

## **Plan International KIDCARE Child Survival Project**

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**Kilifi District, Kenya**

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### **Final Evaluation Report**

**November 2009**

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### List of Acronyms

ACT	Artemesin Combination Therapy
AIDS	Acquired Immune Deficiency Syndrome
AFP	Acute Flaccid Paralysis
AKHS	Aga Khan Health Services
APHIA II	AIDS Population Health Integrated Assistance
ANC	Ante Natal Care
ARI	Acute Respiratory Infection
ART	Anti-Retroviral treatment
BASICS	Basic Support for Institutionalizing Child Survival
BCC	Behavior Change Communications
BCG	Bacille Camlet Guerin
BCI	Behavior Change Information
CBF	Community Based Facilitator
CBO	Community Based Organization
CCCD	Child Centered Community Development
CD	Country Director
CDC-KEMRI	Centers for Disease Control-Kenya Medical Research Institute
CG	Care Group
CHW	Community Health Worker
CHW-TOT	Community Health Worker Trainer of Trainer
CLTS	Community Led Total Sanitation
CORE	The Child Survival Collaborations and Resources Group
CS	Child Survival
CSHGP	Child Survival and Health Grants Program
CSSA	Child Survival Sustainability Assessment
CSP	Child Survival Project
CSTS	Child Survival Technical Support
DASCO	District AIDS and STD Coordinator
DoCH	Division of Child Health
DRHT&S	Decentralized Reproductive Health Training and Supervision
DHC	Dispensary Health Committee
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DMOH	District Medical Officer of Health
DPHO	District Public Health Officer
DPHN	District Public Health Nurse
DPT	Diphtheria - Pertussis - Tetanus
ENA	Essential Nutrition Actions
EPI	Expanded Program on Immunization
EPI-INFO	Epidemiological Information
GOK	Government of Kenya
GUH	Growing Up Health Domain (Plan)

HFA	Health Facility Assessment
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HW	Health Worker
IEC	Information, Education and Communication
IGA	Income Generating Activity
IH	International Headquarters
IMCI/C-IMCI	Integrated Management of Childhood Illness/Community IMCI
ITN/LLIN	Insecticide Treated Net/Long Life Insecticide Net
KANCO	Kenya AIDS NGOs Consortium
KeNAAM	Kenya NGO Alliance Against malaria
KDH	Kilifi District Hospital
KDHS	Kenya Demographic and Health Survey
KDHSF	Kilifi District Health Stakeholders Forum
KEMRI	Kenya Medical Research Institute
KEPI	Kenya Expanded Program on Immunization
KIDCARE	Kilifi District Coastal Area Replication & Evolution
KPC	Knowledge, Practice, Coverage
LQAS	Lots Quality Assurance Sample
MOH	Ministry of Health
MOST	Mobile Ongoing Sustainable Training
NGO	Non-Governmental Organization
NID	National Immunization Day
OGAC	Office of the Global AIDS Coordinator (US Government)
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Salt
ORT	Oral Rehydration Therapy
OVC/MVC	Orphans and Vulnerable Children/Most Vulnerable Children
PHTs	Public Health Technicians
PIT	Provider Initiated Testing (HIV)
PHOs	Public Health Officers
PLWHAs	People Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
PO	Project Officer
PRA	Participatory Rural Appraisal
PSI	Population Services International
PSM	Programme Support Manager
PVO	Private Voluntary Organization
SA	Supervision Area
SBA	Skilled Birth Attendant
SP	Sulphadoxine Pyrimethamine (Fansidar)
STI/STD	Sexually Transmitted Infections/ Sexually Transmitted Diseases
TA	Technical Assistance
TBA	Traditional Birth Attendant
TOT	Training of Trainers
TT	Tetanus Toxoid

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U5/ U5MR	Children under 5 years old/ Under Five Mortality Rate
UNAIDS	United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	Vitamin A Deficiency
VCT	Voluntary Counseling and Testing
VHC	Village Health Committee
WCBA	Women of Child Bearing Age
WFP	World Food Program
WHO	World Health Organization

### **Acknowledgements**

The evaluation Team Leader would like to acknowledge the strong dedication and commitment of all of the partners in the KIDCARE project and to conducