings are low-cost, no partner stepped in during the last fiscal year to absorb the costs. With its limited resources, MCHIP was able to promote the idea of provincial capacity building and coordination committees, but was not in a position to provide funding for these activities except on an exceptional basis. UNICEF, the USAID bilateral health project and others are potential sources of funding for this important prerequisite for successful CCM expansion.

CCM data flow and management

The collection and processing of CCM data has not been institutionalized at the health zone, province or national level. MCHIP played an important role in collecting, processing and analyzing CHW case management forms, supervision checklists and training records for the MOH and partners. Although these forms have been accepted by the National CCM Program, they are not yet produced, distributed, collected or compiled as part of the national health information systems (SNIS). Instead, the CCM case management forms and supervisory checklists are being produced by the CCM program and its partners, distributed during training and collected and replenished during post-training follow-up sessions with CHWs and their supervisors. In areas where there is regular post-training follow-up with CHWs, this works well. In areas where these sessions are irregular, or not taking place at all, data collection has been extremely difficult. The objectives should be to decentralize responsibility for CCM data management to the health zones and ensure that the CCM forms, checklists and reports become part and parcel of the national SNIS in the near future.

IMCI knowledge and skills of facility-based CHW supervisors

CCM is part of DRC's larger facility and community-based IMCI strategies. As CCM coverage increases, a continuing concern is the quality of IMCI knowledge and practice at the health center level. For example the head nurse serves at a basic level of referral and counter-referral for children from CCM sites and also supervises CHWs. Now, the organization and documentation of quality IMCI at the health center remains a weak link, both nationally and in the health zones that have been supported by AXxes in the past. Additional needs include trainings for the head nurses who supervise and support the CHWs in IMCI and monitoring of post-training activities in CCM sites.



Photo: Munikenge village CCM site and CHW in the Kenge health zone, Bandunu province.

Conclusions and Recommendations

The MCHIP/DRC team served as the de facto secretariat for the National CCM Steering Committee and its technical working group. The MCHIP team supported these two groups in initiating and hosting most CCM planning and coordination meetings. In fact, MCHIP continued BASICS role as the lead technical partner in all of DRC's CCM activities. As described above, in FY'10, MCHIP worked with AXxes, LMS, CIDA/PSI, University of Zimbabwe and UNICEF to continue the expansion of CCM (i.e., participated with these groups in the training of CCM trainers and provincial and district managers and supervisors and in CCM follow-up sessions to reinforce CCM knowledge and skills).

The project also initiated and facilitated the revision of CCM tools and implementation guidelines, advocated for mobilization and assisted in coordinating partner resources toward CCM expansion. Additionally, we continued to monitor and evaluate the quality of CCM provided by trained CHWs across the partners, made further refinements to the CCM computer application that is used for this purpose, tested a number of CCM program innovations (i.e. reduced the number of CHWs per CCM site to reduce costs and speed expansion, conducted a field trial of integrated FP/CCM in six health zones), started using immunization outreach sessions to increase support to the CHWs in CCM sites, and led a multi-partner CCM program review as part of the PMI-supported, multi-country effort to document experiences in taking CCM to scale.

Based on its own experience, and that of the BASICS' project before it, MCHIP's recommendations for continued USAID investment in DRC's CCM program can be summarized as follows:

Recommendation 1: Continue USAID's support for the expansion of CCM and the CCM Task Force

Greater coverage and continued attention to the quality of CCM care will be necessary if the CCM strategy is to significantly reduce DRC's high child mortality rate. USAID's new IHP/PROSANI project should continue to support those CCM sites that were established under the AXxes and LMS projects while also ensuring that new CCM sites are added in the 80 health zones. Beyond the USAID bilateral project's health zones, there is also an urgent need for continued advocacy and a partner that can assist the MOH and CCM Steering committee in coordinating and monitoring the investments of all of the CCM partners.

Recommendation 2: Support the development by the MOH and partners of a national strategic plan and budget for CCM scale up

Remarkable progress has been made in interesting partners, mobilizing resources, and increasing CCM coverage. However, if CCM coverage is to increase and it is to be fully integrated into the MOH's service delivery and support systems, the Government's long-term commitment to CCM must be reaffirmed and a clearer framework/roadmap for partner investment is required. The National CCM Steering Committee and partners should continue the momentum from the CCM documentation exercise to use the findings and recommendations to plan--strategically and together--for future CCM expansion. MCHIP played an important role with the other partners in advocating for partner investments, but increasing and sustaining the necessary partner commitments toward expansion will not be possible without a long-term plan

and a multi-year, multi-partner budget to chart the course. We anticipate that the DRC CCM Documentation report will be ready for dissemination and use in the strategic planning process by mid-September 2011.

Recommendation 3: Expand and continue to document the results of the integrated CCM/FP field trial

Initial work to add FP counseling and contraceptive distribution to CCM produced promising results, but the time was short and the number of sites too few to draw conclusions that would justify immediate expansion. MCHIP's recommendation is that USAID continue to support the initial CCM/FP integration trial, but with additional sites and more rigorous monitoring and evaluation than was possible during the final months of the AXxes project.

Recommendation 4: Continue to monitor and provide regular feedback to all implementing partners on the quality of CCM

MCHIP played an important role at the national level in compiling and analyzing data from CCM "sick child" forms and supervision checklists. The process was far from ideal and will have to be improved and decentralized if it is to be sustained. Over the short term, however, there is a need to continue collecting and analyzing CCM data and to feed the results back to the National Steering Committee and its partners as they expand and support CCM in the health zones. To ensure that findings are representative and make data analysis more useful to all involved, MCHIP recommends that the National Steering Committee establish a protocol for data collection and reporting by all of the different implementing partners, including the USAID bilateral project.

Recommendation 5: Refine and test a decentralized version of the CCM computer application, including at least one m-Health application

The database that was managed by MCHIP is the main repository for DRC's CCM data. The National CCM Steering Committee and partners depended on MCHIP staff to compile (and in some cases collect) the CCM sick child forms and supervisory checklists, to enter them and to produce the analyses required for all national reports. MCHIP began working to actively involve the health zones and provinces in data management, but the CCM computer application requires some additional work before it can be decentralized. One or more of the current CCM tools should also be tested as an m-Health application to help in addressing current problems with CCM data flow. The CCM supervisory checklist would be a good candidate for a cell phone application, but other applications might also be possible to reinforce CHW or supervisor knowledge and practice, prompt action and facilitate the uploading and merging of CCM data at zonal, provincial and national level.

2. Child Health - ORT and Zinc in Diarrhea Case Management

Objective 2: To strengthen the case management of diarrhea through the promotion of ORT and introduction of zinc

Background

MCHIP continued BASICS' earlier work to revitalize oral rehydration therapy (ORT) and introduce zinc in diarrhea case management. Using CCM as the entry point, BASICS and the same CCM working group mentioned above updated the national diarrheal disease treatment protocol to include low osmolarity oral rehydration solution (ORS) and zinc. While primarily focused on facility-level interventions, the AXxes project was also actively involved in all diarrheal disease case management activities. According to the most recent DHS (2007), diarrhea is still the third leading cause of mortality among children under five. Although 78% of women know about ORS, only one in three children affected with diarrhea receives ORS as a course of treatment. Likewise, fluid intake is increased in only 35% and food intake in only 6% of childhood diarrhea cases. While 20% of the children receive a home-made remedy of salt, sugar and water, over 50% of all children with diarrhea do not receive any kind of ORT. The fact that women are not putting their knowledge of ORT into practice is likely due to lack of access to a health center and/or unavailability of ORS packets and zinc at the community level. Although the DRC was one of the first countries in Sub-Saharan Africa to incorporate zinc into national treatment guidelines for diarrhea, it is still not widely used as part of the diarrheal treatment regimen. Its introduction and use was therefore a key priority and area of focus for MCHIP.

MCHIP's Approach

MCHIP's strategy to revitalize and strengthen the case management of diarrhea through the promotion of ORT and the introduction of zinc included the following key activities:

- Training health workers and CHWs to manage diarrheal disease at the health facility and community level in accordance with the new protocols;
- Establishing or revitalizing ORT corners in health facilities (hospitals and health centers) to ensure an adequate start to rehydration therapy and to train mothers to administer ORT/Zinc at home;
- Increasing the supply of zinc in the health system through advocacy with the national essential drug program and key partners;
- Monitoring the quality of diarrheal disease case management in target health facilities and health zones;
- Supporting behavior change communication (BCC) activities related to improve home-care and care-seeking for diarrhea and increase the demand for and utilization of zinc in diarrhea treatment;
- Using a multimedia approach to increase the population's knowledge about and demand for ORS and zinc.

Activities and Results

Training and orienting health workers and CHWs

To revitalize ORT and diarrheal disease case management and build the capacity of health workers in AXxes- and LMS-supported health zones, MCHIP assisted the staff of these USAID projects to orient and provide refresher training to health workers and CHWs. The aim was to introduce the new ORT/zinc treatment recommendations and methods for monitoring the management of diarrhea cases.

In FY'10, MCHIP staff provided technical support, acted as national trainers and worked closely with the MOH and the AXxes and LMS projects to build diarrheal disease treatment capacity at all levels. Advocacy and the development of BCC and training tools were MCHIP's priorities, whereas UNICEF and other partners handled the procurement of zinc and low ORS. Specific accomplishments this fiscal year included the:

- Training of health providers from 36 new health zones, including 15 health zones with CCM sites--adding these new health zones to the 114 that had already introduced zinc for the treatment of diarrhea in the previous year brought to 150 the total number of health zones where facility-based providers and CHWs are now trained in diarrhea case management with low ORS and zinc.
- Training of 694 health workers (39 doctors and 665 nurses, spanning 32 hospitals and 540 health centers) in the new diarrheal disease treatment protocols.
- Training of 715 CHWs from 401 CCM sites in the new diarrheal disease treatment protocol and the use of zinc.

Next steps? *Partners should continue the orientation and training of facility-based providers until all health zones and facilities have been covered. Diarrhea case management will continue to be part of the CCM training, and promotional CHW should be encouraged to advocate for the use of ORS and zinc to increase demand for these products. Health facilities must also be assessed and followed-up to determine the quality of IMCI implementation and CCM training and follow-up sessions. A practical approach to continually measuring improvements in the quality of care provided by trained CHWs will also be needed.*

ORT corners

To increase the demand for and utilization of ORT by service providers and mothers alike, MCHIP prioritized the revitalization of ORT corners in health facilities. The establishment of an ORT corner necessitates the procurement of basic equipment (i.e. a dedicated table, two chairs, a bench, some utensils for the preparation and administration of ORS), and a Child Register to document the treatment administered. Given this criteria, MCHIP's goal in FY'10 and FY' 11 was to ensure the establishment and/or revitalization of functional ORT Corners within central hospitals (HGRs) and across all 29 target health zones supported by AXxes.

Not only were ORT corners successfully established in hospitals across all 29 target health zones, but staff members from the four provinces and 29 health zones supported by AXxes were also trained to establish and maintain their own ORT corners. In total, 8 cadres were trained to conduct inspections at the provincial and district level and 87 cadres were trained at the health zone level. Seven AXxes supervisors also participated in this training.

Next Steps? MCHIP encourages the new bilateral health project to continue supporting the establishment and revitalization of ORT corners in the USAID-supported health zones. Supervising and monitoring the use and quality of the corners will be equally important to ensure that they do not, once again, fall into disuse.

Availability of zinc

Shortages in the national supply of zinc have been a serious problem in the DRC, but with UNICEF's support (in addition to the zinc provided by AXxes, IRC and others), over 25 million zinc tablets were procured and distributed to the medical stores in all eleven provinces in 2009. During this reporting period, MCHIP worked with other partners, such as UNICEF, to ensure the distribution of the zinc. MCHIP also liaised with the health zones that had introduced zinc to make sure they were adequately supplied and had the technical support they needed. Furthermore, the project team advocated with the MOH and partners (including AXxes, PSI, and SPS) to ensure pharmaceutical orders were placed well in advance, considering how time consuming the procurement process can be. The project also identified and liaised with pharmaceutical firms, which were one of the target audiences for the multimedia campaign in early FY'11.

Next Steps? Ensuring an adequate supply of zinc and low ORS in peripheral health facilities and community CCM sites will continue to be a challenge in DRC because of its geography and the high cost of importing and transporting pharmaceutical products. There is a need to continue to advocate for and work with partners involved in drug logistics to make zinc available at the peripheral level. Because the MOH depends on multiple partners to finance, procure and distribute most pharmaceuticals, coordination among these partners is extremely important, as is working with them to improve the supply chain for low ORS and zinc.

Measuring the quality of diarrhea case management

Quality monitoring is critical in ensuring that CHWs and facility-based providers understand and follow national diarrheal disease treatment protocols, have the supplies they need, and receive on-the-job training and job aides to reinforce their knowledge and skills. MCHIP actively supported the health zones and the AXxes and LMS projects in performance monitoring, including measuring the quality of services during field supervision visits.

Diarrheal disease case management has not been reported on the traditional health worker registers and reporting forms, even though this information has been available from CHWs for several years. During this performance period, MCHIP worked with AXxes and other partners to test different approaches to data collection for program monitoring and reporting purposes. To gauge the initial uptake of the new diarrheal disease case management protocol, MCHIP also gathered information about treatment practices in the health zones and sentinel sites that are implementing CCM. The team also took advantage of CHW follow-up sessions to gather information on diarrheal disease case management in health facilities and worked with AXxes to use the Lot Quality Assurance Survey (LQAS) method to measure changes in caretaker knowledge of recommended home care practices. Data collected at the community level highlighted the fact that there remained problems with zinc availability at facility level, even in AXxes-supported sites.

Next steps? MCHIP played an important role in monitoring the quality of CCM for diarrhea, malaria, pneumonia and malnutrition and this type of monitoring should continue. Zinc supply remains a problem and there will be a need for constant advocacy and work with UNICEF and the Steering Committee to address this problem in a sustainable way. Quality monitoring at the health facility level will continue to be a challenge because of the lack of HIS data, so this, too, should be addressed. Finally, regular feedback to supervisors, zonal, district and provincial health offices on adherence to national diarrheal disease treatment standards will be needed to keep these standards high on their lists of priorities.

Multimedia campaign to raise awareness



Families and communities are not well informed about the benefits of zinc in the treatment of diarrhea. It is for this reason that, despite the current availability of zinc in many health zones, it is still most commonly prescribed for severe diarrhea cases only.

To raise awareness about diarrhea prevention and the new national diarrhea treatment guidelines, including the benefits of zinc, BASICS began working with the MOH, UNICEF, WHO, and others in 2008 on plans for a national multimedia campaign. Focus group discussions were held prior to the introduction of zinc in three areas of the country and findings were used to develop tailored and culturally relevant communication messages. The campaign had to be delayed, however, because zinc was still not available in most parts of the country. That situation changed in 2009, when the large zinc procurement financed by UNICEF arrived in country and the MOH and partners realized that the product would expire if distribution and uptake did not increase. At that point, plans for the multimedia campaign were revived.

In FY'10, MCHIP collaborated with UNICEF, the University of Kinshasa, WHO, and the National Program for Diarrheal Control (PNLMD) to further develop and implement the multimedia campaign. MCHIP worked very closely with the social marketing organization, CMCT (Communication et Marketing) that was hired by UNICEF to develop all of the communication materials for the campaign. MCHIP's primary role was to ensure that the messages and materials appropriately highlighted diarrheal disease prevention, care seeking, case management and home care, and the importance of zinc. MCHIP also played a key advocacy role with the in-country partners and leveraged resources to increase the numbers of BCC tools and materials produced and distributed in conjunction with the campaign. As a result, new BCC materials were developed and added to the existing package; radio messages and spots were designed; and video clips, ads, and training materials for journalists were developed.

The national launch of the multimedia campaign took place in October 2010. It included a series of half-day scientific sessions to share information and generate support for diarrheal disease treatment among pediatricians, pharmacists, and pharmaceutical companies. There were also round-table discussions and advertisements, spots and sketches were broadcast on national television and radio stations.

Launched a multimedia campaign to promote diarrheal disease treatment

In collaboration with UNICEF, the MOH and other partners, the project organized a series of half-day scientific sessions to share information and generate support for diarrheal disease treatment. These sessions took place in 5 major cities (Kinshasa, Lubumbashi, Bukavu, Kisangani and Mbuji Mayi) and a total of nearly 450 health professionals participated. These events were covered widely in-country through 22 television stations, 29 radio channels and 7 newspapers. The campaign increased awareness amongst both health providers and the general public about new recommendations to combat diarrhea, improve rehydration, ensure proper hygiene measures and create a demand for the use of zinc to treat diarrhea in children.



Matinée scientifique tenue à Kinshasa

Support follow-up in the health facilities after the multimedia campaign of Zinc use

MCHIP supported the National Diarrhea Control program to assure the follow-up of the use of zinc in some health facilities. At the Central Purchasing and Distribution of Drugs in Kinshasa (CAMESKIN), a large stock of zinc was introduced by UNICEF, the Police HZ, the Camp Kokolo HZ, Ngaba HZ and the pediatric Hospital of Kalembe Lembe. Because CAMESKIN received this large amount of zinc, the MCHIP team visited the site to observe and monitor activities. These results have been recorded:

1. CAMESKIN went from a stock of 5 million tablets in April 2011 to zero in June 2011;
2. A systematic prescription of zinc has been implemented in diarrhea case management in children under five;
3. Unfortunately, in all health facilities that were visited, the stock of zinc that was delivered for free is close to expiration (the expiration date for the current stock is November 2011).

Next steps? *The multimedia campaign will act as a springboard for the launch of an ORS-zinc kit in the coming year. MCHIP collaborated with PSI/ASF to support the launch of this kit in USAID-supported health zones and served on the National Steering Committee. The project team is also worked to train the media, including rural radio broadcasters on the inclusion of DD messaging into their programs.*

Challenges

Although the situation has improved, the erratic supply of zinc at the national level continues to be a fundamental problem affecting its availability in health facilities and community sites where CHWs are being trained.

As mentioned above, monitoring the quality of diarrheal disease case management is a continuing problem because SNIS registers and reports have not included (until recently) a space for zinc when recording diarrhea treatment. Further, the register still does not indicate whether zinc was available, only whether it was provided, which does not allow one to differentiate whether zinc was not provided due to poor quality of care, or whether it was due to drug shortage.

The post-training of head nurses in IMCI is also a big challenge, but it can be only linked with CCM follow-up where CCM Sites are functioning. CCM can provide an opportunity to improve health workers' performance. An extra day or a few hours can be added to the CHW post training to reinforce health provider skills in case management.

The need to increase demand for and use of zinc at household level and in health facilities will continue. Promotional activities and BCC campaigns like the one MCHIP helped to support are of critical importance in bringing about much needed change, but they are also costly and difficult to sustain. There were limited resources available to mount the multimedia campaign in the first place, and, even now, producing and getting the new BCC materials developed as part of the campaign into the hands of health providers and CHWs is a problem.

Conclusions and Recommendations

According to recent projections with the Lives Saved Tool (LiST), increasing the use of ORS and zinc for diarrhea treatment in DRC could help to prevent an additional 94,000 child deaths between 2010 and 2015. BASICS and MCHIP approached the strengthening of diarrheal disease case management at the national, health facility, community and household level by working closely with the CCM partners, including UNICEF and AXxes. Much of the project's work to promote and teach the new national diarrheal disease treatment protocol and expand the use of low ORS and zinc was linked to its support for the expansion of CCM. The multimedia campaign launched in early FY'11 has afforded the opportunity to update BCC messages and materials and to expand the audience for these messages to include national opinion makers.

MCHIP recommends the following investments to USAID and the new bilateral health team:

Recommendation 1: Invest in continuing and further expanding the multimedia campaign to raise awareness about ORS and zinc

MCHIP participated with UNICEF and its social marketing partner to develop the messages and materials for this campaign. To increase demand for zinc and its use in the treatment of diarrhea, support will be needed to ensure that the new BCC materials are available to CHWs and health facility staff. Distribution of radio spots, video clips, ads, and training materials for journalists should also continue to keep ORS and zinc on the minds of families, CHWs, facility-

based providers, and the managers and policy makers who must allocate the resources that are required for proper management of diarrheal disease.

Recommendation 2: Continue to support and monitor the expansion of CCM, including next year's launch of the ORS/zinc kit

MCHIP allocated core resources in FY'11 to continue its collaboration with UNICEF and other partners on the introduction of the ORS/zinc kit. The program learning that this national effort generated will be important for DRC and other countries in the region as they work to ensure adequate supplies of low ORS and zinc and to improve prescribing practices, particularly at community level and in the peripheral health facilities. Funding to expand CCM and for the procurement and distribution of the ORS/zinc kit is in the hands of organizations and projects such as UNICEF and IHP/PROSANI that are directly supporting CCM implementation in the health zones.

Recommendation 3: Continue supporting and monitoring diarrhea treatment and ORT corners in USAID-supported health zones

The USAID bilateral health project will be engaged in up to 80 health zones. Most of the health facilities have already had orientation to new diarrheal disease treatment protocols and been supported in adding or strengthening an ORT corner. There is a need to continuously monitor the performance of health facilities and providers in these health zones and to feedback the findings to ensure that the new treatment protocols are understood and followed. MCHIP recommends identifying and taking advantage of different opportunities to improve, sustain and monitor the knowledge and quality of health worker and CHW case management of diarrhea (and pneumonia, malaria and malnutrition). Possibilities might include adding an extra day during CCM post-training follow-up sessions, using immunization outreach to supervise CHWs, and building on other scheduled activities at community and health facility level to assess, improve and monitor diarrhea case management.

As part of our transition efforts, MCHIP worked with IHP/PROSANI in FY'11 on these tasks. IHP/PROSANI is now responsible for monitoring and working to improve the quality of care for diarrheal disease in the 80 health zones supported by USAID.

3. Routine Immunization and New Vaccine Introduction

Objective 3: To improve declining immunization coverage rates in high-burden health zones and support new vaccine introduction

Background

MCHIP continued the technical support provided by USAID's IMMUNIZATIONbasics project (IMMbasics) after that project ended in September 2009. From 2004 through 2006, IMMbasics maintained an office on the MOH grounds in Kinshasa and had a small team of technical officers providing continuous support to the national immunization program (EPI). The office and staff were primarily funded through Mission field support, but when the AXxes project was awarded in September 2006, Mission funding ended and all national-level technical assistance became that project's responsibility.

Shortly thereafter, IMMbasics closed its office, terminated local staff and transferred the Chief of Party to headquarters to support multiple country activities. To protect USAID's considerable past investment in the national immunization program, USAID (DRC Mission, Global Bureau/HIDN and AFR/SD) agreed that IMMbasics would make periodic monitoring and technical assistance visits to DRC from the US. These visits continued until, in 2008, the AXxes project itself (through a separate sub-agreement between IMA Global Health and JSI Research and Training Institute, Inc.) began co-funding IMMbasics' technical support. Under the sub-agreement, IMMbasics worked with AXxes staff to evaluate and address coverage issues in the AXxes-assisted health zones.

In October 2009, MCHIP took over from IMMbasics and Field Support funding for immunization technical support was again provided by the Mission through the field support mechanism. Because this funding was not sufficient to cover all of MCHIP's work, the project's immunization component continued to be jointly funded by the Mission, AFR/SD and G/HIDN. This combined funding allowed for the addition of a local immunization Technical Officer to the MCHIP country team (after January 2010) and continuous on-the-ground support for the first time since 2006 to the EPI and USAID projects. Periodic external technical assistance visits from MCHIP headquarters also continued in FY'10.

MCHIP's approach

MCHIP provided direct technical assistance to the MOH and its national immunization program, the USAID bilateral health projects (formerly AXxes and LMS), and DRC's Inter-Agency Coordination Committee (ICC) for immunization. To contribute to mortality reduction through increased and sustained immunization program coverage, MCHIP:

1. Participated in and provided technical support to the EPI and its partners through monthly technical ICC and ad hoc working group meetings;
2. Participated in annual EPI review and planning workshops at national level;
3. Contributed to the development of the annual Memorandum of Understanding (MOU) between the MOH and its immunization partners (WHO, UNICEF, USAID, Rotary and others);

4. Participated in national technical discussions, decision-making and activities related to EPI program evaluation and the revision of EPI policy, strategy and capacity building activity;
5. Supported EPI and the ICC partners in applying to the GAVI Alliance, preparing for the arrival, the monitoring and evaluation, and the introduction of new and underused vaccines;
6. Provided direct technical support to USAID AXxes, LMS and IHP projects in low-performing health zones including working with these projects and their organizational partners to:
 - a. Review and evaluate immunization program activities
 - b. Implement the micro planning process and other aspects of the RED approach
 - c. Facilitate Data Quality Self Assessment (DQAS) exercises in health zones with poor data quality
 - d. Test new strategies to improve coverage in the health zones
 - e. Monitor and provide feedback on changes in immunization coverage
 - f. Train the Health Zone staff in Mid-Level Management course for EPI Managers
7. Organized and helped to strengthen Provincial ICCs;
8. Provided technical assistance to improving the quality of Supplemental Immunization Activities and National Immunization Days against poliomyelitis;
9. Supported the EPI in the new vaccine introduction process (especially the development of the training tools and staff training).

Activities and Results

MCHIP's contributions to the national immunization program and USAID-assisted projects and health zones are described below. The results included are the collective results of all EPI partners. MCHIP's role has been to provide expert technical support. The project has not provided financial support for implementation; that support has come from the MOH and ICC partners, including the AXxesLMS and IHP (the new bilateral) projects in the USAID-assisted health zones. The national Immunization Technical Officer joined the MCHIP/DRC team in January 2010. All support prior to that time was provided by headquarters-based staff.

Monitoring and working with the EPI to reverse coverage trends

DRC's routine immunization coverage rate rose quickly after 2003. But according to both the Official Country Estimates and the annual WHO/UNICEF Estimates, routine immunization coverage declined for the first time in many years in both 2008 and 2010.⁷ The reasons for this decline are discussed below.

⁷ DTP 3 coverage is used as the indicator for routine immunization coverage.

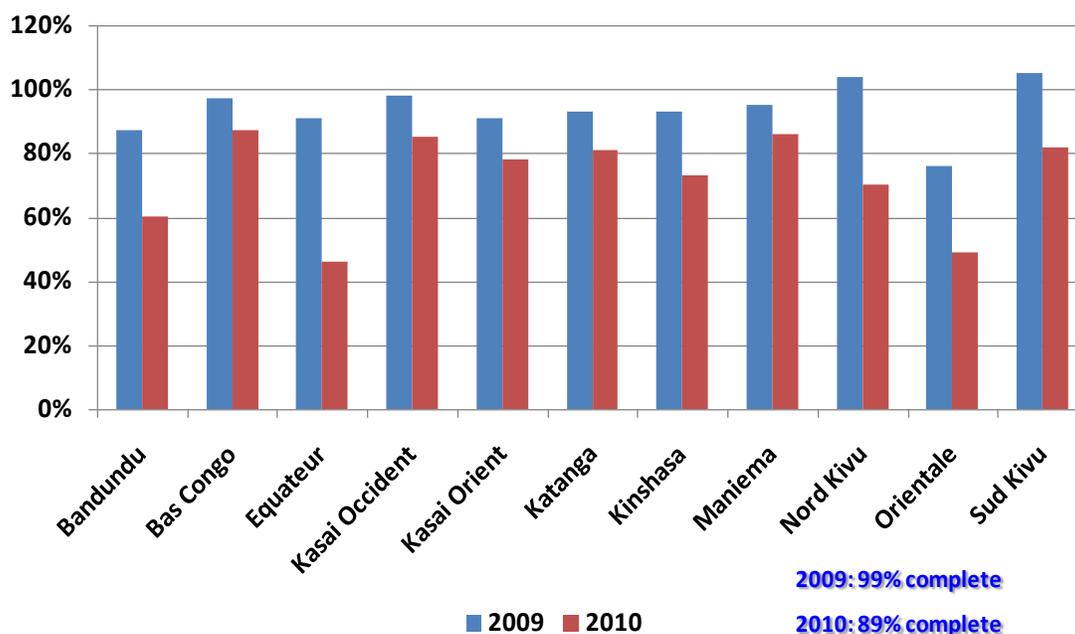
Table 12: Routine immunization coverage 2000-2010, DTP3

	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Country estimates	70	92	83	87	77	73	64	49	43	32	40
WHO/UNICEF estimates	NA	77	68	72	62	60	54	41	38	30	40
Surveys estimates	-	61 MICS	-	-	45 DHS	-	-	-	-	-	31 MICS

Sources: MICS 2001 and 2010; DHS 2007⁸

In FY'10, two different **pentavalent vaccine stock-outs** occurred and contributed to the documented decline (Figure 5). First, a tainted batch of pentavalent vaccine and the recall of the entire shipment by the manufacturer left large parts of the country without DTP/HepB+Hib vaccine from March-April. Then, later in the year, a second stock-out occurred when the GDRC failed to honor its co-financing commitment to the GAVI Alliance for pentavalent vaccine and this held up a planned procurement. The Government has agreed to contribute just over \$1 million per year (or US \$0.15 per dose) for the DTP/HepB+Hib vaccine it receives through 2015. This is a fraction of the total vaccine cost and it is not clear why the GDRC was not able to honor this commitment until late in the year.

Figure 5: Comparison of DRC's reported DTP/HepB+Hib 3 coverage in 2009 and 2010



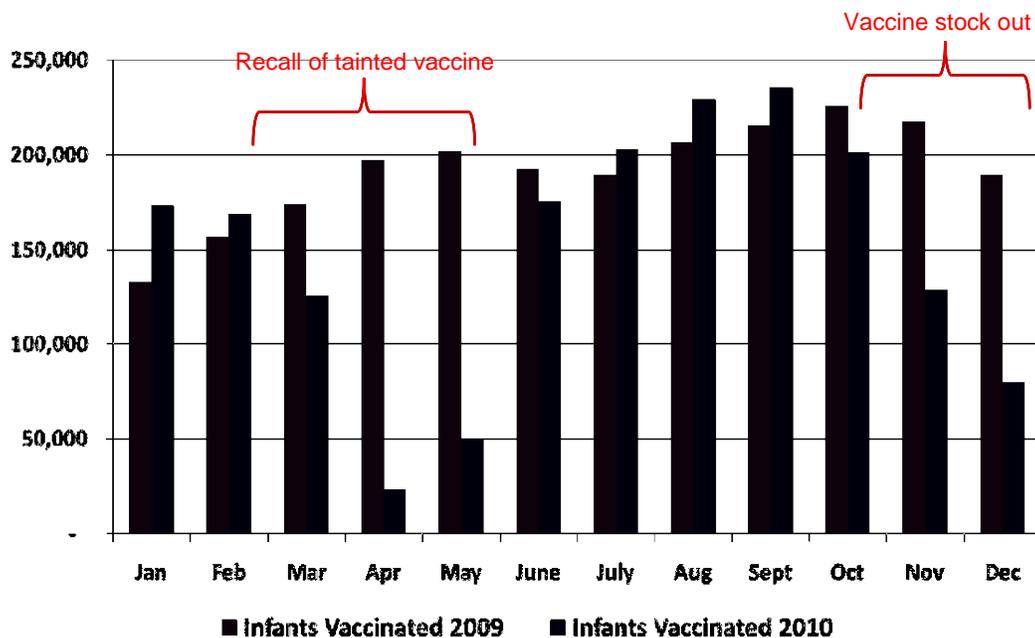
Another reason for falling immunization coverage has been the **lack of budget** to cover the operational costs of the EPI. The GAVI Alliance, UNICEF and others continue to provide the

⁸ Household surveys like MICS and DHS measure immunization coverage during the year prior to the study; therefore, MICS 2001 results are reported for 2000, DHS 2007 for 2006 and MICS 2010 for 2009.

bulk of external support for the national immunization program.⁹ From 2003 to 2007, the DRC earned GAVI Immunization Services Support (ISS) investment and reward payments¹⁰ of from US \$2.5 million to \$5 million per year. This funding was used to cover many of the program's operational costs (e.g., vaccine transport, scaling up of RED training, annual microplanning, transport for supervision and outreach, review meetings, etc.). But when immunization coverage fell in 2008, and again in 2010, DRC stopped earning ISS rewards.

Without GAVI reward payments, and with limited government budget, the EPI has not had the necessary resources to cover many of the program's operational costs on its own. DRC must improve its immunization coverage in 2011 without the benefit of GAVI ISS, so that it will be eligible again for GAVI ISS rewards to reverse the negative coverage trend.

Figure 6: Comparison of numbers of infants vaccinated monthly in 2009 and 2010, with reasons for lower than expected coverage



Next steps? Declining immunization coverage rates, the spread of wild polio virus, the GDRC's failure to fund its national immunization program and the suspension of GAVI ISS payments all point to the urgent need for an external EPI review. USAID and its projects should mobilize the other ICC partners and assist EPI to conduct the review, which will help to galvanize Government and donor commitment towards reversing the negative immunization coverage trends.

⁹ GAVI Alliance grants began in 2002, and commitments to DRC through 2015 total over US \$150 million. GAVI has awarded separate grants for injection safety, Immunization Services Support (ISS), new and under-used vaccines (for yellow fever, tetraivalent and pentavalent), civil society support and Health Systems Strengthening (HSS).

¹⁰ GAVI ISS rewards are paid at a rate of US \$20 for each additional infant immunized with DTP3 over the highest number of vaccinations given since the baseline year of the ISS application.

Preparing for Pneumococcal Conjugate Vaccine (PCV-13)

MCHIP has, over the past year, provided direct technical support to EPI and its partners as they prepare for the introduction of PCV-13. MCHIP headquarters staff, working under IMMbasics, provided technical input during the successful application process in 2008, and MCHIP has been an active member of the working group that is preparing for the introduction. In FY'10, MCHIP played a role in orienting the national EPI team to the different phases of new vaccine introduction and contributed to the development of guidelines and job aids for training health workers at peripheral level. MCHIP also encouraged and contributed to the careful planning with the provinces and health zones for a phased roll out of the new vaccine; starting in the Kinshasa and Bas Congo provinces, then in Sud and Nord Kivu, before targeting the rest of the country. The national launch of the PCV-13 vaccine took place in April 2011.

***Next steps?** USAID's technical support (through MCHIP and/or the new bilateral) should continue during roll-out of PCV-13. Although the EPI has done an admirable job preparing for its introduction, serious gaps in cold chain and communication remain and will have to be addressed. Support should also be provided for a formal post-introduction evaluation in 2012. Given DRC's size and the phased nature of the PCV-13 roll-out, a formal review is also recommended at the end of FY'12 to make mid-course corrections. Globally, MCHIP has core funding to provide technical support to countries, like DRC, that are introducing a new vaccine, and we anticipate that USAID may wish to allocate some of this funding in FY'12 to support some of the recommended activities. See further discussion in Challenges below.*

Contributions to national EPI policy and strategy

MCHIP works intensively with the national immunization program team and ICC partners on important policies, strategies, reports and other documents. Most of this work takes place through participation in monthly technical ICC and working group meetings. MCHIP not only attends these meetings but assists in planning for them and for the higher level "strategic" ICC meetings that are attended by heads of agencies and convened by the MOH. Also through its participation on the technical ICC, MCHIP helps with preparations for, and then participates in, the national EPI mid-year and end-of-year review and planning workshops.

In FY'10, MCHIP staff participated in nine monthly ICC meetings, the annual EPI review and planning meeting in December 2009, and the mid-year review in July 2010. In FY'11 (from October 10 to July 11), MCHIP staff participated in eight ICC meetings, the annual EPI review in December 2010, and the mid-year review in July 2011. Through these reviews and the ICC technical subcommittees and working groups at national level, the following results were achieved:

- The **annual macro plan and MOU** were drafted for signature by the Ministers of Health and Finance and representatives from each of the ICC partners. This MOU commits each organization to providing financial and technical support toward implementation of the annual EPI Macro Plan. As in past years, MCHIP helped in drafting the MOU.
- A set of **integrated microplanning tools** were developed and used nationwide in 2010.
- The EPI and partners at national level took important steps to prepare for **the launch of the pneumococcal conjugate vaccine (PCV-13)**. MCHIP provided continuous support and also monitored this process from headquarters. See discussion below.

- The national **comprehensive Multi-Year Plan for Immunization (cMYP)** was revised to cover the period from 2011-2015. The cMYP is a key document for all national immunization programs and a requirement when applying to the GAVI Alliance for new vaccine and other types of support. MCHIP was an active member on the committee responsible for the cMYP revision.
- DRC continued to prepare for a multi-partner, **external EPI review**. The review was originally planned for 2009, but rescheduled for the second quarter of FY'10 because of competing priorities. Unfortunately, it was postponed again and is now expected to take place in FY'11. MCHIP has been part of the national working group that is developing plans for the review. See Challenges below for a more complete discussion.
- At the national EPI Director's request, MCHIP also prepared a set of **recommendations and a checklist** to focus his team's attention on the very serious issues that are facing the national immunization program.

In FY'11, the EPI and ICC's identified a number of actions that they hope will improve the performance and reduce the costs of the national immunization program. These include expanding vaccine storage and distribution capacity by establishing three new vaccine stores. At present, all vaccines are stored and distributed by the national vaccine store in Kinshasa. Decentralizing vaccine storage and distribution would both reduce the cost of and save time in transporting vaccines to the health zones. The GDRC and partners also hope to improve partner coordination in the health zones: At present, because of the lack of coordination, there are many partners working in the same health zones, while others are without any partner support.

These issues will be explored and resolved by the strategic and technical ICCs in the coming year.

***Next steps?** USAID should continue to provide staff support to the national ICCs (strategic and technical), the ICC subcommittees and the ad hoc technical working groups. Although the national EPI team has stronger leadership and staffing than it has had in the recent past, team members are required to guide and support the EPI activities in the provinces and health zones, as well as produce and deal with far too many things at once (e.g., new vaccine introduction, national polio campaigns, annual JRF and GAVI Alliance reports, new applications to the GAVI Alliance, revising the cMYP, planning for the external EPI review, decentralizing vaccine storage and distribution, etc.). The national EPI team has very limited human resources to do all of this and will continue to need partner support at national level for the foreseeable future.*

Assistance to AXxes,LMS and IHP-supported health zones

In FY'10 and FY'11, MCHIP worked with the USAID bilateral and global programs that were responsible for supporting service delivery in 80 health zones—Axxes,LMS and IHP, specifically. With these three projects and their partners (MSH, IRC, OSC, ECC, World Vision and CRS), MCHIP focused on the lower performing health zones and those with the largest numbers of unimmunized and partially immunized women and children. These health zones were assisted during immunization micro-planning sessions and supportive supervision visits that included on-the-job-training sessions. Refresher training in Data Quality Self Assessment

(DQSA) was provided, as well, and those zones with serious data quality issues were supported in conducting their own DQSA and developing action plans to address specific problems.

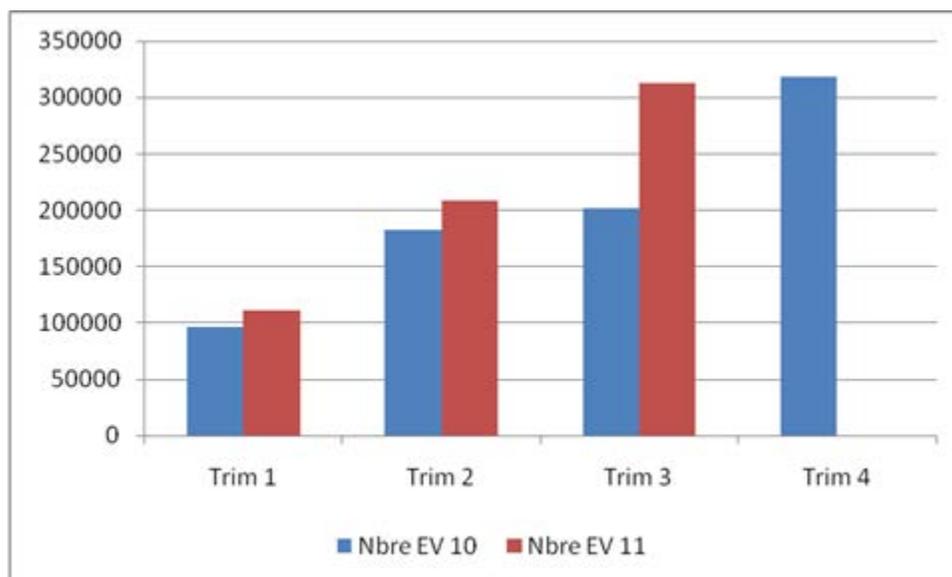
Results in FY'10 included:

- **Micro-planning:** MCHIP first worked with the technical ICC to develop an integrated micro- planning template and then conducted micro-planning training sessions for health workers from the targeted health zones and provincial health offices. During the fiscal year, 18 provincial staff, 56 staff from eight AXxes-supported health zones, and 12 staff from six LMS-supported health zones learned to determine their target populations, developed micro plans, and were provided with a refresher on the other elements of the RED approach.
- **Supportive supervision:** MCHIP conducted or participated with AXxes and LMS in supportive supervision visits in 16 low-performing health zones. Specifically, the MCHIP Immunization Technical Officer visited health facilities in 7 AXxes-supported health zones (Kadutu, Kalehe, Katana, Miti Murhesa, Vanga Kete, Mubumbano and Walungu) and 9 LMS-supported zones (Luiza, Yangala, Mwene Ditu, Kandakanda, Luputa Tshumbe, Dikungu, Wembo Nyama, Katako and Djalo). During supportive supervision visits, he and his AXxes and LMS colleagues focused on those health facilities with known problems and included on-the-job refresher training and problem-solving activities with those responsible for planning and providing vaccination services.
- **Data Quality Self Assessment (DQSA):** 30 staff from AXxes- and LMS-supported health zones were trained or re-trained in the DQSA methodology during the fiscal year. Thereafter, 5 LMS-supported and 14 AXxes-supported health zones were assisted by MCHIP staff in conducting their own DQSA. At the national level, three EPI staff members were also trained to assist with DQSA exercises in the field. See discussion of DQSA findings and continuing data quality issues below.
- **Monitoring coverage:** AXxes and LMS collected and provided routine immunization program data to the MCHIP immunization team for analysis. MCHIP received reports from both projects for the first three quarters of the fiscal year. MCHIP also used the national immunization program's database at central level to crosscheck these reports and assess coverage trends in the USAID-assisted zones. Feedback was given to AXxes and LMS on a regular basis and used with the health zones themselves to identify and address coverage issues.

Figure 7 shows the cumulative number of infants in the 80 AXxes- and LMS-supported health zones who received a third dose of pentavalent DTP/HebB+Hib3 vaccine during 2010. Just under 320,000 infants were immunized. Although this cumulative achievement is impressive, the number immunized, even in these USAID-assisted zones, was lower than in 2009 for all of the reasons mentioned above. MCHIP's own work to help the health zones improve their data quality almost certainly resulted in reported coverage declines, as well.¹¹

¹¹ Coverage declines are one of the expected results when addressing issues of data quality, particularly where over-reporting is a problem. Only after data quality improves do actual coverage trends become apparent.

Figure 7: Comparison of cumulative number of infants vaccinated with DTP/HepB+Hib 3 by quarter as reported in the USAID-assisted Health Zones, FY'10 and FY'11



(Source: EPI database, October 2009 to September 2010 vs. October 2010 to June 2011)

Results in FY'11 included:

- Supportive supervision:** MCHIP conducted or participated with IHP in supportive supervision visits in 8 low-performing health zones. Specifically, the MCHIP Immunization Technical Officer visited health facilities in 8 IHP-supported health zones (Kadutu, Ibanda, Ototo, Lodja, Tshumbe, Bilomba, Ndeksha and Luiza). During supportive supervision visits, he and his IHP colleagues focused on those health facilities with known problems and included on-the-job refresher training and problem-solving activities with those responsible for planning and providing vaccination services. Especially, the MCHIP Immunization Technical Officer helped those Health Zones in the strengthening of their routine immunization coverage by reducing the number of unvaccinated infants.
- Monitoring coverage:** IHP collected and provided routine immunization program data to the MCHIP immunization team for analysis. MCHIP also used the national immunization program's database at central level to crosscheck these reports and assess coverage trends in the USAID-assisted zones. Feedback was given to IHP on a regular basis and used with the health zones themselves to identify and address coverage issues.
- Training in the Mid-Level Management Course:** During FY 2011, MCHIP provided technical assistance to IHP project in the training of 59 Health Zones staff including 25 Medical Doctors and 34 Nurses. These managers were also trained in the Data Quality Self Assessment methodology

Next steps? *DRC's immunization coverage problems are so serious and the potential to fall further behind so great that USAID might want to consider establishing a dedicated immunization technical support activity. Whether done through the bilateral or as a standalone activity, USAID is in a unique position to make a significant impact in this most fundamental and basic need within the DRC's health program (see Recommendations below).*

At a minimum, USAID-assisted health zones and health centers will continue to require technical and financial support to improve their immunization coverage and data quality. USAID partners should monitor coverage trends in all of the health zones and then work with them to take corrective action whenever coverage falls or is consistently lower than in surrounding zones.

The focus in the health zones should be on microplanning, supportive supervision, on-the-job training, data quality improvement and the use of data in problem solving. USAID partners should also encourage public recognition of those health zones and provinces that successfully increase and maintain high rates of routine immunization coverage over time.

Strengthening Sud Kivu's provincial ICC

IMMbasics introduced the concept of a provincial ICC, led by the provincial health office and bringing national and international partners together on a regular basis to assess the immunization situation of the health zones and coordinate a unified response. From 2005 to 2006, provincial ICCs in the Eastern Kasai, Western Kasai, and Oriental provinces produced very positive results. (The provincial ICC is explained in the document "Reinforcing Provincial ICCs", see Annex 2).

MCHIP supported Sud Kivu province in FY'10 to establish a new provincial ICC. Sud Kivu contained many of the AXxes-supported health zones that were classified as low performing and it also had many different NGO partners working in the health zones—some supporting immunization service delivery and others with the potential to do so. To get the ICC going, MCHIP helped to organize an initial partners' meeting and then attended at least one of the monthly ICC meetings each quarter to offer technical support. In the process, MCHIP also introduced the use of an excel-based tool for tracking and raising awareness of coverage targets and the incidence of vaccine preventable disease among the ICC partners (this document is available upon request).

Figure 8 shows how Sud Kivu performed when compared to the other provinces in FY'10. Although it is not possible to draw definitive conclusions from these data, MCHIP and AXxes found it encouraging that Sud Kivu's immunization performance was better than that of most other provinces throughout FY'10. Under the circumstances described above, achieving 82% DTP/HepB-Hib 3 coverage in 2010 was truly an accomplishment, even with AXxes project support. This was particularly true because Sud Kivu's health zones were simultaneously working to improve data quality and most experienced an initial drop before being able to report increases in coverage.

Figure 8: Quarterly and annual DPT/HepB+Hib 3 coverage by province in 2010

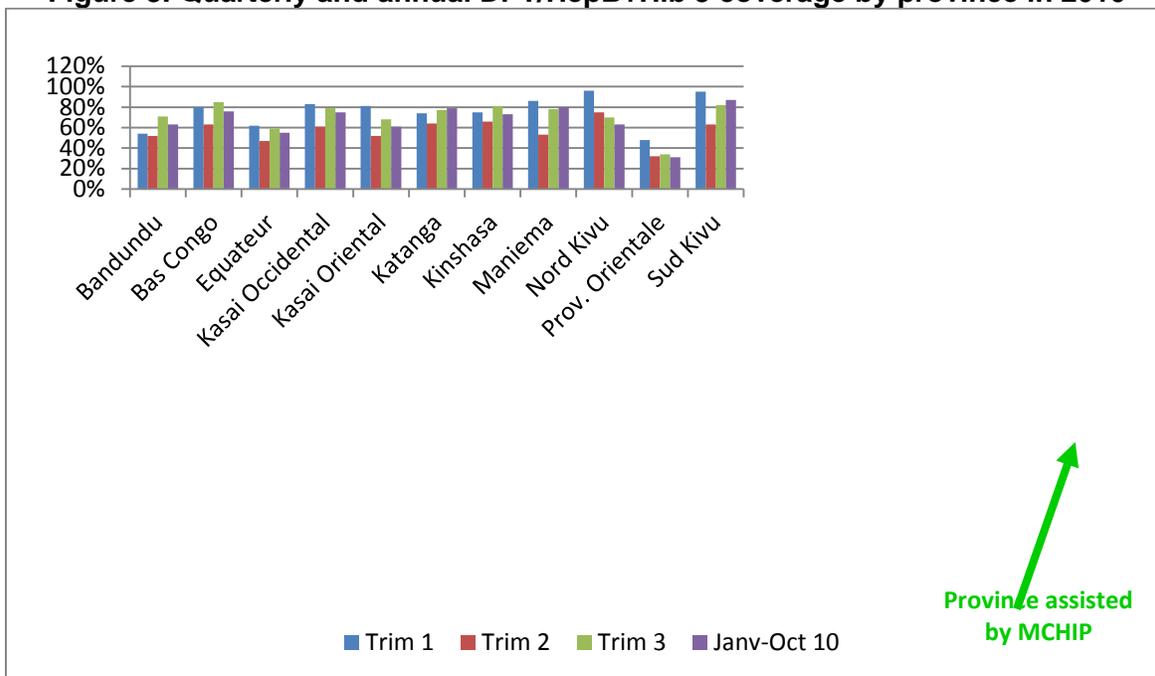
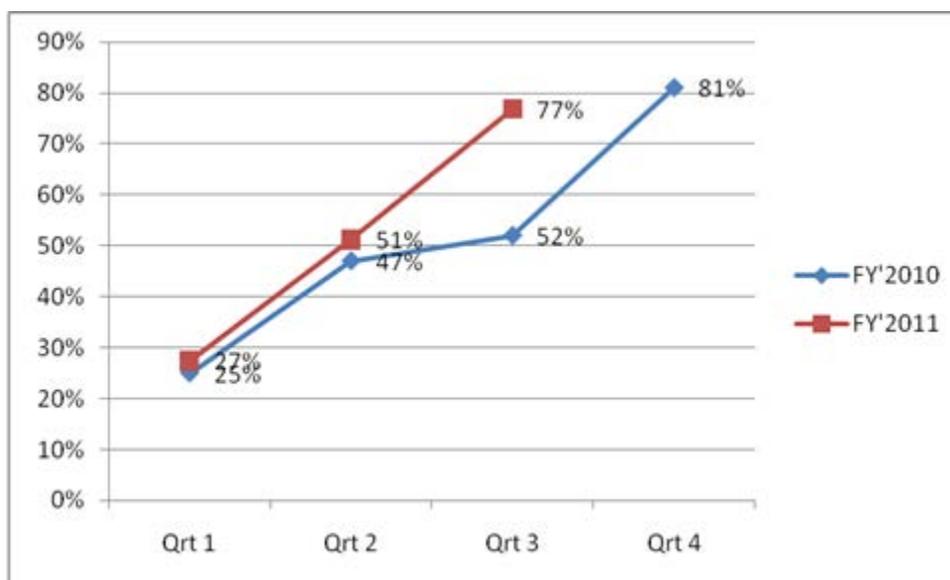


Figure 9: Quarterly DPT/HepB+Hib3 coverage in the IHP Health Zones in FY'10 and FY'11



Next steps? The Provincial ICC model deserves greater investment from the Government and partners, including USAID. USAID's new bilateral health program, if it is working at provincial level to build leadership and health sector capacity, could play a major role in organizing and supporting provincial coordination committees. Those provincial ICCs might focus on single interventions, such as immunization, or they might have a broader and more integrated MNCH mandate. Either way, the provincial ICC model has the potential to greatly enhance the

effectiveness of partners and the health zones they support. MCHIP has had a positive experience with provincial ICCs and working groups for immunization and child health and will continue to assist with this work at provincial level by investing Core funding to support this effort.

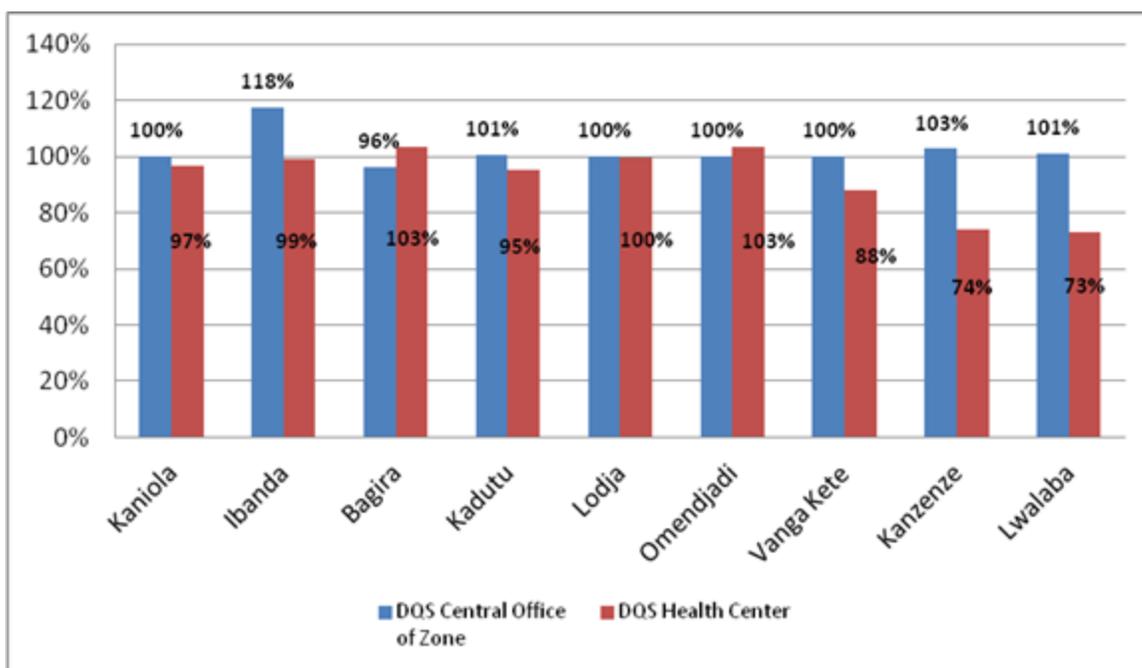
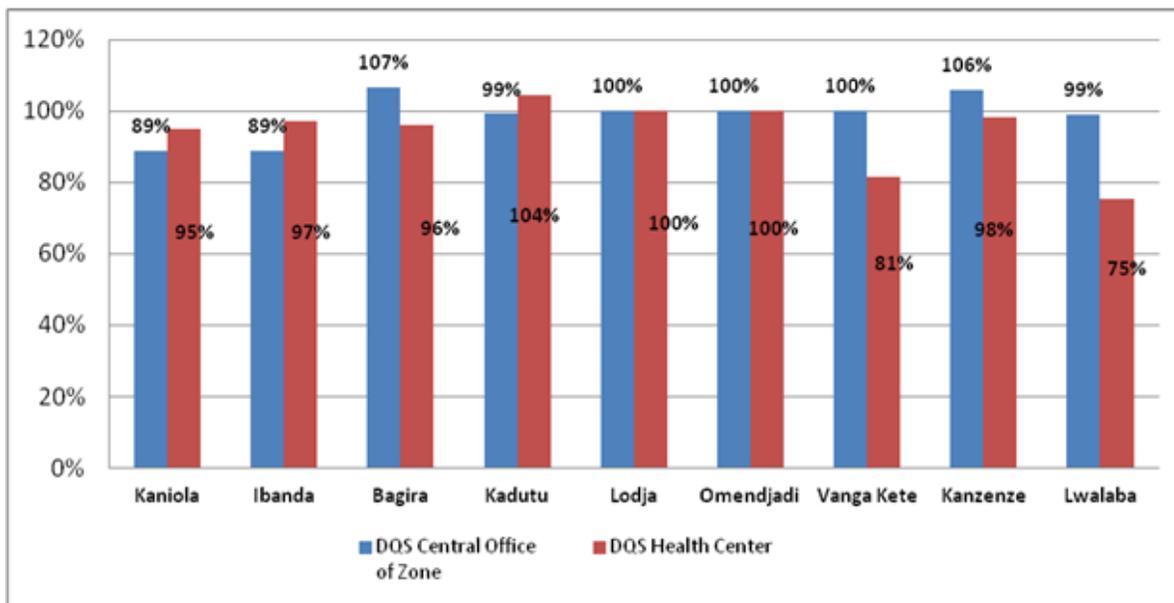
Data Quality Self Assessment (DQSA) and other monitoring activities

One of MCHIP's priorities in FY'10 was to improve the quality of immunization data that was being collected and reported by the low-performing health zones. Glaring discrepancies when comparing AXxes and LMS immunization reports with the reports from the health zones themselves and at the national level triggered this attention. The Data Quality Self-Assessment (DQSA) approach was chosen to highlight some of the problems because it has been used in the past by DRC's EPI and is well known. DQSA is a verification process that entails reviewing and comparing immunization data at different levels (health centers, central office of health zone and higher level) to determine consistency and accuracy as vaccination statistics are recorded, transcribed and reported to higher and higher levels of the health system.

In FY'10, MCHIP led DQSA exercises in nine health zones—all were selected with AXxes and LMS because of their low immunization coverage rates and poor data quality. In these health zones, health workers were first briefed on the DQSA methodology and then provided technical support to conduct their own DQSA. Poor data quality was documented in 7 of the 9 health zones. The following graphs show the DQSA findings when data from health centers were compared to data archived at the zonal health office. Errors were found to be due to over reliance on or misuse of tally sheets, failure to complete or keep the immunization register at the health center up to date, mistakes in transcribing the numbers of vaccinations given by age and sex to report forms, and mistakes in calculating coverage and wastage rates.

Figure 10 compares DTP/HebB+Hib3 coverage reported by zonal health offices to the records and reports of their corresponding health centers. This analysis shows possible under-reporting by three of the nine zonal health offices when compared to health center reports and over-reporting by four others. Similarly, Figure 10 compares measles vaccination coverage reported by zonal health offices and health centers but shows a different pattern. In this case, six zonal health offices reported higher measles coverage than their health centers, and only one under reported. Based on these findings, MCHIP recommended that the health zones conduct an abbreviated version of the DQSA on a monthly basis and take action based on their findings to improve the quality of their data over time.

Figure 10: DPT3 coverage reported by zonal health offices compared to health center records (Source: MCHIP-led DQSA in selected health zones, FY'10)



In addition to the DQSA exercises, MCHIP worked with the national EPI and with AXxes and LMS to reconcile and address issues with the immunization data that all three have been collecting and reporting. Denominators (target populations of surviving infants) and numerators (infants immunized) reported by AXxes and LMS for the 80 health zones were frequently different than those on record with the national EPI. For example, the EPI estimates surviving

infants in these zones at 390,616, while the USAID projects use significantly higher estimates (414,048 AXxes and 109,002 LMS = 523,050). As is the case in many countries, the national EPI uses national census projections for each health zone, while AXxes and LMS used catchment area estimates produced by the health centers themselves. The numbers of infants that AXxes and LMS reported having vaccinated were also different on a monthly and quarterly basis than those in the EPI database. The sense was that AXxes and LMS reports were more up-to-date and complete than those coming in through the EPI system, but it was not unusual for their numbers vaccinated to be lower.

Discrepancies in denominators and numerators made it very difficult for the two USAID projects and the provincial and national authorities to identify and jointly address coverage problems. In a data-rich program like EPI, this was a missed opportunity. MCHIP encouraged more work at the antennae level to reconcile reports and databases and proactively question and agree on the datasets that are used in monitoring, evaluating and intervening with the zonal offices and health centers to improve coverage results. Such a data review committee functioned in South Kivu province and in Sankuru in the past, with very positive results.

Next steps? *To successfully address their data quality issues, many health zones will continue to require outside support for their DQSA exercises. MCHIP expects to continue working with the health zones on their data quality with Core funding resources. USAID's new bilateral program, depending on its staffing, could also provide this type of support. MCHIP also recommends that data validation committees (made up of USAID bilateral program and zonal health office EPI staff) meet on a monthly or quarterly basis at antennae level to review and agree on the data that will be used by all to track immunization program performance in the USAID-assisted health zones. Work is also required at the national level to clean and keep the EPI database up-to-date. If this is beyond USAID's capacity, focusing at the health center, health zone and EPI antennae levels should be given top priority, as this is where immunization data are most effectively used to identify and solve problems.*

Challenges

Falling immunization coverage rates

Vaccine stock-outs, the suspension of GAVI ISS reward payments, limited GDRC resources to cover the operational costs of the EPI, poor coordination of partners, data quality issues and other factors discussed above are eroding past immunization achievements. A further decline in coverage should be expected if action is not taken to reverse the recent downward trend in coverage that has been documented in both 2008 and 2010.

National EPI Review repeatedly postponed

The external EPI review has been postponed multiple times because of competing priorities and the lack of dedicated resources to support the exercise. It may be postponed again in 2011, for the same reasons, even though it is desperately needed. Better communication among the partners and between the EPI and partners will be required to ensure that this activity takes place.

Government's failure to meet financial commitments

Each year, the MOH and its ICC partners sign an MOU that spells out each one's contribution to the annual EPI macro plan. As part of its commitment, the GDRC has agreed to pay a small co-share amount each year for the pentavalent DTP/HepB+Hib and PCV-13 vaccines it now receives from the GAVI Alliance. Payment of this co-share has been problematic. DRC also continues to be dependent on UNICEF to purchase its traditional vaccines and the government has not covered many of the operational costs that it commits to in the annual MOU. Constant advocacy with the GDRC is required, as is follow-up by the ICC partners to ensure that the GDRC and the other partners each honor their MOU commitments.

Launch of PCV-13 scheduled, but not all pieces are in place

DRC was one of the first countries in Africa to be approved for the introduction of pneumococcal vaccine in 2008. Although a lot of work has been done to prepare for the vaccine launch, the country is not entirely ready. A cold chain assessment has been started but not completed and there are concerns that some parts of the country will not have adequate cold chain capacity to accommodate the PCV-13 when it arrives. Training has begun and key communication messages for parents and health workers have been developed, but with too little time remaining to reach all 515 health zones with training and communications materials, so the introduction will be phased. MCHIP will continue assisting the EPI and partners as they work to finish key activities before the launch. There will also be a need for the USAID implementing partners in the health zones and provinces to monitor and support the phased introduction during the rest of the year.

Continuing polio outbreak

Over 100 new polio cases were identified in DRC in 2010. MCHIP's involvement with polio in FY'10 was limited to training the supervisors of campaigns at national level. The polio vaccination campaigns that are to be conducted across the country in 2011 are necessary, but they will almost certainly compete with routine immunization services for the time of health staff and available funding. These campaigns must be planned and conducted based on the epidemiology of the current outbreak and their negative impact on routine services must be mitigated. At USAID's request, MCHIP will continue to be involved in reviewing plans and proposals related to the polio response. We will also assist USAID in monitoring and providing technical support on the ground during campaigns and other containment activities.

Continuing conflict limits access to routine services

Access to regular immunization services in the eastern part of the country continues to be limited for security reasons. UNICEF and the NGOs are working in these areas to ensure that the population has access to primary care, including immunization, but security issues in the conflict zones will continue to make it difficult to achieve sustainable coverage improvement.

Conclusions and Recommendations

USAID's support to targeted health zones through its bilateral health projects—SANRU, AXxes, LMS and now IHP/PROSANI) is a critical element in ensuring high rates of immunization coverage. USAID's technical assistance to the national immunization program through its global projects—BASICS, IMMbasics and, most recently, MCHIP--has been equally important in strengthening the national immunization program and multi-donor commitment to it. Over the past year, MCHIP has assisted the EPI in formulating and revising key policies, strategies and approaches at national level. We have also worked with the USAID projects and the health zones they assist to identify and address performance problems and data quality issues. Finally, MCHIP has also demonstrated, once again, the positive impact of new approaches such as the organization of the Provincial ICC in Sud Kivu.

Although MCHIP has been working to improve immunization in DRC for only the last year, MCHIP's immunization staff members have worked with DRC's EPI since the mid 1990's—first through BASICS, then IMMbasics, and now MCHIP. After a number of years providing only periodic technical support from headquarters, and without staff based in the country, it has been a very valuable experience to re-engage in work at the zonal and provincial levels with AXxes and LMS, and at the national level through active participation on the technical ICC and its working groups.

Based on the last year's experience and DRC's precarious immunization situation at this time, MCHIP's recommendations to USAID for its future technical support are as follows:

Recommendation 1: Support an external EPI review with the other ICC partners in 2011

An external EPI review, conducted with representatives from the international organizations that support DRC's EPI (including UNICEF, WHO, USAID and others), would raise awareness about the current immunization situation and help in leveraging a stronger financial commitment from the GDRC. This activity has been postponed multiple times and may be held up again for lack of resources. High level advocacy and a commitment of funding by USAID will be required to ensure that this review takes place.

MCHIP is active on the planning group that was formed last year and is ready to contribute external technical assistance, using core funding, because we believe that this review is desperately needed and that it would help to galvanize partner and GDRC support for the national immunization program.

Recommendation 2: Increase USAID's support for routine immunization at national and provincial levels

There is a continuing need for all partners to advocate on behalf of the national immunization program, while also providing it with supplementary technical support. The Mission's active participation on the strategic (high-level) ICC, MCHIP's work with the technical ICC and working groups, and the bilateral project's direct support to the USAID-assisted health zones are all important and should continue. Based on recent experience, however, this may not be enough to produce sustainable change.

The recent decline in DRC's routine immunization coverage, its loss of GAVI ISS rewards, the continuing polio outbreak, the fact that all necessary systems were not in place for PCV-13 introduction when it began in April 2011, and the GDRC's failure to meet its financial commitments to the EPI are all of great concern and good arguments for increased immunization technical presence at the national and provincial level.

One approach would be for USAID and other partners to support a small, time-limited group of technical experts (with immunization, finance and information systems background) who would work to strengthen the national EPI and work with it to get the GDRC's financial commitments back on track. Such a technical assistance group would not implement, but would be a catalyst for change. By working with the EPI and partners, it would increase the visibility of and commitments to the EPI and also promote greater accountability and improved performance at all levels. Specifically, the team would work with the EPI to: (1) advocate for increased investment in immunization at national, provincial, and zonal level; (2) monitor program spending and link it to performance/results;(3) independently verify coverage estimates; (4) continue to work with the health zones, provinces and other immunization partners to improve their data quality; (5) improve partner coordination and problem-solving at the provincial level (i.e., by establishing and/or strengthening provincial ICCs); and (6) provide regular, actionable feedback and recommendations to the national strategic ICC and the highest levels of the GDRC and the partner agencies.

MCHIP plans to assist in developing the terms of reference (TOR) for a small immunization technical support group at national level. Such a group could be funded through the HPI/PROSANI bilateral project, a global program such as MCHIP, another dedicated USAID mechanism, or by a group of partners.

Recommendation 3: Continue to offer technical assistance to the EPI during and after the launch of PCV-13; encourage the GDRC to delay its application to the GAVI Alliance for the introduction of rotavirus vaccine until after PCV-13 has been successfully introduced

MCHIP is already actively engaged in the PCV-13 introduction process. The country was not fully prepared when the vaccine was launched in April 2011, so the introduction will be phased. As the vaccine rolls out to the different provinces and health zones, continued support will be needed to identify and address issues with the distribution, storage, acceptance and use of the new vaccine. Adverse events must also be monitored and investigated, and, because the cost of PCV-13 is considerably higher than that of earlier vaccines, proper storage and low wastage rates are necessary before it will be a truly cost-effective investment.

MCHIP can also assist the EPI with the introduction of rotavirus vaccine. However, because of the uncertainties surrounding the PCV-13 introduction, USAID/DRC is encouraged to offer this technical support to the EPI only once PCV-13 is available (and can be distributed and stored properly) in all parts of the country.

MCHIP is continuing to support the PCV-13 introduction by offering immunization staff time and travel through the end of FY'11.

The post-introduction evaluation of PCV-13 should take place in 2012. The plan to phase introduction and learn from early introduction before tailoring later phases means more active monitoring and work with provinces and zones as they plan for their own part in the national rollout of the vaccine. To actively participate in this monitoring and planning, MCHIP may support this activity by applying core funding to cover staff or consultant time, resources permitting.

Recommendation 4: Continue to promote and support the establishment and strengthening of Provincial ICCs

MCHIP is ready to share its positive experiences and tools for establishing and working with provincial ICCs to improve immunization results with the new USAID bilateral project team. This is a model that addresses the need for better coordination of partner inputs and greater equity across health zones. It is also a model that may fit well with the strategy proposed by the bilateral partners and one that could, over time, be effective not only in immunization, but also in coordinating partner support for more integrated packages of MNCH interventions.

MCHIP has briefed the bilateral project team on past experience with the Provincial ICC model during the transition period. Minimal time and travel are also included in the MCHIP Year Four Core workplan to support the participation of MCHIP immunization staff during the quarterly ICC meetings in Sud Kivu province.

Recommendation 5: Continue to support the organization and monitoring of national polio campaigns and other disease control activities

MCHIP has been asked by USAID/DRC and USAID's Global Polio Coordinator to continue providing technical support and oversight as the country works to stop the further spread of the wild polio virus.

MCHIP's support is currently funded through its Year Three Core Workplan which covers expert review and technical input to DRC's containment plans, external monitoring and support during polio campaigns, and consultation to ensure that the polio response is well articulated with the national immunization strategy and does not undermine or distract from improving the routine immunization services and thereby sustaining polio coverage overtime.

4. Integrated Maternal and Newborn Health

Objective: To improve maternal and newborn health through expansion of Essential Newborn Care (ENC) and the Active Management of the Third Stage of Labor (AMTSL) and other maternal and newborn health interventions

Background

DRC has high maternal and neonatal mortality rates as indicated in Table 14. While there has been significant decrease in the maternal mortality ratio (MMR) and some decrease in the under-five mortality rate, there has been no change in the neonatal mortality rate (NMR) over the past two decades. In fact, it appears to have increased slightly since 2002.

Table 13: DRC MNCH Mortality Data

Source	MMR (per 100 000 live births)	NMR (per 1000 live births)	< 5 Mortality (per 1000 live births)
1992 – 1997 (ELS)	2100	38	172
1997 – 2002 (MICS 2)	1289	37	165
2002 – 2007 (DHS)	549	42	148

The four major causes of maternal mortality are obstetric hemorrhage (mostly postpartum hemorrhage), hypertensive disorders in pregnancy (pre-eclampsia and eclampsia), infections (also mostly in the immediate postpartum), and obstructed labor. Hemorrhage and hypertension together account for more than half of maternal deaths.

The main causes of deaths in the neonatal period, or the first four weeks of life, include sepsis, birth asphyxia and trauma, and complications of prematurity. According to the DHS (2007), the incidence of low birth weight in DRC is 7.7%, lower than the regional average of 14% for sub-Saharan Africa, but significant because of the high risk of death in low birth-weight newborns.

From 2007 to 2009, USAID's BASICS and POPPHI projects worked closely with the MOH, the AXxes Project and other implementing partners to improve maternal and newborn health by adapting and implementing an integrated package of Essential Newborn Care (ENC) and Active Management of the Third Stage Labor (AMTSL). Technical assistance was provided to adapt the generic package and promote strategies linking these evidence-based maternal and newborn health interventions at the community and facility level. Early implementation involved the introduction of ENC, early postnatal care with AMTSL at facilities, and behavior change communication strategies to improve maternal and newborn health practices at the community

level. After approximately two years of technical assistance from BASICS and POPPHI, when the BASICS office closed in March 2009, the following results had been achieved:

- Policymakers had reached consensus on a new integrated MNH policy that was being finalized;
- A national Newborn Health Task Force had been established;
- 27 national, 97 facility-level and 95 community trainers had been trained and training had been rolled out in 30 health zones--25 with support from AXxes and 5 supported by UNICEF; and
- 422 health workers had been trained at the health zone, maternity, and community levels.

MCHIP's Approach

MCHIP built on the early achievements of BASICS and POPPHI and continued providing technical assistance to AXxes, the MOH and other partners. One of the first steps was to develop a national implementation plan for ENC and AMTSL, with special focus on AXxes-supported health zones. Thereafter, MCHIP provided technical support to the MOH and to AXxes, LMS, and UNICEF staff during implementation. This included assistance for the:

- Updating of national MNH policies, standards and guidelines in late 2009/early 2010;
- Adaptation of proven MNH tools, such as antenatal cards, partographs and registers to track antenatal, delivery and postnatal care;
- Training and supervision of health providers, supervisors and community workers in the ENC/AMTSL package and other maternal and newborn interventions;
- Design and field testing of an integrated CCM and family planning counseling and contraceptive distribution activity in AXxes health zones (see section 1 on CCM for in-depth description of this effort);
- Regular monitoring and evaluation of the quality of MNH care provided in the AXxes-supported health zones.

Key MNH Interventions

The high impact MNH interventions at the core of MCHIP activities in DRC include:

- Promotion of ANC
- Integration of maternal and newborn care
- Active management of the third stage of labor¹ (AMTSL)
- Essential preventive newborn care
- Resuscitation for birth asphyxia
- Postnatal care of the mother and baby
- Identification and treatment of major and minor infections in the newborn
- Additional newer elements
 - Family planning
 - Kangaroo Mother Care (KMC)
 - Pre-eclampsia and Eclampsia
 - Partograph
 - Vesico-vaginal fistulas

Activities and Results

The initial policy work and training in ENC/AMTSL was carried out by USAID's BASICS and POPPHI projects through March 2009, when the transition was made to USAID's new Maternal and Child Integrated Program (MCHIP). The prime implementing agency in DRC, AXxes, was the same during the BASICS/POPPHI and MCHIP periods of support. To demonstrate the continuum of technical assistance from these USAID projects more completely, we are including in this report not only those results noted during the last 20 months of MCHIP support, but those over the last four years, as well.

National MNH policies, guidelines and tools developed with partners

MCHIP was an active member of DRC's National MNCH Task Force, which is led by the MOH and also includes other partners such as WHO, UNICEF, IRC, World Bank, and GTZ. Two essential goals identified by the National MNCH Task Force have been to: 1) update and further integrate existing standards, guidelines, and tools for maternal and newborn health and 2) ensure their use by all relevant programs and partners.

With the aim of accelerating mortality decline, the MOH's National Program for Reproductive Health (PNSR, a key member of the National MNCH Task Force) embarked upon an effort in late 2009 to update its own standards, guidelines and tools. The PNSR invited all programs that have a direct or indirect influence on maternal and newborn health to participate in the exercise. The objective was to ensure cohesion between programs and rationalize health indicators used by the different programs. Programs that participated in the activity included those for HIV/AIDS, malaria, sickle cell anemia, tuberculosis, IMCI, adolescent health, blood transfusion safety, nutrition, immunization, communication for health promotion, and labor and industry.

MCHIP technical advisors worked closely with PNSR on this effort, as did WHO, LMS, and AXxes. MCHIP advisors participated in the technical working groups that drafted these revised standards and produced the integrated training, supervision and information tools that will be required to implement them.

MCHIP, BASICS and POPPHI have collaborated with the MOH, AXxes and LMS projects, UNICEF and other NGO partners on the development of several important learning resource packages that are currently being used in the country. These include the integrated essential maternal and newborn care training package; the screening, identification, and management of gestational hypertension training package, emphasizing pre-eclampsia and eclampsia; training materials on use of the partograph; and family planning training materials for community health workers. Of note is the inclusion of steps for AMTSL and ENC in the delivery register, and steps for AMTSL on the maternal care card. Data collection tools were pre-tested in multiple facilities, revised based on input in December 2010, and validated after a consensus built on these new products in January 2011. Table 14 lists the key policies, guidelines and tools developed with support from the USAID global programs and the roles they played.

Next steps: *It will be essential with the support of the new bilateral project to disseminate and evaluate the impact of the new and more fully integrated MNH standards, guidelines and tools.*

Table 14: Policies, guidelines, training packages and other tools produced by the MOH since 2007, with BASICS, POPPHI and MCHIP

Documents and Tools		Produced/ revised	Roles Played by of USAID Global Projects and Current Status
1	<p>Integrated MNH Training Tools for Facility Workers</p> <ul style="list-style-type: none"> • Reference Manual • Guide for Trainers of Facility- Level Workers • Participants' Guide • Learning and supervisory checklists 	2008	Adapted with MOH from generic materials developed by BASICS and POPPHI from Feb to July 2008; still in use.
2	<p>Training Tools for Community Level Workers</p> <ul style="list-style-type: none"> • Counseling Cards • Additional Job Aids • Guide for Training of Community Health Workers 	2008	Adapted from generic materials and tools in use in the country, from Feb-July 2008; still in use.
3	Supervisory Checklists	2009/2010	Developed with support from BASICS and POPPHI in March 2009; field tested and streamlined with support from MCHIP in 2009/2010
4	Integrated Standards and Guidelines related to Maternal and Newborn Care	2010	Policies and guidelines developed with support from MCHIP and others from January to December 2010.
5	<p>Tools for Monitoring and Evaluation</p> <ul style="list-style-type: none"> • Partographs including follow-up assessment of the mother and baby during hospital stay • Delivery Room Register • Postpartum visit register • General Clinic Register • Questionnaire on maternal knowledge, attitudes and practices 	2010	Originally developed by BASICS. M&E tools were revised and updated with support from MCHIP in 2010; pretest was completed December 2010; revisions and further testing still needed prior to adoption. New key MNH indicators also need to be incorporated in the DRC HMIS.

6	Training tools for KMC unit Centers <ul style="list-style-type: none"> • Reference Manual • Guide for trainers • Participants' guide 	2011	Adapted from the tools developed by Save the Children in Mali
7	Monitoring and evaluation tools for KMC <ul style="list-style-type: none"> • KMC facility Register • KMC follow-up register • KMC indicators 	2011	
8	KMC supervisory checklists: <ul style="list-style-type: none"> • For KMC unit • For KMC implementation steps 	2011	Adapted from generic supervisory checklists developed by MCHIP

Integrated MNH training conducted for health facility staff

Each of DRC's health zones has approximately 15 health centers. From 2008 through September 2010, an average of one hospital and four health centers in each of 66 health zones received training in essential newborn care, AMTSL and aspects of emergency obstetrical and newborn care. Training commenced with AXxes HZs and later expanded to include UNICEF and LMS, with support initially from BASICS/POPPHI and later from MCHIP. In every health center, two skilled workers were trained off site and then asked to update and carry out on-the-job capacity building for other center staff involved in the care of pregnant women and newborns. BASICS and POPPHI conducted the initial training activities in some of the health zones and MCHIP continued follow-up activities in these areas while also supporting training in the areas added after April 2009.

At facility level there are three categories of birth attendants. A1 or "accoucheuse diplômée" (midwife with a diploma) have three years training after nursing school and a university degree. These were considered skilled birth attendants (SBA). Other less qualified categories were A2 nurses or "infirmières diplômées" (nurses with diploma) and A3 nurses or "aides-infirmières" (nursing assistants). Based on the requirements of the MOH, only A1 and A2 nurses were included in the official training supported by AXxes and MCHIP. However, many of the other birth attendants working at the same facilities acquired skills from these skilled birth attendants after they were trained. As mentioned above, all health workers who received training from AXxes and MCHIP were asked to share their new knowledge and skills with their colleagues. Table 16 provides information on the total number of health zones where training activities occurred and the number of facility and community health workers trained. The first training courses were conducted in July 2008, and training continued through September 2010.

Table 15: MNH Training Coverage 2008-2010 (health zones and health workers)

	TOTAL			AXxes			UNICEF			LMS		
	T	M	F	T	M	F	T	M	F	T	M	F
No. of health zones	66			57			5			4		
No. of facility workers	642	317	325	570	283	287	51	28	23	21	6	15
No. of community health workers	570	324	246	570	324	246						
T = Total; M = Male; F = Female												

In the second and third quarters of 2011, MCHIP supported the training of and additional 64 facility health workers in LUIZA and DEKESSE, two Health Zones of the new bilateral IHP/PROSANI project.

Next steps? *There will always be a need to refresh the knowledge and skills of those who have been trained and to provide training to new individuals who were not trained in the initial MNH courses. With recent modifications to national policies, guidelines and tools, facility-based providers and supervisors will also require up-dating through on-the-job training and formal orientation sessions. The training of community health workers, as explained below, also requires further attention.*

Community-based maternal and newborn interventions supported in AXxes health zones

Improving the quality and coverage of community-based MNH interventions was one of the BASICS/POPPHI and then MCHIP goals. Over the life of our combined involvement, as shown in Table 15, 570 CHWs from 19 AXxes-supported health zones were trained in behavior change communication (BCC) strategies, basic preventive maternal and newborn care and the identification of danger signs and need for referral. An MNH data-collection tool was also developed for use by CHWs. Although there was some uptake after training, this proved to be one of the most challenging and least successful areas of our technical support.

Follow-up evaluation indicated that most of the CHWs were not carrying out their assigned activities, nor were they receiving adequate supportive supervision through the provincial government officers and health center staff. Evidence shows that household birth preparedness, use of skilled birth attendants, early postnatal and postpartum visits, and the recognition of danger signs and prompt care seeking when they occur in the community are the key to saving both maternal and newborn lives. The lack of attention given by AXxes to the community component after CHW training was disappointing.

Next steps? *Community-based maternal and newborn care is an area of great need and one that deserves more attention in future efforts to reduce DRC's high rates of maternal and neonatal mortality. (See Challenges and Conclusions and Recommendations below).*

Follow-up and supportive supervision in AXxes health zones

Supportive supervision is primarily the responsibility of the MOH's provincial and zonal supervisors. MCHIP and AXxes project staff routinely accompanied local supervisors in the health zones on their supervisory visits. During these visits, they conducted post-training follow-up, assessed the transfer of learning to the workplace and promoted more uniform standards of care. To ensure retention post-training, the skills taught during different training activities had to be added to the routine supervision tools used by MOH staff. Therefore, MCHIP and AXxes personnel worked with members of the MOH monitoring and supervision team to review and modify existing supervision tools for the central, regional, and district levels, and a team at the PNSR was tasked with finalizing the revised supervision tools.

Next steps? *The revised supervision tools will require field testing and additional refinements before they are adopted and disseminated more widely. We recommend that PNSR ensure that these tools are finalized, disseminated and in use.*

Kangaroo Mother Care (KMC) advocacy and training of national training team

There is ample evidence of the value of KMC in the care of preterm/low birth weight babies. In 2010, MCHIP offered technical assistance to a number of its partners, including the Ministry of Health (PNSR), UNICEF, the AXxes and LMS projects, to strengthen and improve KMC in select hospitals and health centers. MCHIP conducted a short training of trainers course on KMC in Kinshasa and worked to include KMC standards and guidelines in the national policies of the Ministry of Health.

MCHIP also provided two health centers in Katanga and Sud Kivu with the basic physical infrastructure to serve as future KMC centers of excellence and worked with UNICEF and the MOH to strengthen two hospital-based KMC services in Kinshasa and to plan another future center of excellence in Bas-Congo.

Also, MCHIP led a group of five technical experts, including two MCHIP MNH staff members, a pediatrician, an obstetrician and a representative from UNICEF on a study tour to Mali, where they visited and learned from functioning KMC centers in that country. This study tour, sponsored by UNICEF and organized by Save the Children/Mali, was designed to build the capacity of the participants as trainers and managers of existing and new KMC centers.

Tools for capacity building and for the monitoring and evaluation of facility-based KMC have been adapted for DRC and are ready for pretesting. Next steps included a workshop to train KMC trainers, along with strengthening the pediatric unit at the General Hospital of Kinshasa as a demonstration area for the training of other clinician and facility managers.

Unfortunately, UNICEF had trouble mobilizing the necessary resources for KMC implementation at the end of 2010. This not only delayed the study tour and training of master trainers in Mali, it also delayed the training of the first pool of KMC trainers at the national and provincial level after the study tour.



However in July 2011, with the technical support of MCHIP and in collaboration with the new bilateral IHP/PROSANI, the MOH organized the training of the first pool of KMC trainers at facility level. The competence of 6 skilled health workers - nurses and doctors - 8 technical coordinators of IHP/PROSANI, and 8 representatives from the MOH were trained, among them 13 Male and 9 Female.

Next steps? *Further investment by IHP/PROSANI and UNICEF is encouraged to fully establish the fledgling KMC “Centers of Excellence” and develop the capacity of other hospitals and health centers to offer high quality KMC to premature and low birth-weight infants..*

Integrated family planning and CCM field trial

MCHIP planned and carried out a short field trial to determine the operational issues when combining family planning counseling and contraceptive distribution and community case management of childhood illness by CHWs. This trial was carried out in 6 health zones supported by the AXxes project, during the second half of FY'10. Although the time was short, the initial results were positive. (see Objective 1 on “Community Case Management” for further discussion).

Next steps? *This is an example of MNCH integration that should be explored more thoroughly by future USAID projects.*

Indicators, data collection tools and job aides for integrated MNH tested

A consensus was reached with the MNCH Task Force to adapt or update selected MNH tools for data collection during the antenatal, delivery and postnatal periods. As such, MCHIP personnel worked with the MOH monitoring and supervision team to include essential indicators in the following data collection tools:

1. Antenatal register
2. Antenatal card
3. Delivery register
4. Partograph
5. Postnatal register
6. Register for the community health workers (RECO)

Pretesting of these tools was carried out in selected health facilities in August-September, 2010, with a view to refining and adding the most useful MNH indicators and data collection tools to the national Health Management Information System (HMIS) over the medium term. Evaluation of the results was handicapped by fact that it took place near the end of the AXxes agreement. It will be followed up by the new bilateral.

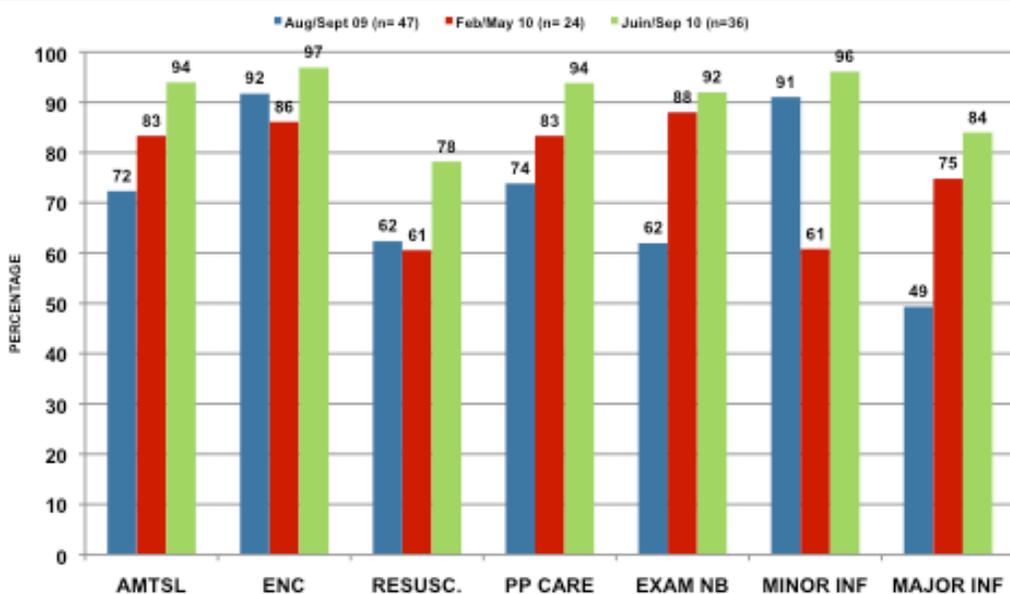
Next steps? *Attention to routine information systems will continue to be needed and this is an area of MCHIP’s work with AXxes and the MOH that merits future attention. Until DRC is able to collect useful maternal and newborn service and outcome data in its health facilities, it will be impossible to monitor or to take timely action to improve the quality and coverage of maternal and newborn care.*

Changes in health provider performance and quality of care evaluated

MCHIP and AXxes carried out a series of in-depth supervision visits, using pre-defined checklists to evaluate knowledge and competencies, in five health centers in each of ten health zones (Bunyakiri, Dibindi, Ibanda, Kadutu, Kalonge, Katana, Mpokolo, Mutoto, Songa, Tshikaji), These health centers were followed over time, with each receiving three supervisory visits from

September 2009 through September 2010. The results of the supervisory visits are shown in Figure 11.

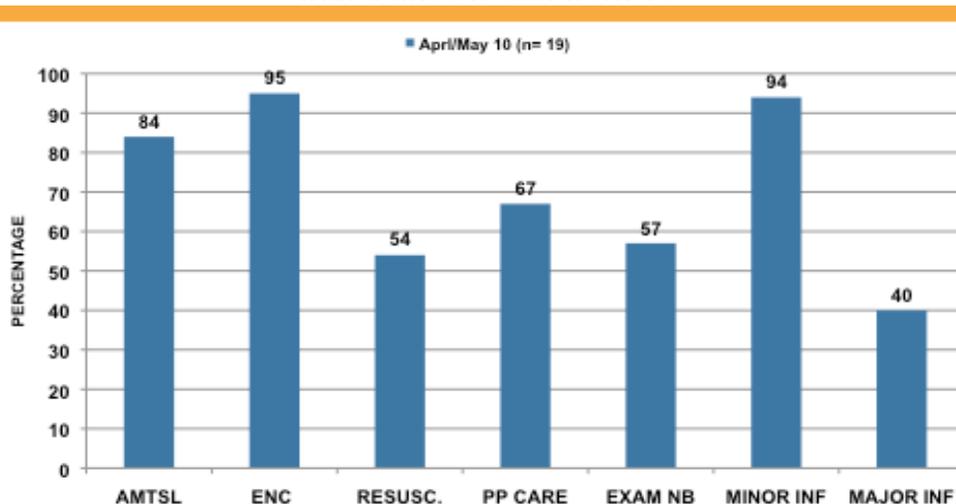
Figure 11: Changes in provider skills in 10 health zones after multiple rounds of supervision (MNH)



The greatest improvement after training was noted in areas such as implementation of AMTSL and basic essential newborn care at birth. There were challenges in maintaining skills in neonatal resuscitation and care of the sick newborn, whether with major or minor infection. Individual peripheral centers did not see many cases of neonatal asphyxia at birth or neonatal infections; therefore, staff in these centers had difficulties maintaining the necessary skills. In fact, such cases were rarely, if ever, seen during supervisory visits either, so supervisors primarily checked the skills of the health workers using mannequins and checklists. There was also difficulty in collecting relevant data because critical MNH indicators, especially those related to newborn health, are not currently included in the national HMIS (“SNIS”) and are therefore not recorded.

In addition to evaluating health workers who had participated in formal training, supervisors also evaluated selected health workers who had improved their knowledge and competence as a result of the support they received from their trained colleagues. Nineteen (19) of these providers were evaluated in the health zones of Fungurume, Kanzenze, Dilala, Lualaba, Manika Health Zones. The results (Figure 12) were similar to those noted in the evaluation of the trained health workers (Figure 11).

Figure 12: Skills of providers who gained competence through interaction with trained health workers



Training follow-up and supervision presented a number of challenges, as noted below. Because of this, “group” supervision was tried as an alternative to individual supervisory visits in one health zone (Lubudi), where health workers from five centers gathered together at one site. In using this method, MCHIP found that the supervisor could cover more health workers and that it was easier and less time consuming, after assessing individual knowledge and skills, to update the workers’ competencies as a group. The one disadvantage of using “group” supervision was that it did not allow the supervisor to observe or collect important information at the service delivery sites. This can, however, be rectified by rotating the venue during subsequent supervisory sessions.

Next steps? Systematic training follow-up and evaluation of provider performance should guide future approaches to improving maternal and newborn health knowledge and practice. Areas of weak performance (newborn resuscitation, postpartum and postnatal care and recognition and treatment of major infection) require further attention through short training courses or on-the-job training.

Further work is also needed to refine the group supervision and on-the-job training model introduced by MCHIP and AXxes. Results in Lubudi zone were encouraging, but the trial was small and it should be repeated with more health facilities and zones, and over a longer period of time.

Results: Performance in AXxes-supported health zones

Key MNH indicators from AXxes zones are noted in Table 16. The results are expressed as numbers achieved, based on USAID Mission requirements. As shown, there was progressive improvement over the four years in the numbers of women receiving at least one antenatal visit and giving birth with a skilled birth attendant. Similar trends were noted for women who received AMTSL and babies who received the basic elements of preventive ENC¹².

¹² Essential elements of ENC at birth: being wiped dry immediately after birth and wrapped appropriately including the head in order to maintain body temperature, eye care, early initiation of breastfeeding and cord care.

Table 16: ACHIEVEMENTS IN AXYES HEALTH ZONES

(Data pertain to USG assisted programs and facilities and are presented as actual figures based on USAID Mission requirements)

	Year 1 Oct '06-Sept '07	Year 2 Oct '07 – Sept '08	Year 3 Oct '08 – Sept '09	Year 4 Oct '09 – Sept '10	Total
Total Population	7,392,000	8,027,086	8,027,086	8,267,899	NA
1. Number of women with at least one ANC visits with a skilled provider	189,632	273,826	304,466	331,649	1,099,573
2. Number of deliveries with a skilled birth attendant (SBA)	138,906	204,216	234,548	262,105	839,775
3. Number of women receiving AMSTL	7,094	116,575	211,871	282,948	618,488
4. Number of postpartum visits within 3 days of birth	45,167	204,216	234,548	262,105	746,036
5. Number of newborns receiving essential newborn care	34,811	174,414	220,258	251,215	680,698
6. Number of sick newborns receiving antibiotics from appropriate health workers	392	8,759	7,812	10,932	27,895
NOTE:					
a) Total populations noted for yr 2 and 3 are the same because figures could be updated only in Sept 2008 and were used for both years b) The number of women receiving AMTSL in yr 4 is higher than the number of deliveries conducted by SBAs because some of the less skilled staff such as “aides infirmières” or A3 nurses working at facilities acquired skills from the trained SBAs and started applying this intervention					

The number of women and babies who presented for postnatal visits within three days of birth also increased steadily. The MOH mandate is to keep women and their newborns at the facility for three days after birth. When project activities began, providers at the facilities gave very little care during the three days following birth, and they did not consistently evaluate either the woman or her newborn. This practice began to change with the introduction of the intervention, and postnatal care and evaluation of the newborn and postpartum woman improved over time. In one of the hospitals that had served as a site for practical training, the nursing supervisor in charge of the delivery room allocated one of their nurses to actually remain in the postnatal ward to help promote appropriate care of the woman and baby (see Appendix # 1 on success stories) and be available if problems occurred.

The percentage of babies receiving antibiotics from skilled birth attendants increased to some extent by the end of a year 2, dropped in year 3 and increased again in year 4. This was the weakest indicator. Sick babies were often identified late and even then were not necessarily taken to appropriate skilled health workers in health centers. There were also several challenges in *documenting* this indicator. At peripheral centers, babies suspected of having major infections were given the first dose of antibiotics and sent to the referral center. Hence, they received the full treatment at higher level centers. There may therefore be some element of duplication. One option in the future would be measure this indicator only in centers where full treatment is administered, as in referral centers.

Challenges

Difficulties associated with integration

One of the important aspects of this program was the integration of several elements of reproductive, maternal and newborn care. This approach was in line with the MOH's vision to address the causes of mortality in mothers and newborns in an integrated way, taking advantage of the logical synergies between interventions that are targeted for labor, childbirth, and the postnatal period. Integration allowed the sharing of funds among the technical areas, and by combining training, supervision and monitoring, there were certain efficiencies achieved that would not have been possible otherwise. However, this approach did have its challenges.

More messages needed to be conveyed by health workers; a greater number of competencies needed to be taught during training and reinforced in training follow-up; health workers at all levels were expected to develop and retain perhaps too many competencies at once; and the time and effort required for integrated training, supervision, monitoring and evaluation increased, as did the bulk and cost of tools. We also found that it was more difficult for trainees to improve competence in newer skills, such as certain components of newborn health and postpartum care, if those skills were not required on a regular basis in their health centers (e.g., newborn resuscitation and management of newborn infections). With very few opportunities to use and practice them, the transfer of learning from the training activity to the worksite was difficult.

Lack of supervision

MCHIP noted a fundamental and pervasive problem motivating staff to carry out supervisory visits. The long distances to be traveled and the poor quality of DRC's roads have historically been a problem, but adding to this the large number of components to be covered during a

supervision visit may also have contributed to the supervisors' lack of motivation. The other problem we encountered was with supervisors in the government service who work in offices and no longer are in touch with clinical practices. This meant that supervisory checklists had to be more detailed to guide the supervisors, and this increased the length of these tools and the time required to complete them. The national team of MNH supervisors, including staff from MCHIP and AXxes, tried to accompany the provincial supervisors whenever possible to provide additional support, but the added cost and other commitments made this support irregular. Where the chief medical officer in the health zone was motivated to offer support, the outcomes were better, but most were too occupied providing services to provide regular supervisory support. It should be noted that one of the reasons for integrating maternal and newborn activities was to combine supervisory trips, reduce their frequency and hopefully address part of the motivation issue. MCHIP is not convinced that the integrated supervision achieved these objectives and suggests that this issue be addressed more systematically by the new bilateral project team.

Limited results at community level

Supervision of CHWs after initial training was difficult due to poor coordination between the local teams involved in supervision such as 'Comité de Développement', the supervisory staff of the health zones (Chief Zonal Medical Officer and animateur communautaire) and the health centers (infirmière titulaire). MCHIP found that CHW follow-up, one-on-one supervision, updates and actual operationalization of the recommended home visits were very inadequate. This is another area of the work that MCHIP helped the MOH start that will require additional attention in the future.

Few evidence-based indicators for monitoring and improving care

There were a number of challenges related to the collection, review and onward transmission of maternal/newborn data for monitoring purposes. The most significant is that several meaningful maternal health indicators and most of the evidence-based newborn indicators are not part of the National HMIS. Health workers were not always filling existing forms such as the partograph correctly and retention of trained staff is an underlying problem, with transfers and departures a common problem.

Supply and equipment issues

Many health facilities lacked the necessary equipment and supplies to adequately implement the quality care they were trained to provide. Follow-up supervisory visits found that some centers did not have ventilatory bags for resuscitation, specific medications such as magnesium sulphate and vitamin K, functional "newborn baby corner" with warmers for care of babies with problems such as birth asphyxia, etc.

Delayed release of partner funding

MCHIP was able to provide technical assistance for this effort, but did not have funding to establish the KMC training sites. On the positive side, MCHIP generated considerable interest in expanding KMC and, as a result, commitments were made by the MOH and by UNICEF, AXxes and MCHIP to work together to strengthen and expand the number of KMC training sites. However, there were major challenges in ensuring the release of funds for some of the necessary activities. See recommendation 4 below.

Conclusions and Recommendations

An evaluation of the work started by BASICS/POPPHI, continued by MCHIP and implemented by the MOH with AXxes, LMS, UNICEF and others, showed improvement in maternal newborn indicators. The proportion of women seeking antenatal care, deliveries with skilled attendants at facilities, women receiving AMTSL, babies given basic preventive ENC, and women and babies having early postnatal visits increased in areas supported by MCHIP. Health workers were able to update their fellow workers after their own training and the performance of those they trained mirrored that of those who had been formally trained. Skills in neonatal resuscitation and management of infections in the newborn were more difficult for health facility staff to master and sustain. Also, where the number of staff was inadequate and the workload high, newer elements such as postpartum care of the mother and early postnatal visits for the baby tended to be neglected. There were also problems in improving practices related to rare occurrences, i.e., newborn resuscitation for birth asphyxia, treatment of newborn infections, and specific aspects of postpartum care. Other major challenges were in the regular provision of supportive supervision, information systems and community-based interventions.

The following recommendations are made on the basis of MCHIP experiences—positive and negative—with the integration of maternal and newborn interventions at national, facility and community level. During close of project workshops, MCHIP shared its experiences, results, challenges with the new bilateral project, IHP/PROSANI, and other in-country partners.

Recommendation 1: Continue supporting integrated maternal and newborn training and supervision, based on lessons learned

The integration of policies, training packages, supervision checklists and job aides promotes integrated care for mothers and newborns and reduces missed opportunities for care. However, in a large integrated program, it is difficult to effectively implement all interventions and expect transfer of learning for all new competencies through short training courses. To address the challenges associated with integrated training and follow-up, MCHIP recommends building on past successes and moving ahead to test additional innovations. Some of MCHIP's more important lessons—positive and negative—and recommendations in relation to integrated training and supervision include:

1. **Prioritize the elements *within* each intervention package that are feasible, scalable and will have the greatest impact on mortality.** Although DRC's integrated AMTSL/ENC approach evolved to focus on a more comprehensive maternal and newborn health package, focusing on one high impact maternal health intervention, AMTSL, and then moving on to others (i.e., management of pre-eclampsia/eclampsia, family planning, etc.) seems to have produced positive results. ENC competencies were also transferred with some success.
2. **Streamline and experiment with modular training:** Promote more compact training modules with checklists and job aids, as these will reduce printing and training costs. This is particularly important when several technical areas are integrated. To increase retention, consider breaking up the training activities into modules (i.e., care during labor; care during second and third stages and the first 6 hours postpartum; care during

the postnatal period; etc.) to reduce time spent away from the work site and the number of competing competencies to be mastered during the training period. This will increase the cost of training, so that will need to be taken into account, unless on-site training can be promoted further.

3. **Advocate for attention to areas of known weakness:** For those elements of a package that are weak or difficult to improve, there must be continued advocacy to promote improvement. Newborn resuscitation, postpartum care and treatment of major infections in newborns have been areas of weak provider performance that require greater attention. This could be by strengthening the content of the existing training package and/or through short on-the-job training and orientation sessions.
4. **Continue to promote peer-to-peer and other forms of training:** MCHIP encouraged providers who were trained in formal courses to train their peers after returning home. This produced encouraging results. Peer training should be further tested as a low-cost way to update the skills of facility-based providers. To formalize the process and provide support for the providers responsible for training their peers, on-site and/or whole-site training and blended learning approaches are worth testing in the future. Such blended approaches might combine group-based and self-paced learning of theory with clinical practice and use site-based mentors to guide learners through the materials
5. **Address supply and equipment needs:** There was better transfer of learning of new competencies when necessary equipment and supplies were available at the service delivery site. Procurement of equipment and supplies takes a significant amount of time, so before commencing training, the necessary systems and logistics for procurement (as well as strategies for repair and replacement) must be in place. Besides equipment for care, increasing the supply of the more economical mannequins that are available in the HBB program would make it possible to reinforce newborn resuscitation skills that have been difficult for providers to master in the past.
6. **Quality improvement:** Innovative methods for quality improvement and monitoring and evaluation would also be beneficial.

Recommendation 2: Give equal attention to community and facility-based MNH approaches

Although the community-based interventions are the most likely to save newborn lives, they proved to be the most difficult to implement and follow-up. More attention should be given and more innovative measures instituted in support of community-based essential newborn care interventions, in particular. Maintenance and review of records and indicators, group supervision, interactions and exchange of experiences and lessons learned may be helpful. Also, it will be necessary to strengthen links between the health facilities and the communities and to promote actions that increase local ownership of programs at peripheral levels. More resources should be dedicated to community approaches in future programs to ensure that those who need information and care receive it when they need it and as close to home as possible.

Recommendation 3: Enhance the information system to permit monitoring and evaluation of maternal and newborn care

Ensuring the integration of selected indicators into existing health registers and data collection tools is an area of MCHIP's work with the MOH that merits future attention. DRC must be able to collect useful maternal and newborn care data in its health facilities and communities if it is to monitor and take timely action to improve the coverage and quality of that care. MCHIP worked with the MOH and the AXxes project to add key maternal and newborn indicators to the existing registers, supervisory forms and other data collection tools. These adapted tools were then tested in a number of health facilities in late FY'10, but the test was cut short by the end of the AXxes project. This field test should be repeated with IHP/PROSANI and in a larger number of health facilities and communities. This time the test should involve decision makers from within the NRHP and its Steering Committee, and from the national HMIS. After arriving at a useable set of indicators and forms, continued advocacy will be required to ensure that they become part of the national HMIS and are more widely used.

Recommendation 4: Continue working with UNICEF to establish the Kangaroo Mother Care training sites and train national and provincial trainers

MCHIP was able to provide technical assistance to raise awareness and leverage commitments from the MOH and UNICEF and AXxes to strengthen and expand the number of KMC training sites in the country. Delayed release of UNICEF funding at the end of 2010 caused a related delay in the training of national and provincial KMC trainers and the refurbishment and equipping of KMC units at the General Hospital of Kinshasa and two health centers in Katanga and Sud Kivi. MCHIP continued to advocate for the KMC centers in these three sites during the transition period and encouraged both the new USAID bilateral program and UNICEF to support this fledgling work.

Recommendation 5: Support the national rollout of Helping Babies Breathe

Newborn resuscitation was one of the most difficult competencies to develop and retain in health providers because of the infrequent occurrence of newborn asphyxia in their health facilities. DRC has accepted the new basic resuscitation package for babies not breathing properly at birth, Helping Babies Breathe (HBB). HBB is the strategy of the American Academy of Pediatrics (AAP) and was launched as a Global Development Alliance in June 2010, with USAID, AAP, NICHD, Save the Children and Laerdal Foundation as sponsors and MCHIP as one of USAID's technical assistance providers at country level. Based on MCHIP's experience teaching basic newborn resuscitation, active engagement with the organization that is taking the lead in DRC, Latter Day Saints Charities, is recommended. HBB could be an important opportunity to mobilize resources and reinforce basic newborn resuscitation skills and equipment in health facilities.

Many sites, however, still lack basic equipment for newborn resuscitation. In addition, mannequins to practice skills of resuscitation are scarce, thus few providers have the opportunity to maintain their new skills, and get rusty. Additional mannequins would partially address this problem. Work in consensus with the MOH and a National Working Group to ensure maintenance of suitable standards, expansion to scale and sustainability is also necessary.

Finally, there is a need to integrate HBB with appropriate components of the MNH activities that can be readily taken to scale, as well as harmonize HBB with existing basic resuscitation programs.

Recommendation 6: Address the motivation and training of supervisors

While it is generally known that supervision is essential to improve the quality of services, it requires strong advocacy and *motivated and* trained supervisors. Conventionally used in-country supervisory systems are time consuming as the distances between the health facilities are great and there are a number of technical areas to evaluate. Supervision by centrally-based teams is more difficult and less frequent given the long distances, the inaccessibility of health zones and air travel problems. Increased involvement of the provincial teams will be more helpful. In addition, both provincial and health zone supervisors need to take increased ownership for this activity.

Due to the major challenges, *alternative methods* for supervision such as *internal* supervision for larger centers and hospitals and *group supervision* for health centers with few staff need to be tried. In the latter options health staff need to be motivated to maintain data to monitor key indicators. Key activities in the group sessions could include review of data to note changes, sharing of experiences, demonstrations and updates and not on long individual assessment of competence. The latter, while ideal, has been observed to be very time consuming and does not permit many workers to be covered because of prolonged and difficult travel and existing challenges in the supervisory system.

5. Point of Use Water Treatment

Objective 5: To expand the promotion and distribution of point of use water purification products (i.e., PUR and Aquatabs) and improve hygiene practices in cholera-endemic health zones in South Kivu.

Background

In 2008, USAID's Point of Use Water Disinfection and Zinc Treatment (POUZN) project expanded distribution of the water purification product, PUR, in the South Kivu region. This was done in rural areas through both commercial distribution and community-based channels, and distribution of PUR was complemented by interpersonal communication (IPC) activities in health centers and markets and through household visits, conducted by partner NGOs.

Also in 2008:



- branded and generic safe water spots were aired via community radio and television channels in endemic cholera areas;
- a baseline household survey was conducted in the health zone of Uvira in the South Kivu province to examine the current use of PUR at the household level and assess behaviors associated with the practice of treating drinking water and hygiene;
- information on the importance of safe water and POU water treatment was integrated into AXxes project training and trainees received 600 PUR demonstration kits;
- supervisory visits reinforced key messages and continued the promotion of POU to health zone staff;
- a new radio spot, a teledrama in Swahili, and other promotional/IEC materials were produced;
- household visits conducted by PSI mobile educators.

POUZN activities in DRC were managed by MCHIP partner PSI and its local affiliate, Association de Santé Familial (ASF). During the final POUZN project review meetings with the Ministry of Health, partners recommended expanding POUZN's water treatment and hygiene behavior change communication (BCC) activities into other cholera endemic health zones of South Kivu. Responding to this recommendation, and at the request of USAID/DRC, PSI/ASF worked through MCHIP from October 2009 to December 2010, to expand promotion and distribution of PUR in South Kivu.

MCHIP's Approach

PSI/ASF coordinated with the provincial and zonal health offices in Sud Kivu to plan and implement the safe water, hygiene and sanitation activities listed below. Three health zones (Kadutu, Ibanda and Bagira) were initially targeted for support. However, due to the severity of the cholera outbreak in the province, the provincial authorities asked MCHIP to add a fourth health zone (Uvira) and this was done. MCHIP worked in the four health zones to:

- Train CHWs on POU water treatment and the importance of other key personal and household hygiene behaviors (partners included CRS , Interchurch Medical Assistance, the AXxes project and the Ministry of Health);
- Distribute communication tools (brochures with instructions & posters) to support CHWs in effectively conveying key water/sanitation messages during “door to door” discussions with caregivers;
- Convey key messages and demonstrate PUR “door to door” during CHW home visits;
- Educate women sitting in clinic waiting rooms during ante and post natal visits on water, hygiene and sanitation issues and diarrhea prevention;
- Develop and implement a media campaign mainly through radio spots and radio talks to increase awareness about water quality issues;
- Create additional sales points for PUR water treatment packets in each of the four health zones; and
- Ensure the supply of PUR to these and the existing sales points in the four health zones.



Activities and Results

Working through PSI/ASF, MCHIP successfully expanded distribution of the POU water treatment product, PUR, in the South Kivu region. Distribution of PUR was carried out through community-based channels and emergency distribution and was complemented by promotional activities including mass media and interpersonal communication (IPC). PUR-branded and generic safe water radio spots were also aired along with radio talks. Promotional/IEC materials were produced and IPC at health centers and door to door sensitization were carried out by CHWs. Through these activities, MCHIP achieved the following results in Sud Kivu:

CHWs trained to promote improved hygiene practices

MCHIP trained 131 community health workers, clinical providers, religious leaders, and other local association in Uvira, Kadutu, Ibanda, Bagira health zones on the importance and correct use of point-of-use water treatment and key personal and household hygiene behaviors. The project empowered these community workers with communications skills and tools (household water treatment and hygiene communication and education materials, including brochures with instructions and posters previously developed by POUZN) and enabled them to effectively convey key water sanitation messages during “door to door” discussions with caregivers. As a result, over 3,800 households with household water treatment and hygiene messages were reached through the CHWs home visits and “door to door” discussions.

Messages and communication tools developed and disseminated

MCHIP supported a number of communication initiatives to disseminate messages to the general population on hygiene improvement practices. During the course of the project, MCHIP aired up to 500 safe water radio spot (French and Swahili) on 2 local radio stations and participated in more than 80 radio talk shows on community radio stations with the support and engagement of local authorities to increase awareness about water quality issues. Communication agents and trained CHWs conducted over 700 IPC (interpersonal communication) sessions among caregivers of children under five, students, point-of-sale agents, and others. They also distributed educational materials (PUR posters, folders and guide to use), as well as generic household water treatment and hygiene communication materials and targeted schools, churches, markets, and other sites. In addition, MCHIP supported over 8,000 twice-weekly, ante-natal and post-natal education sessions on safe water, hygiene, and sanitation through nurse-led clinics in Uvira, Kadutu, Ibanda and Bagira health zones. This proved to be a highly effective approach to reaching mothers and other caregivers of young children with important information about safe water and the prevention of diarrhea and other waterborne diseases through hygiene education.

Increased supply and demand for POU water purification products

Effective hygiene messaging led to an increased demand for the PUR and Aquatabs products and 140 new sales points for PUR water treatment packets were created as a result of MCHIP’s work. Over 300,000 packets of PUR were sold through these new and the existing PUR sales points, enabling an estimated 4,100 people to produce their own safe drinking water over a one year period in the cholera-prone health zones of Uvira, Kadutu, Ibanda, and Bagira. The recent 2010 end-line household survey on improved hygiene practices and safe water treatment in these health zones found that one in three respondents had used PUR and that one in four had purchased the product. And 14% of caregivers of children under five could show they had PUR in the household at the time of the survey, compared to only 2% in 2007. Moreover, it was reported that there was an increase in percent of people who knew that contaminated water was a cause of diarrhea; an increase in the percent of those who knew that PUR is a treatment product for drinking water; and an increase in the percent of those who knew that diarrhea could be avoided by washing hands.

Collaboration with WATSAN partners

In partnership with the MOH, UNICEF and other agencies promoting water and sanitation interventions (WATSAN), MCHIP supported sensitizations in markets, schools, churches, health centers and other venues to commemorate global Hand-Washing Day (October 15, 2009) and PSI/ASP planned similar events on Global Water Day (March 22nd, 2011). They also participated in the regular WATSAN cluster and health cluster monthly meetings with the other WATSAN and health partners (NGOs, UN Agencies and the GDRC institutions). MCHIP also was represented at the Hygiene Promotion In Emergency Training in Oriental Province, along with the delegations of other East WATSAN international and national actors including UNICEF, OXFAM, Solidarité and others.

Next steps: *MCHIP support for this activity in Sud Kivu ended in September 2010. PSI and ASF continue to work with the sales points and with the CHWs and nurses in Sud Kivu, and they, in turn, continue to deliver safe water, hygiene and sanitation messages during home visits and in ANC and well-child clinics in the four health zones. Funding for the behavior change aspects of this work is now provided by USAID under the AIDSTAR project. This funding mechanism does not provide the water treatment products--PUR and Aquatabs—but these are being supplied, on a temporary basis, by other donors (Procter and Gamble for PUR and UNICEF and UNDP for Aquatabs). Support for the provision of additional supplies of PUR and Aquatab, as well as additional BCC activities, must be galvanized as it will be critical for continued and sustained behavior change as well as expansion of the approach.*

Challenges

Point-of-use water purification is well accepted in DRC, but the population's access to fresh water sources is severely limited. Almost half of Congolese households spend 30 minutes or more to reach a water source and this is detrimental to having an adequate supply of water available in the home not only for drinking but also for washing hands. The country also suffers from a lack of sanitary toilets, with over 80% of households using rudimentary and inappropriate toilets or the open air, adding to the contamination that causes diarrhea, cholera and other enteric diseases.¹³

MCHIP's work in South Kivu, and POUZN's work before that, was designed to change behavior and create a sustainable demand for PUR. Although a lot of progress was made in South Kivu in a short period, as demonstrated by the results of the 2010 endline survey, the timeframe was too short to measure long-term changes in safe water, hygiene and sanitation behavior or to ensure that demand for PUR will be sustained without additional support. A sustainable supply of affordable POU products and continuous education and promotion to encourage their use will be required to increase demand and scale up distribution and use of PUR.

PUR's cost is still relatively high and the margin that must be split between ASF and the wholesalers and detailers in the private distribution network is low. This means that sustaining the distributor's motivation to buy and sell the product is another problem--one that must be addressed over the long term.

¹³ DHS 2007

Conclusions and Recommendations

Although its sustainability requires further evaluation, MCHIP's work in South Kivu successfully changed behaviors and increased the demand for and sale of POU safe water treatment products. Integrating safe water, hygiene and sanitation messages during the training of CHWs and health center nurses made it possible for them to reach the families of young children with important hygiene information and to demonstrate and increase the demand for safe water products.

USAID partners—HPI/PROSANI, PSI/ASF, UNICEF, and the NGO and FBO networks --are well positioned to move an integrated diarrhea prevention and treatment approach to scale through their work to expand CCM, revitalize ORT corners in health facilities and establish a successful and sustainable social marketing approach to the sale of PUR and distribution of Aquatabs.

THE WAY FORWARD

MCHIP/DRC achieved impressive results after assuming responsibility from BASICS and POPPHI in April 2009 and from IMMUNIZATIONbasics in October of the same year. As a small team of just eight technical and administrative staff in Kinshasa (with targeted technical support from MCHIP headquarters), MCHIP cultivated close partnerships with international and local NGO partners, served on many catalytic steering committees and technical working groups, and supported the MOH and its child health, immunization and reproductive health programs to successfully plan and implement a variety of important national maternal, newborn and child health initiatives.

MCHIP's goal at the global level and in DRC was to accelerate the scale-up of high impact, evidence-based MNCH interventions. Across program areas, we have done this by helping the DRC's MOH put enabling policies and programs into place, disseminate new information, leverage and coordinate the resources of USAID's own projects and the other bilateral, multilateral and NGO partners working in the health sector toward scale up and refine program approaches, guidelines and tools. MCHIP's role was to provide on-going technical support to the MOH and implementing partners to expand the coverage and improve the quality of key intervention packages, monitor the results of program activities and the quality of MNCH care, and strengthen the support systems required to sustainably increase the coverage of interventions across the technical areas.

In 2010, MCHIP's support for the introduction and expansion of integrated CCM led the DRC to be selected as one of three countries being profiled globally by USAID as models for CCM scale up. Working closely with the MOH, AXxes, LMS, UNICEF, GTZ, CIDA/PSI, and others, MCHIP contributed to the establishment of over 1,100 functioning CCM sites (of which more than 400 were newly established in FY'10 alone), the training of over 2,000 CHWs, 50 national CCM trainers, and 700 of the doctors and nurses who manage CCM services at provincial and zonal level, the revitalization of ORT corners in the central hospitals of 29 health zones and the national multi-media campaign that is currently raising awareness about diarrhea prevention and treatment in young children, including the use of zinc. In all of this work, MCHIP also played the role of a national CCM secretariat, providing continuous technical support, facilitating the development and refinement of training materials, implementation guidelines, job aides and other tools that are made available to all partners, and compiling (and in some cases collecting) the information that is needed to monitor CCM expansion and the quality of life-saving care for malaria, pneumonia and diarrhea provided at community and facility level.

In the area of immunization, in FY'10 MCHIP supported the EPI team and ICC partners to formulate and revise key policies and strategies, develop a number of important documents (including the revised cMYP, the annual EPI macro plan and MOU, and the WHO/UNICEF Joint Report and Annual Report to the GAVI Alliance), revise the integrated micro-planning tool developed in FY'09, improve systems required to deliver high quality, routine immunization services, prepare for and assist with the phased introduction of pneumococcal conjugate vaccine (PCV-13) in 2011 and respond to the continuing polio outbreak. With AXxes and LMS, MCHIP worked intensively with low-performing, high-burden health zones to improve their immunization coverage by conducting joint supportive supervision visits with MOH, AXxes and LMS staff, training staff in the DQSA methodology, assisting with the analysis of program data collected by AXxes and LMS and the health zones themselves, and supporting them technically as they worked to address performance and data quality issues. MCHIP also played an

important role in the on-going monitoring of immunization coverage data at national level and the flagging of performance gaps for corrective action. Finally, MCHIP supported the Sud Kivu provincial health office and its partners to form their own ICC and demonstrated, once again, the potential that this mechanism has for leveraging and coordinating partner investments to improve routine immunization coverage.

MCHIP's support for the expansion of an integrated package of Essential Newborn Care (ENC), Active Management of the Third Stage of Labor (AMTSL), KMC and other maternal health interventions led to notable improvements in the numbers of mothers and newborns receiving quality services and evidence-based interventions in FY'10. Much remains to be done to consolidate and strengthen different aspects of this combined approach, but there is little doubt that the integration of reproductive, maternal and newborn care creates notable technical and logistical synergies and has the potential to reduce training, supervision and other program costs. Based on this work to combine maternal and newborn health, and its integrated CCM and immunization activities, the MCHIP team was in an excellent position to respond when the MOH launched an integration initiative across all of its national health programs in 2009/2010. MCHIP provided direct technical assistance to the national reproductive health, diarrheal disease, acute respiratory infection and malaria control programs during the efforts to more fully integrate existing program policies, guidelines and training packages.

Finally, the program's successful training and BCC initiatives to improve hygiene practices, and promote the use of point of use water purification products (i.e., PUR and Aquatabs) led to dramatic increases in the use of these products, with 300,000 packets of PUR sold in four cholera-endemic health zones in South Kivu, enabling an estimated 4,100 people to make their own safe drinking water.

MCHIP's core functions included providing technical support to the Ministry of Health and its partners at the national level, strengthening the capacity of USAID projects and other partners working in the health zones, and introducing and testing program innovations. This report has attempted to detail the accomplishments, opportunities and remaining challenges across the intervention areas in which MCHIP worked. Some of these will be addressed by the new USAID bilateral health project and its team, and by DRC's other MNCH/immunization partners, including UNICEF, WHO, UNFPA, World Bank and others.

The technical assistance functions that MCHIP performed since April 2009 were critically important at national level and in selected health zones. How these functions will be performed in the future is an important question for the MOH, USAID and the other partners to address.

In closing, MCHIP would like to sincerely thank USAID/DRC and, in particular, Madame Lina Piripiri, Ms. Connie Davis and Ms. Michelle Russell for their guidance and support, without which none of the achievements described in this report would have been possible.

ANNEX 1: Location of CHWs in health zones supported by AXxes

Location of CHWs in health zones supported by AXxes							
PROVINCE		Health Zone	Date of Training 1st and 2nd series		Number of Sites Trained	Number CHWs Trained	Partners
SOUTH KIVU	1	Kaniola	13/03/2009	20/10/2009	5	5	AXXES/CRS
	2	Lemera	18/06/2010		5	5	AXXES/CRS
	3	Nundu	02/04/2009	05/08/2009	7	14	AXXES/CRS
	4	Ruzizi	02/04/2009	01/08/2009	7	14	AXXES/CRS
	5	Kaziba	13/03/2009	01/08/2009	7	14	AXXES/CRS
	6	Bunyakiri	04/03/2009		7	14	AXXES/WV
	7	Kalonge	04/03/2009		12	24	AXXES/WV
	8	Idjwi	09/03/2009		8	16	AXXES/WV
	9	Mubumbano	01/06/2007	08/05/2010	5	5	AXXES/CRS
	10	Mwana	01/06/2007	11/06/2010	5	5	AXXES/CRS
	11	Kitutu	26/07/2010		5	5	AXXES/CRS
	12	Mwenga	13/05/2010		5	5	AXXES/CRS
	13	Uvira	02/04/2009	06/08/2009	7	14	AXXES/CRS
	14	Kamituga	21/07/2010		5	5	AXXES/CRS
	15	Nyangezi	26/05/2010		5	5	AXXES/CRS
KASAI- OCCIDENTAL	16	Tshikaji	07/03/2009	22/07/2009	7	14	AXXES/ECC-IMA
	17	Bulape	18/04/2009		12	19	AXXES/ECC-IMA
	18	Mutoto	05/06/2009	30/07/2009	7	14	AXXES/ECC-IMA et IRC
	19	Lubondaie	25/04/2009	25/08/ 2009	12	19	AXXES/ECC-IMA
KASAI- ORIENTAL	20	Bibanga	07/03/2009	25/07/2009	7	14	AXXES/ECC-IMA
	21	Pania Mutombo	07/03/2009		7	14	AXXES/ECC-IMA
	22	Vanga kete	10/09/2008		12	24	AXXES/ECC-IMA
	23	Omedjadi	10/09/2008		12	24	AXXES/ECC-IMA
	24	Lodja	20/03/2009		10	20	AXXES/ECC-IMA
	25	Lusambo	07/03/2009	23/07/2009	12	19	AXXES/ECC-IMA
KATANGA	26	Songa	10/04/2009	20/07/2009	7	14	AXXES/ECC-IMA
	27	Kinkondja	09/04/2009	25/09/2009	7	14	AXXES/ECC-IMA
	28	Mulongo	31/03/2009	01/09/2009	7	14	AXXES/ECC-IMA
	29	Malemba Nkulu	13/03/2009	01/09/2009	7	14	AXXES/ECC-IMA

Location of CHWs in health zones supported by AXxes							
	30	Kabongo	13/03/2009	25/08/2009	7	14	AXXES/ECC-IMA
	31	Kitenge	20/03/2009	29/08/2009	7	14	AXXES/ECC-IMA
	32	Kayamba	06/05/2010		11	11	AXXES/ECC-IMA
	33	Lwamba	07/05/2010		10	10	AXXES/ECC-IMA
	34	Mukanga	10/05/2010		9	9	AXXES/ECC-IMA
	35	Kanzenze	25/03/2009		7	14	AXXES/WV
	36	Lualaba	28/02/2009	24/07/2009	8	17	AXXES/WV
	37	Fungurume	25/03/2009	05/09/2009	7	14	AXXES/WV
	38	Mutshatsha	07/04/2009	31/09/2009	7	14	AXXES/WV
	39	Bunkeya	25/03/2009	06/09/2009	7	14	AXXES/WV
	40	Dilala	02/04/2010		7	7	AXXES/WV
	41	Lubudi	18/04/2010		6	6	AXXES/WV
TOTAL					314	531	

ANNEX 2: Inventory of trained CHWs and CCM sites established 2006-2010

PROVINCES	Health Zones	Health Centers	Population of Health Zone	CCM Sites established	Population of CCM sites
BANDUNDU	KENGE	21	267 268	31	36 625
	Nioki	10	13 744	10	9 513
	Tande Mbelo	7		17	2 316
	Bandzow Moke	0		8	
	BOKORO	8		9	3 936
	BOSOSBE	0		9	
	INONGO	9	44 393	9	6 848
	KIRI	9		9	4 441
	MIMIA	8		8	3 560
	OSHWE	0		15	
PENZUA	8		14	7 550	
BAS-CONGO	Kimpese	5		18	4 941
EQUATEUR	NDAGE	18	106 412	37	48 057
	BOKONZI	16	170 763	50	61 841
	BULU	12	112 732	41	43 352
	MAWUYA	13	129 707	52	63 612
	BWAMANDA	15	351 544	52	81 860
	TANDALA	16	230 262	52	97 048
	Gemena	10	114 213	10	22 025
	Gbadolite	6	45 060	10	9 013
K. OCCIDENTAL	Demba	11	130 408	18	28 765
	Mutoto	18	146 459	22	38 017
	Lukonga	12	128 910	15	61 096
	Lubondaie	12	79 994	12	13 295
	Bulape	10	99 351	12	10 741
	Tshikaji	5	39 441	7	7 955
	Bilomba	7		8	6 106
K. ORIENTAL	Bena Dibebe	8	53 009	8	7 301
	Vangakete	7	48 366	12	13 913
	Minga	0		7	
	Omendjadi	12	85 358	12	15 948
	Djalo	7	35 591	11	6 252
	Lodja	12	75 341	10	11 279
	Pania mutombo	7	42 713	13	1 185
	Tshumbe	8		11	13 117
	Kalenda	14	61 493	20	22 763

	Kanda Kanda	20	210 443	27	59 035
	Bibanga	10	62 428	10	12 684
	Lusambo	9	45 350	12	9 862
KINSHASA	Mt Ngafula1	6	78 382	13	11 560
	Mt Ngafula2	11	89 230	16	35 042
	Binza Meteo	11	310 837	13	49 265
	Selembao	10	194 078	13	29 182
	Makala	4	74 267	12	13 795
	Kikimi	2	40 054	2	2 646
	Kimbanseke	2	51 859	2	25 914
	Biyela	2	28 566	2	1 867
MANIEMA	Kindu	0		6	
	Alunguli	6	48 589	18	11 912
PROVINCE ORIENTALE	Ubundu	8	32 604	8	5 559
	Bunia ituri	4	51 148	4	8 620
	Rwampara	4	24 644	4	9 411
	Komanda	4	41 243	4	7 938
	Nyakunde	4	44 563	4	2 911
	Damas	4	34 062	4	9 925
	Lita	4	37 270	4	6 090
	nizi	4	67 935	4	14 664
	Bambu	4		4	8 955
SUD KIVU	Kalonge	7	51 200	9	10 598
	Buniakiri	11	59 147	14	8 412
	Kalehe	0		7	
	Kabare	13	120 506	33	51 236
	Kaniola	7	84 038	7	13 877
	Mubumbamu	5	50 815	7	9 755
	Mwana	11	19 531	7	3 991
	Mwenga	7	44 588	5	6 570
	Kamituga	5	20 728	5	9 067
	Kitutu	5	31 200	5	6 461
	Lemera	5	8 112	5	5 979
	Nyangezi	11	40 008	5	13 361
	Uvira	7	34 376	7	8 010
	Nundu	8	42 075	7	12 642
	Ruzizi	7	28 645	7	5 938
	Kaziba	8	44 626	7	9 110
	Idjwi	5	51 938	8	8 442
	Fizi	2		2	3 603
	Minembwe	2		2	4 495
	Haut Plat.	2		2	5 170
KATANGA	Songa	7	44 110	7	17 413
	Kabongo	7	83 858	7	15 864
	Kitenge	7	84 140	7	4 274
	Kikondja	7	66 175	7	10 282

	Malemba Nkulu		7	105 783	7	31 638
	Mulongo		7	110 313	7	57 138
	Kayamba		13	91 429	11	10 253
	Lwamba		5	36 123	10	9 044
	Mukanga		9	92 167	9	14 605
	Kanzenze		7	34 710	7	16 167
	Lualaba		5	38 538	8	5 984
	Fungurume		18	95 260	7	4 643
	Mutshatsha		6	28 796	7	6 407
	Bunkeya		7	44 717	7	5 572
	Dilala		3		7	9 517
	Lubudi		6		6	
	TOTAL	94	723	5 867 736	1 117	1 516 626
PROVINCES	Health Zones	Health Areas	Population Health Zones	CCM Sites	Population in CCM Sites	
				Children under 5	288,159	

ANNEX 3: Province, health zone, and partner who organized post training follow up of CHW

PROVINCES	HEALTH ZONES		PARTNERS	PERIOD												
				Oct '09	Nov. '09	Dec '09	Jan '10	Feb '10	Mar '10	Apr '10	May '10	Jun '10	Jul '10	Aug '10	Sept '10	
BANDUNDU	1	NIOKI	CCISD/PARSSS					1								
	2	TANDEMBELO	CCISD/PARSSS					1								
	3	BOKORO	CCISD/PARSSS					1								
KASAI-OCC	4	LUBONDAIE	AXXES				1				1			1		
	5	TSHIKAJI	AXXES				1					1		1		
	6	MUTOTO	AXXES					1		1				1		
	7	BULAPE	AXXES					1		1						
KASAI-OR	8	VANGAKETE	AXXES				1			1				1		
	9	OMENDJADI	AXXES					1		1				1		
	10	LODJA	AXXES					1		1				1		
	11	BENA DIBELE	AXXES		1									1		
	12	DJALO	LMS		1											
	13	TSHUMBE	LMS		1											
	14	KALENDA	LMS		1											
	15	KANDA KANDA	LMS		1											
	16	PANIAMUTOMBO	AXXES					1								
	17	BIBANGA	AXXES					1				1		1		
KINSHASA	18	LUSAMBO	AXXES					1								1
	19	BINZA METEO	UNICEF											1		
	20	MAKALA	UNICEF													1
	21	SELEMBAO	UNICEF													1
	22	MONT NGAFULA I	UNICEF													1
	23	MONT NGAFULA II	UNICEF													1
	24	KIMBANSEKE	IRC									1				
	25	KIKIMI	IRC									1				

	26	BIYELA	IRC									1					
KATANGA	27	SONGA	AXXES					1				1			1		
	28	KABONGO	AXXES					1				1			1		
	29	KITENGE	AXXES					1				1			1		
	30	KIKONDJA	AXXES					1				1			1		
	31	MALEMBANKULU	AXXES					1				1			1		
	32	MULONGO	AXXES					1				1			1		
	33	KANZENZE	AXXES					1				1					
	34	LUALABA	AXXES					1				1			1		
	35	FUNGURUME	AXXES					1				1					
	36	MUTSHATSHA	AXXES						1			1					
	37	BUNKEYA	AXXES					1				1					
SUD-KIVU	38	KALONGE	AXXES				1			1				1			
	39	BUNIAKIRI	AXXES				1			1				1			
	40	KANIOLA	AXXES					1		1							
	41	UVIRA	AXXES					1		1							
	42	NUNDU	AXXES					1		1							
	43	RUZIZI	AXXES					1		1							
	44	KAZIBA	AXXES					1		1							
	45	IDJWI	AXXES							1							
TOTAL	45 HZ			0	5	0	5	25	10	13	7	10	2	12	10		
			Quarter 1			Quarter 2			Quarter 3			Quarter 4					
Follow-up sessions		99				5			40			30			24		

ANNEX 4: CCM Data Collection Forms

République Démocratique du Congo/ Ministère de la Santé / Prise en Charge de Intégré des Maladies de l'Enfant dans la Communauté

FICHE INDIVIDUELLE DE PRISE EN CHARGE DE L'ENFANT MALADE N° Fiche

(ENFANT DE 2 MOIS A MOINS DE 5 ANS)

DATE :...../...../..... NOM DU RELAIS DE SITE.....

ZONE DE SANTE DE :..... CENTRE DE SANTE DE SITE DE :.....

1. IDENTIFICATION DE L'ENFANT MALADE

Nom de l'enfant..... Nom de la mère..... Adresse.....

Sexe M F Ageans.....mois PoidsKg.....gr Statut nutritionnel Vert Jaune Rouge

BALANCE disponible? NON OUI
MUAC disponible? NON OUI

2. PLAINTES (cocher NON si absence signe ou OUI si présence Signe)

Depuis combien de Jours Traitement reçu à domicilejours

Fièvre..... NON OUI

Diarrhée... NON OUIjours

Toux ou Rhume...jours

SPECIFIER pour les autres plaintes.....

3. RECHERCHER LES SIGNES DE DANGER ou d'ALERTE REFERER si OUI

DEMANDER, RECHERCHER	Cocher	NON	OUI	DEMANDER, RECHERCHER	NON	OUI
Nourrisson de 1 Sem à 2 mois amené au SITE		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	Anémie ou pâleur palmaire	<input type="checkbox"/> NON	<input type="checkbox"/> OUI
Statut nutritionnel de l'enfant, ROUGE		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	Respiration difficile avec tirage ou sifflement	<input type="checkbox"/> NON	<input type="checkbox"/> OUI
L'enfant est-il incapable de boire ou de téter ?		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	Toute maladie qui dure 15 jours ou plus	<input type="checkbox"/> NON	<input type="checkbox"/> OUI
L'enfant vomit tout ce qu'il consomme ?		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	L'enfant est souvent malade	<input type="checkbox"/> NON	<input type="checkbox"/> OUI
L'enfant a-t-il convulsé ou convulse maintenant ?		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	L'enfant est très affaibli	<input type="checkbox"/> NON	<input type="checkbox"/> OUI
L'enfant est inconscient ou ne répond pas aux stimuli externes		<input type="checkbox"/> NON	<input type="checkbox"/> OUI	L'enfant devient plus malade malgré les soins adéquats à domicile	<input type="checkbox"/> NON	<input type="checkbox"/> OUI

4 FIEVRE (= Chaud au toucher ou antécédents de fièvre dans les 2 jours)	<input type="checkbox"/> NON <input type="checkbox"/> OUI (cocher)
TDR DISPONIBLE AU SITE ?	<input type="checkbox"/> NON <input type="checkbox"/> OUI
Résultat de TDR	<input type="checkbox"/> NEGATIF <input type="checkbox"/> POSITIF
à REFERER si :	<ul style="list-style-type: none"> - Fièvre qui continue après 2 jours de traitement à domicile avec Artésunate + Amodiaquine et Paracétamol, <input type="checkbox"/> NON <input type="checkbox"/> OUI - ou Fièvre avec éruptions cutanées généralisées <input type="checkbox"/> NON <input type="checkbox"/> OUI - Fièvre avec TDR NÉGATIF et non associée à Toux/rhume <input type="checkbox"/> NON <input type="checkbox"/> OUI
A traiter au site	<ul style="list-style-type: none"> - Tous les problèmes ci-haut sont absents et fièvre avec TDR POSITIF <input type="checkbox"/> NON <input type="checkbox"/> OUI - Tous les problèmes ci-haut sont absents et TDR NON DISPONIBLE au site <input type="checkbox"/> NON <input type="checkbox"/> OUI

5 DIARRHEE (= Selles liquides 3 fois par jour ou plus)	<input type="checkbox"/> NON <input type="checkbox"/> OUI (cocher)
à REFERER si :	<ul style="list-style-type: none"> - Signes de déshydratation (yeux enfoncés, assoiffé, <input type="checkbox"/> NON <input type="checkbox"/> OUI - pli cutané s'efface lentement, enfant agité), ou <input type="checkbox"/> NON <input type="checkbox"/> OUI - Sang dans les selles, ou <input type="checkbox"/> NON <input type="checkbox"/> OUI - Diarrhée trop liquide (comme de l'eau)
A traiter au site	Tous les problèmes ci-haut sont absents <input type="checkbox"/> NON <input type="checkbox"/> OUI

6	TOUX ou RHUME	NON <input type="checkbox"/> OUI <input type="checkbox"/> (cocher)	Minuteur fonctionnel	NON <input type="checkbox"/> OUI <input type="checkbox"/>	
		Mvts respiratoires/Nbre	par Minute (Ecrivez)	
	La RESPIRATION est RAPIDE	- 50 Mvts respiratoires ou (+) chez l'enfant de moins de 1 an - 40 Mvts respiratoires ou (+) chez l'enfant de 1 an et plus	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	→ PNEUMONIE
	La RESPIRATION est NORMALE	- moins de 50 Mvts respiratoires chez l'enfant de moins de 1 an - moins de 40 Mvts respiratoires chez l'enfant de 1 an et plus	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	→ TOUX ou RHUME
7	MALNUTRITION (les points 7, 8,9 sont à rechercher chez tout enfant)				
	MALNUTRITION SÉVÈRE à référer	- Amaigrissement visible et sévère, - ou Œdèmes aux membres inférieurs.	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	→ MALNUTRIT° Sévère
	MALNUTRITION légère Ou Enfant à risque	Poids faible pour l'âge : - Dans la bande JAUNE, ou - poids stationnaire ou qui baisse après 3 pesées successives	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	→ MALNUTRITION LEGÈRE ou Enf à Risque
	PAS DE MALNUTRITION	- Poids normal (Zone VERTE), - pas de signes de malnutrition	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	→ PAS de MALNUTRITION
8.	STATUT VACCINAL et pour CPS & Vit A		CARTE CPS VUE.		NON <input type="checkbox"/> OUI <input type="checkbox"/> (cocher)
		- L'enfant a-t'il un problème avec les pesées - L'enfant a-t'il un problème avec la vaccination - L'enfant a-t'il un problème avec la Vit A	NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	Rattrapage NON OUI
			NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	Rattrapage NON OUI
			NON <input type="checkbox"/> OUI <input type="checkbox"/>	NON <input type="checkbox"/> OUI <input type="checkbox"/>	Rattrapage NON OUI
9	AUTRE PROBLEME	TOUT AUTRE PROBLEME (à référer)			AUTRE:Référez <input type="checkbox"/>

10 CAS REFERE Cocher NON OUI **CONSEILS POUR LES CAS A REFERER AU CS INTEGRE**
(entourer l'action)

<ul style="list-style-type: none"> • Si l'enfant peut téter ou boire, continuer à téter en route (ou lait exprimé à la tasse) ou donner de l'eau sucrée si enfant sevré • NOURRISSON de 1 Sem. à 2 mois: le maintenir au chaud 	<ul style="list-style-type: none"> • SI FIEVRE : Paracétamol (½ Co à moins de 3 ans, ¾ Co enf 3-5 ans) + enveloppement tiède de la tête en cas de forte fièvre. + Artésunate en Suppositoire (25mg à moins 1an, 50mg enf 1-5ans) • SI DIARRHEE : donner fréquemment des gorgées de SRO avec la tasse, (même si allaitement exclusif)
NB:REEMPLIR LA FICHE DE REFERENCE ET REFERER	

11. TRAITEMENT

<p>TRAITEMENT DE LA FIEVRE/PALUDISME</p> <p>1) Médicaments</p> <p>a) ARSTESUNATE – AMODIAQUINE comprime (Co) :</p> <ul style="list-style-type: none"> • Enf 2-11 mois : 1 Co Art-AQ 25 /67,5mg 1fois par jr pdt 3jrs (TOTAL : 1 blister 2-11 mois de 3 Comprimés) • Enf 1-5 ans : 1 Co Art-AQ 50 /135 mg 1fois par jr pdt 3jrs (TOTAL : 1 blister 1-5 ans de 3 comprimés) <p>b) Paracétamol Co 500 mg: (4 fois/jour).</p> <ul style="list-style-type: none"> • Enf de moins de 3 ans : ½ Co, pdt 2 jours (TOT 4 Co) • Enf à partir de 3 ans et plus : ¾ Co, pdt 2 jours (TOT 6 Co) <p>2) Conseils : Voir CARTE 1</p> <p>3) RDV après 2 jours</p>	<p>TRAITEMENT DE LA DIARRHEE</p> <p>1) Médicaments</p> <p>a) SRO durant toute la diarrhée (au moins 2 sachets) ou autres liquides recommandées:</p> <ul style="list-style-type: none"> • ½ verre de SRO à chaque selle: Enfant < 2 ans • 1 verre de SRO à chaque selle: Enf.2 ans et plus (Si Vomissement: attendre 10 min. puis redonner) <p>b) Mébendazole : ou 1 Co de 100 mg 2 fois par jour pdt 3 jours (TOT 6 Co) (ou 1 Co 500 mg dose unique dès âge de 1 an)</p> <p>c) Zinc Co pdt 10 jours, à raison de :</p> <ul style="list-style-type: none"> • ½ Co 20 mg, enf de moins de 6 mois (TOT : 5 Co) • 1 Co 20 mg, enf de 6 mois et plus (TOT : 10 Co) <p>2) Conseils : Voir CARTE 2</p> <p>3) RDV après 2 jours</p>
<p>TRAITEMENT DE PNEUMONIE ET DE TOUX/RHUME</p> <p>1) PNEUMONIE :</p> <p>a) COTRIMOXAZOLE</p> <ul style="list-style-type: none"> • Enf 2 mois-6 mois: ¼ Co 2 fois par jr pdt 3 jrs (TOT 1½) • Enf 6 mois-3 ans: ½ Co 2 fois par jr pdt 3 jrs (TOT 3 Co) • Enf 3 ans –5 ans: 1 Co 2 fois par jr pdt 3 jrs (TOT 6 Co) <p>b) Remède contre la toux : Jus de citron dilué ou miel dilué</p>	<p>PRISE EN CHARGE DE LA MALNUTRITION LEGERE</p> <p>1) Médicaments</p> <p>a) Mébendazole : 1 Co de 100 mg 2 fois par jour pdt 3 jrs (TOT 6 Co) (ou 1 Co 500 mg dose unique dès âge de 1 an)</p>

<p>) Si fièvre : Voir traitement de Paludisme.</p> <p>2) TOUX OU RHUME SIMPLES :</p> <p>a) Remède contre la toux (Jus de citron ou miel dilué)</p> <p>b) Si fièvre : Voir traitement de Paludisme.</p> <p>3) Conseils : Voir CARTE 3</p> <p>4) RDV après 2 Jours</p>	<p>b) Fer 1 Comprimé par jour pendant 1 mois (TOT 30 Co)</p> <p>2) Conseils : Voir CARTE 4</p> <p>3) RDV après 2 Jours pour vérifier l'application des conseils donnés, puis RDV après 7 jours</p>
--	---

12. RATTRAPAGE (Voir Statut vaccinal & CPS & Vit A, et conseils pour rattrapage si nécessaire)

Dans tous les cas, encourager la mère à poursuivre les pesées, la vaccination et la supplémentation en Vit A au CS

13 VISITE DE SUIVI EFFECTUEE?	NON	OUI	INSTRUCTIONS POUR LE RDV DE SUIVI.
A POSSIBILITE n°1:	POSSIBILITE n°2:		
la mère de l'enfant est revenue <input type="checkbox"/>	La mère n'est pas revenue <input type="checkbox"/>		
Cocher si:	Cocher pourquoi elle n'est pas revenue:		
a. Revenue selon le RDV fixé <input type="checkbox"/>	a. Consultation de tradi-praticien ou traitement traditionnel <input type="checkbox"/>		
b. Revenue immédiatement suite à l'aggravation de la santé de l'enfant <input type="checkbox"/>	b. Manque d'argent <input type="checkbox"/>		
	c. Enfant amélioré <input type="checkbox"/>		
	d. Activités de mère: vendeuse, champs, travail, maladies en famille. <input type="checkbox"/>		
	e. décès <input type="checkbox"/>		
	f. autres causes: <input type="checkbox"/>		
B L'ETAT DE L'ENFANT EST-IL AGGRAVE ? (Demande à la mère) <input type="checkbox"/>	NON <input type="checkbox"/>	OUI (cocher) <input checked="" type="checkbox"/>	SI OUI, REFERER
C L'ENFANT A-T'IL UNE NOUVELLE PLAINTE ?	NON <input type="checkbox"/>	OUI <input type="checkbox"/>	SI OUI, PRENDRE UNE NOUVELLE FICHE
D RECHERCHER LES SIGNES DE DANGER et d'ALERTE RÉFÉRER SI PRÉSENCE D'UN SEUL SIGNE			
<ul style="list-style-type: none"> • L'enfant incapable de boire ou de téter <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • L'enfant vomit tout ce qu'il consomme <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • A convulsé ou convulse maintenant <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Inconscient ou très affaibli <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Respiration difficile (tirage ou sifflement) <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Pâleur palmaire (anémie) <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • L'enfant devient plus malade <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI 	<ul style="list-style-type: none"> • Fièvre qui persiste malgré traitement <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Apparition des éruptions cutanées généralisées et/ou du prurit <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Signes de déshydratation <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Sang dans les selles, <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Diarrhée trop liquide (comme de l'eau) <input type="checkbox"/> NON <input checked="" type="checkbox"/> OUI • Autre phénomène anormal <input type="checkbox"/> 		
E SI L'ENFANT AVAIT TOUX OU RHUME, Nbre de Mvts Resp/minute <input type="checkbox"/>	Respiration rapide ? NON <input type="checkbox"/> OUI <input checked="" type="checkbox"/>		
	REFERER SI OUI		
F VERIFIER SI L'ENFANT A RECU SES MEDICAMENTS COMME PRESCRIT.	A reçu sa dose ? NON <input type="checkbox"/> OUI <input checked="" type="checkbox"/>		
• Vérifier la quantité restante des médicaments dans le sachet de la mère.			
G CONSEILLER DE CONTINUER LE TRAITEMENT DE L'ENFANT			
• Demander à la mère de rappeler comment elle a administré les médicaments (revoir les «3 COMBIENS »)			
• Si la mère a bien administré les médicaments, FELICITER ET ENCOURAGER A CONTINUER			
• Si la mère a mal administré les médicaments, démontrer la dispensation (revoir les « 3 COMBIENS ») puis demandez-lui de répéter et d'administrer une dose en votre présence. Vérifiez sa compréhension.			

FICHE INDIVIDUELLE INTEGREE DE SUIVI MENSUEL DU RELAIS DE SITE

Zone de santé: _____ Centre de santé : _____ SITE de:Nom du Relais

I Interview du Relais Communautaire

ITEMS (oui = 1 , non = 0)	MOIS D'EVALUATION				
	SUIVI 1	SUIVI 2	SUIVI 3	SUIVI 4	SUIVI 5
Connaissances des signes de danger. DEMANDER : Quels sont les signes de danger que vous connaissez ?					
Incapable de boire ou de téter					
Vomit tout ce qu'il consomme					
Convulsions (actuelles ou récentes)					
Léthargie ou inconscience					
Signes de Malnutrition sévère					
Tirage sous-costal					
Quels sont les seuils de respiration rapide pour :					
2 mois à 11 mois (moins de 1 an)					
12 mois à 5 ans (1 an et plus)					
Vous recevez un enfant au site. Comment vous assurez vous qu'il a reçu un T3 adéquat à domicile contre la fièvre					
- Art +AQ et paracétamol ou SP + Paracétamol					
Comment recherchez vous les signes de déshydratation chez l'enfant ?. Démontrer :					
Yeux enfoncés					
Assoiffé					
Agité					
Pli cutané qui s'efface lentement					

II Grille d'observation

Est ce que Le Relais du Site de soins communautaires :	SUIVI 1	SUIVI 2	SUIVI 3	SUIVI 4	SUIVI 5
1. EVALUATION					
a) A recherché les signes généraux de danger ?					
b) A interrogé la maman sur le symptôme toux/Rhume ?					
c) A bien préparé l'enfant pour compter les mvts resp.					
d) A Recherché le tirage sous costal					
e) A évalué correctement le poids/ âge					
f) A évalué correctement l'état vaccinal					
g) A évalué correctement le statut de la vitamine A					
h) Qualité de décompte des mouvements respiratoires					
Décompte des mouvements respiratoires par le Relais					
Décompte des mouvements respiratoires par l'Instructeur					
2. CLASSIFICATION : a correctement classé l'enfant					
3. TRAITEMENT					
a) A donné la bonne dose de cotrimoxazole pour la pneumonie					
b) A référé les cas graves					
c) A donné des conseils sur les soins à domicile :					

III. RESPECT DES ETAPES DE DISPENSATION DES MEDICAMENTS ESSENTIELS

TACHES	SUIVI 1	SUIVI 2	SUIVI 3	SUIVI 4	SUIVI 5
1. Conditionner les médicaments :					
a) Le Relais a bien compté la quantité nécessaire pour un traitement complet					
b) Il a bien étiqueté l'emballage avec le nom du médicament, la posologie et la durée du traitement					
2. Montrer le médicament à la mère : Il a montré à la maman le nom, la forme de Médicament et ce qu'il traite (ou son utilité)					
3. Expliquer à la mère : Combien par prise =a, Combien de fois/ jour =b, pendant Combien de jours=c					
4. Vérifier la compréhension de la mère : Le Relais a fait REPETER à la maman les 3 combien pour chaque méd.					
5. Démonstration : Le relais a demandé à la mère d'administrer La première dose en sa présence.					

GRILLE DE DEPOUILLEMENT DES FICHES DE PRISE EN CHARGE DES CAS AUX SITES

Evaluation de la qualité de prise en charge

Province :	District:.....	ZS:.....	CS:.....	Site:.....
Noms du Relais:				

COMPLETUDE DE LA FICHE DE PEC PAR SECTION ET MOIS DEPUIS L'ENTRÉE EN FONCTION

Indiquer le mois de l'année	Mois 1		Mois 2		Mois 3		Mois 4		Mois 5		Mois 6	
	O	N	O	N	O	N	O	N	O	N	O	N
Sections de la fiche												
1. Identification												
2. Plaintes												
3. Signes de danger/alerte												
4. Fièvre												
5. Diarrhée												
6. Toux/rhume												
7. Malnutrition												
8. Rattrapage												
9. Autres problèmes												
10. Conseils pour les cas à référer												
11. Traitement												
12. Conseils rattrapage												
13. Instructions de suivi												
Statut nutrition correct ?	O	N										

CONCORDANCE ENTRE SIGNES/SYMPÔMES ET CLASSIFICATION

	O	N	O	N	O	N	O	N	O	N	O	N
Fièvre												
diarrhée												
Pneumonie												
Fièvre + Pneumonie												
Toux/rhume												
Problème nutritionnel												

CONCORDANCE ENTRE CLASSIFICATION ET TRAITEMENT/ACTION

	O	N	O	N	O	N	O	N	O	N	O	N
Signes de danger/alerte												
Fièvre												
diarrhée												
Pneumonie												
Fièvre + Pneumonie												
Toux/rhume												
malnutrition												

CONCORDANCE ENTRE AGE ET LA DOSE DES MEDICAMENTS

	O	N	O	N	O	N	O	N	O	N	O	N
Reference												
Fièvre												
diarrhée												
Pneumonie												
Fièvre + Pneumonie												
Toux/rhume												
malnutrition												

VISITE DE SUIVI DU MALADE RECOMMANDEE

Effectuée?												
------------	--	--	--	--	--	--	--	--	--	--	--	--

CONCORDANCE ENTRE SIGNES/SYMPÔMES, CLASSIFICATION ET ACTION LORS DU SUIVI

	O	N	O	N	O	N	O	N	O	N	O	N
Signes de danger et alerte												
Toux/rhume												

(Observations, Noms, signature du Superviseur et date, au verso)

ANNEX 5: CCM supply report

Résultats sur la Disponibilité / Rupture de stock aux Sites

Veuillez Spécifier la Période (date) de suivi :

.. Proportion des sites avec disponibilité des médicaments lors des visites de suivi

Afficher

	Disponibiité (N=	Sites)
ACT		%
Quinine		%
Paracétamol		%
SRO		%
Zinc		%
Mébéndazole		%
Cotrimoxazole		%
Fer		%

2. Proportion des sites avec disponibilité des Matériels lors des visites de suivi

Afficher

	Disponibiité (N=	Sites)
Fiches de prise en charge		%
Balance fonctionnelle		%
Minuteur fonctionnel		%
Note de référence et de contre référence		%
Fiches de rapport mensuel		%
Emballage pour les médicaments		%

3. Proportion des sites avec rupture de stock de médicaments d'au moins 5 jours

Afficher

	Rupture de stock (N=	Sites)
ACT		%
Quinine		%
Paracétamol		%
SRO		%
Zinc		%
Mébéndazole		%
Cotrimoxazole		%
Fer		%

ANNEX 6: Immunization Training and Orientation Sessions Supported Technically by MCHIP in FY'2010 and FY 2011

Topic	Category of Personnel Trained	Site of Training	Number of persons trained		
			M	F	Total
1). Data Quality Self Assessment (DQSA ou auto évaluation de la qualité de données PEV)	Membres des Equipes Cadres des ZS	9 ZS AXxes au Sud-Kivu 3 ZS AXxes au Sankuru 2 ZS AXxes au Katanga 5 ZS LMS au Sankuru 19 ZS au Total	28	2	30
2) Mid-Level Management Course for EPI Managers	Membres des Equipes Cadres des ZS	14 Zones de Santé IHP au Sankuru (34 personnes) 11 Zones de Santé IHP au Kasai Occidental (25 personnes)	55	4	59
3) Formation pour l'introduction du vaccin contre les infections à pneumocoque	Membres des Equipes Cadres provinciales et des ZS + Cadres du niveau central	Direction PEV Province du Bas Congo Province du Sud Kivu	159	23	182

ANNEX 7: Family Planning training for providers and briefings for church leaders in six HZs

PROVINCES	Health Zones	Date of training	Number of areas in trained zones involved	Number of head nurses trained	Number of CHWs trained	Number of sites	Number of church leaders trained
Kinshasa	1.Binza Meteo	5/6/2010	8	5	12	6	0
Zones Supported by the AXxes Project							
Kasai-Occidental	2.Tshikaji	23/6/2010	9	4	13	7	28
	3.Lubondaie	23/6/2010	4	7	14	7	31
Kasai-Oriental	4.Bibanga	24/6/2010	5	10	17	10	20
Katanga	5.Songa	24/6/2010	6	5	12	6	26
	6.Lualaba	18/6/2010	4	5	13	7	20
TOTAL AXYES			28	26	69	37	125
COUNTRY TOTAL			36	31	81	44	125

ANNEX 8: Strengthening Provincial Immunization Interagency Coordinating Committees

Renforcement du Comité de Coordination Inter Agences au niveau de la Province

Renforcement du Comité de Coordination Inter Agences au niveau de la Province

Exemple de la République Démocratique du Congo

Historique

Le Comité de Coordination Inter Agences – CCIA en sigle – est né en 1995, en RDC, dans un contexte d'urgence complexe et multiforme pour faire face aux épidémies de rougeole, d'ébola, de polio et de choléra qui sévissaient à l'époque, aux catastrophes de tout genre et enfin à la dégradation continue du système de santé. Le CCIA ainsi créé avait pour rôles de mobiliser les ressources, de coordonner les interventions des partenaires et de suivre, d'une manière continue, les ressources et les interventions avec l'appui des partenaires.

Ce Comité était composé du Gouvernement (Ministère de la Santé), d'Agences des Nations Unies, des Missions diplomatiques, des ONGS internationales, et de tout autre Institution impliquée dans la résolution des problèmes de santé. C'est ainsi que le CCIA a été subdivisé en plusieurs Sous Comités, parmi lesquels se trouvait le Sous Comité Vaccination.

Devant la dégradation continue du Programme Elargi de Vaccination – PEV -, de l'intérêt de la communauté internationale pour le PEV et des recommandations en rapport

avec l'Initiative de l'Eradication de la Polio, le Sous Comité Vaccination s'est développé plus rapidement que les autres Sous Comités.

Le Sous Comité Vaccination s'est organisé en structures de coordination et en commissions de travail, à tous les niveaux, surtout en rapport avec l'organisation des activités de vaccination supplémentaires. Avec le temps, les activités de vaccination de routine et de surveillance s'y sont progressivement ajoutées et, depuis 1998, le CCIA / Sous Comité Vaccination s'est organisé et mieux structuré.

A la fin de chaque année, les membres des différentes commissions organisent une revue annuelle et développent un plan annuel pour les activités du PEV de l'année suivante. Les partenaires internes et externes du PEV participent à cette revue et contribuent à l'amélioration du plan proposé. Un mémorandum d'entente, qui définit les tâches et les responsabilités de chaque partenaire est élaboré et signé entre les partenaires du PEV et le Ministère de la Santé pour l'appui à donner au PEV.

Abréviations

AFRO	Africa Regional Office
BASICS	Basic Support for Institutionalizing Child Survival
BDOM	Bureau Diocésain des Œuvres Médicales / catholiques
CCIA	Comité de Coordination Inter Agences
CF	Chaîne de Froid
CPC	Comité Provincial de Coordination
CRS	Catholic Relief Services
DTC	Vaccin triple: Diphtérie Tétanos Coqueluche
ECC	Eglise du Christ au Congo
INRB	Institut National des Recherches Bio-médicales
ME	Médicaments Essentiels
JSI	John Snow Inc.
MORES	Mobilisation des Ressources
MOSO	Mobilisation Sociale
MSF	Médecins Sans Frontières
OMS	Organisation Mondiale de la Santé
ONG	Organisation Non Gouvernementale
PEV	Programme Elargi de Vaccination
PFA	Paralyse Flasque Aigue
PV	Procès Verbal
RC	Relais Communautaire
RDC	République Démocratique du Congo
SANRU	Projet de Soins de santé primaires en milieu rural
SC	Sous Comité
SIDA	Syndrome Immuno Déficience Acquis
TNN	Tétanos Néonatal
TR	Termes de référence
UNICEF	Fonds des Nations Unies pour l'Enfance
USAID	Agence Américaine pour le Développement International
VAR	Vaccin Anti Rougeoleux
WCARO	West and Central Africa Region Office
ZS	Zone de Santé

This activity conducted by IMMUNIZATIONBasics DR Congo is implemented by John Snow, Inc./JSI Research & Training Institute Copyright 2005 John Snow, Inc. All Rights Reserved.

This activity was made possible through the support of USAID under the terms of IMMUNIZATIONBasics contract no. GHS-A-00-04-00004-00. The views expressed herein do not necessarily reflect those of the U.S. Agency for International Development.

Contexte

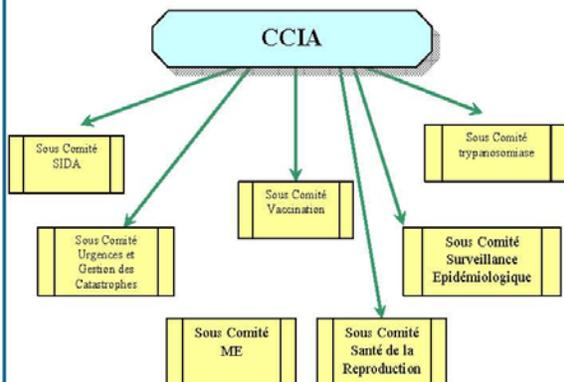
En 2002, le modèle du Comité de Coordination Inter Agences (CCIA), tel qu'il est organisé et fonctionne en République Démocratique du Congo a été documenté. La revue de fonctionnement du CCIA en 2004 a permis de faire un certain nombre des constats:

- Dans les provinces, il existe de nombreux partenaires qui assistent les zones de santé dans le cadre du Programme Elargi de Vaccination – PEV - (des ONGs, des Eglises, des Projets divers, etc.)
- Ces partenaires apportent énormément des ressources aux zones de santé et/ou aux structures du PEV à ce niveau. Parmi ces ressources, on peut citer : les matériels de la chaîne de froid, les matériels de transport, les matériels informatiques, des subsides pour la supervision et pour certains, la prime du personnel basée sur la performance
- Ces informations sur les ressources des partenaires ne sont, malheureusement, pas partagées entre les partenaires de la même province ni avec la direction du PEV, avec comme conséquences :
 - Existence des zones de santé très assistées à côté de celles sans assistance
 - Difficulté pour le PEV national de mettre à jour les inventaires des matériels PEV dans les zones de santé
 - Difficulté pour le PEV d'identifier les zones de santé qui sont réellement dans le besoin pour organiser les activités de vaccination
- Il manque un cadre de coordination des partenaires opérationnelles sur le terrain. Leurs interventions ne sont pas suffisamment coordonnées dans l'appui qu'ils apportent au PEV. Comme conséquence, on note une faible performance générale dans les provinces confrontées à ces genres de problèmes.

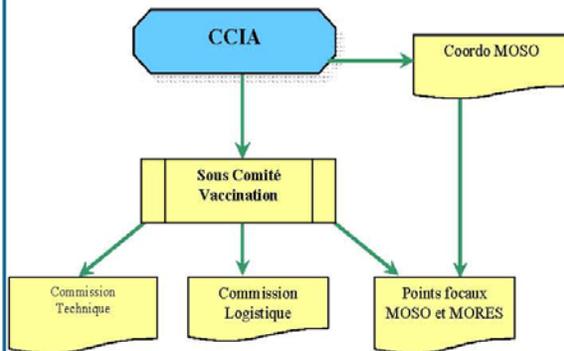
Devant cette situation, il a été identifié un certain nombre des besoins pour mieux appuyer les Inspections médicales des provinces :

1. Etablir le CCIA Provincial : Un cadre de concertation, de mobilisation et de coordination des partenaires pour coordonner leurs interventions sur le terrain. C'est le Comité Provincial de Coordination.
2. Identifier, à partir de ce grand Comité Provincial, des **Sous Comités** selon les priorités sanitaires de la province, parmi lesquelles existe un **Sous Comité Vaccination**
3. Organiser ces Sous Comités en structure de coordination et en commissions de travail. Pour le Sous Comité Vaccination, la structure de coordination est le **Comité Provincial de Coordination (CPC)** et les Commissions de travail sont : la **Commission Technique**, la **Commission Logistique**, la **Commission de Mobilisation Sociale** et la **Commission de Mobilisation des Ressources**
4. Reconnaître et rendre officielles les contributions locales des partenaires en province par la signature d'un document d'accord. Ce document sera signé par le Médecin Inspecteur Provincial et les partenaires présents dans la province.
5. Faire un **suivi régulier**, par cette structure, « Sous Comité Vaccination », des performances du PEV et de l'impact de cette performance (surveillance) dans les zones de santé, dans les structures du PEV et faire une rétro-information aux zones de santé.
6. Partager ces information avec les partenaires du terrain et avec le CCIA National à Kinshasa. Formaliser un processus de rétro-information pour la prise de décision.

Organigramme CCIA Stratégique



Organigramme CCIA, sous-comité Vaccination



Définitions – Organisation - Structures

Le CCIA stratégique, est un Comité d'action, de mobilisation des ressources et de coordination des interventions des partenaires sur le terrain pour mieux appuyer le Ministère de la Santé dans sa lutte contre les problèmes de santé auxquels il fait face. Ce comité a pour rôle:

- La mobilisation des ressources
- L'identification des partenaires et la coordination des interventions des partenaires pour le PEV
- Le suivi et la surveillance continue de performances
- L'évaluation des ressources et des interventions sur le terrain.

Le CCIA provincial, le cadre de concertation au niveau de la province, comprend plusieurs Sous Comités :

- Sous Comité SIDA
- Sous Comité Vaccination
- Sous Comité Santé de la Reproduction
- Sous Comité Lèpre - Tuberculose
- Sous Comité Trypanosomiase,
- Sous Comité Gestion des catastrophes

Chaque Sous Comité (SC) est organisé en structure de coordination et en Commissions de travail. La structure de coordination se retrouve à chaque niveau et les Commissions de travail sont multi-sectorielles.

Rôles et Termes de référence de CCIA provincial

D'une manière générale, le CCIA provincial / Sous Comité Vaccination devra :

- Identifier les partenaires opérationnels dans le domaine du PEV en province et connaître les domaines de leurs interventions
- Faire le plaidoyer efficace auprès des partenaires pour les zones de santé non appuyées et pour les domaines sans appui
- Coordonner les interventions des partenaires et organiser régulièrement des réunions de suivi et d'évaluation des indicateurs du PEV
- Elaborer et signer un document d'accord, entre l'Inspection provinciale à la santé et les partenaires présents en province. Ce document d'accord spécifie l'appui à donner au PEV par partenaire.

D'une manière spécifique,

La **Commission technique** devra se réunir une fois toutes les deux semaines pour :

- ⇒ Analyser les rapports de vaccination et de surveillance des zones de santé : vaccinations effectuées par antigène et par zone, calculer des indicateurs clés du programme, veiller à la qualité de service
- ⇒ Identifier les problèmes techniques et leurs causes : planification, formation, supervision, monitoring
- ⇒ Faire des propositions de solutions pour améliorer la situation et faire un feedback
- ⇒ Présenter les conclusions de leurs discussions lors de la réunion mensuelle de CCIA
- ⇒ Partager les résultats et rapports avec le CCIA National

La **Commission logistique** devra se réunir une fois toutes les deux semaines pour :

- ⇒ Analyser, chaque mois, les données de la gestion des vaccins et calculer les trois indicateurs clés de gestion des vaccins (disponibilité, utilisation et pertes des vaccins) et des autres intrants du PEV
- ⇒ Suivre la qualité de la chaîne de froid
- ⇒ Identifier les problèmes et leurs causes
- ⇒ Partager cette information avec les autres Commissions du CCIA lors de la réunion mensuelle de CCIA
- ⇒ Chercher, ensemble, des solutions pour améliorer la situation.

La **Commission de Mobilisation Sociale** devra se réunir, une fois toutes les deux semaines pour :

- ⇒ Analyser les indicateurs clés de vaccination et de surveillance provenant des zones de santé : couverture vaccinale, taux d'abandon, enfants vaccinés par stratégie (fixe, avancée et mobile)
- ⇒ Identifier les problèmes de mobilisation sociale et leurs causes :
 - Insuffisance des relais communautaires (RC)/mobilisateurs formés dans les zones de santé
 - Absence ou insuffisance des matériels éducatifs pour les RC (boîtes à images,

recueil de messages essentiels)

- Besoins de formation et du suivi des RC dans les villages
- Absence de supervision des RC
- ⇒ Faire des propositions de solutions pour améliorer la situation et faire un feedback
- ⇒ Présenter le rapport lors de la réunion de CCIA Technique qui se tient une fois par mois

La **Commission des Mobilisation des Ressources** devra se réunir une fois toutes les deux semaines pour :

- ⇒ Faire le point de la situation des ressources disponibles et celles à rechercher pour financer les activités de vaccination dans la province
- ⇒ Identifier les partenaires présents et potentiels dans la province, déterminer les domaines de leurs interventions et l'endroit où ils travaillent
- ⇒ Faire un plan de plaidoyer pour les zones sans appui et les domaines non financés et le mettre en oeuvre
- ⇒ Suivre les justificatifs des ressources reçues des partenaires
- ⇒ Faire des propositions de solutions pour améliorer et un feedback
- ⇒ Présenter le rapport lors de la réunion de CCIA technique qui se tient une fois par mois.

Indicateurs de suivi

Trois types d'indicateurs ont été identifiés et suivis :

✦ Indicateurs de processus :

- ⇒ Existence d'un Comité de Coordination
- ⇒ Existence des Commissions de travail
- ⇒ Document d'accord signé
- ⇒ Réunion mensuelle de CCIA tenue
- ⇒ PV de réunion disponible et envoyé au niveau central

✦ Indicateurs de performance

- ⇒ Couverture DTC1, DTC3, VAR (par zone de santé, antenne et province)
- ⇒ Catégorisation des zones de santé suivant accessibilité et utilisation des services
- ⇒ Taux d'abandon DTC1-DTC3

✦ Indicateurs d'impact

- ⇒ Incidence des cas de rougeole, coqueluche et tétanos maternel et néonatal
- ⇒ Nombre d'épidémies des maladies du PEV

Ces indicateurs sont suivis chaque mois dans les provinces ciblées et comparées aux autres provinces du pays.

Résultats Obtenus

Des efforts pour renforcer le fonctionnement du CCIA Provincial ont été amorcés avec un appui intensif des membres du CCIA National depuis le dernier trimestre 2004. Au départ, trois provinces sur 11 que compte le pays ont été appuyées (Kasaï occidental, Kasaï oriental et la province Orientale), avec le but d'étendre le processus dans toutes les provinces pendant les prochaines années.

Pour le reste des provinces, les activités de CCIA ont continué et ont subi l'influence des provinces ciblées (termes de référence partagés, indicateurs de suivi, les PV des réunions). Le CCIA a documenté les indicateurs de suivi, principalement les indicateurs de performance et d'impact. En rapport avec les indicateurs de processus, les informations sur les réunions mensuelles organisées, la disponibilité des PV des réunions, la présence des commissions de travail avec membres briefés sur leurs termes de référence, n'étaient pas disponibles.

Des feuilles de saisie des données étaient conçues, pour générer les indicateurs de suivi de CCIA par province.

D'une manière générale, même pour les provin-

ces ciblées, les réunions mensuelles étaient irrégulières, les 4 commissions de travail n'étaient pas toujours fonctionnelles. Souvent, ce sont les commissions technique et logistique qui fonctionnaient. Les commissions de travail traitaient plus des activités du PEV de routine et des activités liées à l'initiative de contrôle des maladies (polio, rougeole, TMN) et presque pas des activités de surveillance.

Certaines équipes provinciales étaient plus engagées, là où il y avait un esprit de partenariat et un bon leadership. D'autres par contre n'avaient pas suffisamment d'initiative pour les activités de CCIA. En effet, dans certaines provinces, les coordinations provinciales du PEV étaient peu actives, les inspections provinciales de santé moins engagées. Cette situation n'a pas permis un meilleur fonctionnement du CCIA, même dans certaines provinces assistées.

Les principaux résultats du fonctionnement du CCIA, par province, sont résumés dans les tableaux qui suivent. Ces tableaux sont générés automatiquement et sont partagés avec les provinces sous forme de rétro information. Ils ont été classés par indicateurs de processus, de performance et d'impact.

Suivi des activités de CCIA provincial 2005

Kasaï Oriental		Reunion Tenue	PV des réunions disponibles	PV envoyé à Kinshasa	CV DTC1 annualisées	CV DTC3 annualisées	No ZS Categ 1	No ZS Categ 2	No ZS Categ 3	No ZS Categ 4	Tx abandon DTC1-DTC3	Tx perte en vaccins	No de cas de PFPA investigués	No épidémies rougeole	No cas rougeole	No épidémies coqueluche	No cas coqueluche	No épidémies TNN	No cas TNN
CCIA Existe : Oui	Janvier	Oui	Oui	Oui	8,1%	5,2%	3	21	5	22	14,8%		4		28		40		18
CCIA avec structure de coordination : Oui	Février	Non	Non	Non	12,4%	10,7%	5	18	9	19	13,7%		6		24		45		24
	Mars	Oui	Oui	Oui	19,2%	16,8%	6	19	9	17	12,5%		3		38		75		51
CCIA avec commissions de travail	Avril	Oui	Oui	Oui	25,1%	22,2%	7	17	6	21	11,6%		17		18		24		19
Technique Oui	Mai	Oui	Oui	Oui	33,0%	26,0%	8	14	7	22	12,1%		13		18		47		24
Logistique Oui	Juin	Non	Non	Non	39,3%	34,6%	9	14	9	19	12,1%		15		22		49		22
Moso Oui	Juillet	Non	Non	Non	45,8%	40,3%	10	14	7	20	12,1%		8		14		21		16
More Oui	Août	Oui	Oui	Oui	52,8%	46,7%	11	13	10	17	11,6%		5		31		48		21
	Septembre	Non	Non	Non	59,3%	52,4%	9	15	10	17	11,7%		29		27		13		10
Termes de Référence	Octobre	Non	Non	Non	67,2%	59,5%	11	16	9	15	11,5%		12		27		16		14
Technique Oui	Novembre	Non	Non	Non	74,3%	66,0%	12	14	11	14	11,2%		6		31		5		7
Logistique Oui	Décembre	Non	Non	Non	82,0%	73,4%	17	11	11	12	10,4%		5		153		13		10
Moso Oui	Total	5	5	5									123	0	431	0	396	0	236

Note : Saisir les CV annualisées et rapporter seulement les nouveaux cas des maladies pour le mois

Feuille de saisie des Indicateurs de suivi de CCIA

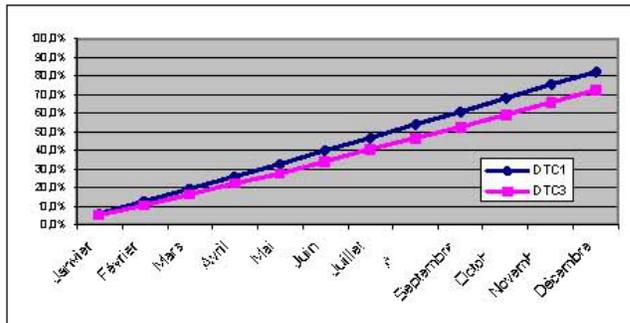
Indicateurs de processus, suivi de CCIA provinciale, RDC 2005

	CCIA fonctionnel	Avec commissions de travail	Commissions avec TR	Documents d'accords
Bandundu	Non	0	0	Non
Bas-Congo	Non	0	0	Non
Equateur	Oui	4	0	Non
Kasai-Occidental	Oui	4	4	Non
Kasai-Oriental	Oui	4	4	Non
Katanga	Oui	0	0	Non
Kinshasa	Non	0	0	Non
Maniema	Non	0	0	Non
Nord-Kivu	Non	0	0	Non
Province Orientale	Oui	4	0	Non
Sud-Kivu	Non	0	0	Non

Couverture vaccinale annualisée DTC3	Nb de cas de PFA invest.	Nb cas rougeole	Nb cas coqueluche	Nb cas TNN
77,8%	128	6488	419	154
91,0%	60	7813	36	29
54,4%	172	150	801	87
77,7%	115	92	72	121
73,4%	123	431	396	236
73,1%	233	727	721	232
81,1%	63	160993	674	128
73,6%	36	154	292	154
108,1%	54	2164	162	19
55,9%	213	2568	733	318
58,0%	100	935	268	38
	1297	182515	4574	1516

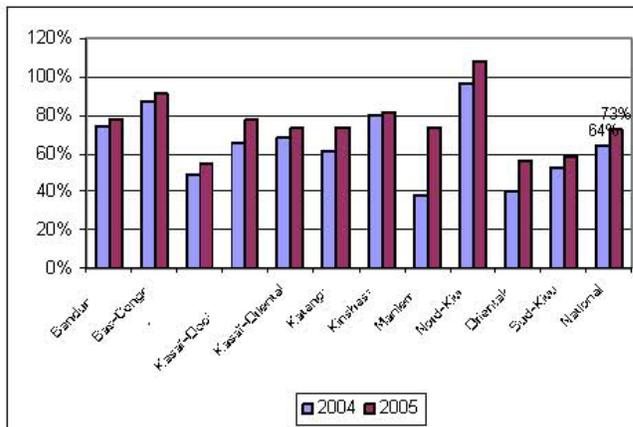
Indicateurs de performance

Couverture vaccinale Annualisées DTC1 et DTC3, RDC, janvier-décembre 2005



Indicateurs de performance

Evolution de la Couverture Vaccinale DTC3 par province, RDC 2004 et 2005



Leçons apprises

1. La présence d'une équipe formée et responsable au niveau de la province (médecin inspecteur de la province, médecin coordonnateur PEV) améliore le fonctionnement du CCIA
2. La présence des partenaires traditionnels du PEV (OMS et UNICEF) dans la province est un facteur déterminant pour le fonctionnement du CCIA
3. L'implication des autres partenaires (Eglises, ONGs) aux activités de CCIA provincial exige une gestion transparente des ressources et équipements mis à la disposition du PEV par l'équipe PEV de la province
4. Un feedback du niveau central vers les provinces est un facteur de motivation pour les équipes du niveau provincial
5. Le démarrage du CCIA provincial exige une longue initiation de l'équipe provinciale par les membres de CCIA national. Il faudra toujours accompagner et suivre les équipes du niveau provincial avec des activités clés de briefing des membres des commissions, d'organisation des réunions mensuelles, d'organisation du feedback vers la base, etc.
6. La performance et l'impact liés au fonctionnement du CCIA dans le domaine du PEV prennent quelques années (3 à 4 ans) et nécessite un suivi régulier.

Michel Othepa, Chief of Party, IMMUNIZATIONbasics / DR Congo
Lora Shimp, Immunization Technical Officer, IMMUNIZATIONbasics / HQ
Remy Mwamba, Information System Specialist, IMMUNIZATIONbasics / DR Congo

Remerciements

Même si ce document est publié par le projet IMMUNIZATIONbasics, il représente le fruit des efforts soutenus, de la collaboration intense et de l'implication de nombreux collègues et organisations oeuvrant en RDC, dans le domaine de la vaccination.

Que toutes ces organisations et collègues, membres de la Coordination Inter Agences (CCIA), trouvent ici, l'expression de notre reconnaissance pour leur rôle clé et participation, lesquels ont contribué au succès du CCIA tel qu'il est décrit tout au long de ce document.

Spéciale reconnaissance va au Ministère de la Santé de la RDC, au Programme Elargi de Vaccination de la RDC, aux Directions spécialisées du Ministère de la Santé (spécialement aux 4^e et 5^e Directions), à l'INRB, à l'OMS (Bureau de Kinshasa, AFRO et du Siège), à l'UNICEF (Bureau de Kinshasa, WCARO et Siège), au Gouvernement des Etats-Unis d'Amérique, à l'Union Européen, au Gouvernement du Japon, au Gouvernement du Canada, au Rotary/Kinshasa, au Projet IMMUNIZATIONbasics (Kinshasa et HQ), au CRS, aux MSF (Belgique et France), au BDOM, à l'ECC, à SANRU et à toutes les autres organisations et donateurs qui continuent à contribuer et à s'investir pour améliorer le fonctionnement du CCIA, surtout au niveau provincial.

Suite à leur engagement et au rôle clé qu'ils continuent de jouer, les auteurs voudraient partager le succès de cette documentation avec Son Excellence Ministre de la Santé, le Prof. Emile Bongeli et avec son équipe, avec le Dr Léonard Tapsoba, ancien Représentant de l'OMS en RDC, Mr Gianfranco Rotigliano, ancien Représentant de l'Unicef en RDC, Mr Robert Heyller, Directeur de l'USAID, Mme Aleathea Musah, Health Officer / USAID, Dr Jean Marie Mbuya, Directeur du PEV, Dr Bonanche Alela, Directeur Adjoint du PEV, Lina Piripiri, Child Survival Officer / USAID, Dr John Agbor, EPI Officer / Unicef, Sumaili Bonny, Immunization Officer / Unicef, Dr Gaye Abou Becker, Team Leader OMS, Jean Marie Yameogo, ancien chargé de la Surveillance / OMS, Dr Moïse Yapi, Chargé de la rougeole / OMS, Ir Mary Traoré, logisticien OMS, Dr O. Dah, chargé du PEV de routine / OMS, Yolande Maseembe / PEV-OMS, Léon Kinuani / PEV-OMS, Dr Valentin Mutombo, Rotary Belge, Dr Denis Matshifi, CRS / RDC, Jean Kaseya, SANRU / RDC, Dr Célestino Costa, WCARO, Dr Auguste Ambendet, AFRO, Dr Tanderu Manzila, AFRO, Ms Mary Harvey, USAID/HQ.

Nous regrettons de n'avoir pas cité tous les noms des personnes qui ont contribué d'une façon ou d'une autre dans l'amélioration du fonctionnement du CCIA en RDC. Que tous trouvent ici, l'expression de notre profonde reconnaissance.



Eléments clés de fonctionnement du CCIA provincial

- *Existence du Comité de Coordination Inter Agences, au sein duquel les membres des différentes agences de la province, impliqués au PEV, se retrouvent pour discuter les problèmes de vaccination et rechercher des solutions*
- *Existence d'un CCIA Provincial organisé en structures de coordination et en commissions de travail*
- *Des commissions multisectorielles de travail – technique, logistique, mobilisation sociale et mobilisation des ressources – disposent des termes de référence définis et des membres actifs.*
- *Les membres de commissions de travail se réunissent au moins deux fois par mois pour analyser les problèmes qui se posent, identifier leurs causes et proposer des solutions*
- *Tenue régulière des réunions mensuelles de CCIA.*
- *Procès verbaux des réunions mensuelles de CCIA sont distribués à tous les membres présents en province et à ceux du CCIA national*
- *Partage d'informations sur les contributions des partenaires de province entre eux et avec ceux du niveau central*
- *Signature d'un Document d'Accord entre les représentants du Ministère de la Santé et les partenaires de la province (y compris les bailleurs, les ONG et les autres partenaires clés de la province)*
- *Documentation des performances du PEV en province et de l'impact de ces performances sur la réduction de la morbidité*
- *Organisation d'un travail d'équipe entre les partenaires pour réaliser certaines activités d'envergure: planification, suivi des activités, formation, supervision formative, qualité des données, etc.*
- *Organisation d'un feedback par le CCIA national vers les provinces*



This activity conducted by IMMUNIZATIONBasics DR Congo is implemented by John Snow, Inc./JSI Research & Training Institute
Copyright 2005 John Snow, Inc. All Rights Reserved.
This activity was made possible through the support of USAID under the terms of IMMUNIZATIONBasics contract no. GHS-A-00-04-00004-00. The views expressed herein do not necessarily reflect those of the U.S. Agency for International Development.

ANNEX 9: SUCCESS STORY: MCHIP Provides Health Workers with Life-Saving Skills for Mothers and Babies.



Mannequins and equipment for teaching AMTSL and newborn resuscitation.

In 2010 MCHIP worked with the MOH, the AXxes Project and other implementing partners to improve maternal and newborn health by adapting an integrated package of Essential Newborn Care (ENC), Active Management of Third Stage Labor (AMTSL) and training health workers in these areas.

Training was met with great enthusiasm and led to observed sustainable changes, even in very peripheral centers as health workers quickly saw the beneficial effects simple steps could have on saving lives. For example, how AMTSL could reduce postpartum bleeding. They noted how easy it was to implement one of the most important actions of basic ENC, namely, drying and wrapping the baby soon after birth and promoting skin-to-skin contact. They had really never considered this since they lived in the tropics and believed warmth was not an issue. Nurses and midwives were also amazed to find that there were no problems with not covering a baby's umbilical cord with a bandage (as they had been doing for many years), noting that by just keeping the cords clean and dry, these actually dried more quickly. Not only did the trained health workers readily adopt these practices, but the enthusiasm spread rapidly to other health providers who adopted these practices by interacting with the trained staff.

Care during the postpartum period had also been grossly neglected. Even when mothers and babies were kept at the facility for 3 days (which was rare), not much was done for the two; not even during the first six hours postpartum when mothers and infants are at high risk of complications. After the training many health facilities, including St. Joseph's Hospital in Kinshasa, started having a nurse/midwife *sitting* in the postpartum room adjacent to the delivery room instead of visiting only when required or called for by the mothers. This way the nurse/midwife could readily evaluate the mother and baby every 15 min for 2 hours, every ½ hour for the next hour and every hour for the remaining 3 hours. Nurses and midwives also seized this opportunity to counsel mothers to recognize danger signs in herself and her baby. These measures not only improved the quality of care of mothers and their infants, but health workers felt greatly empowered by their increased competencies.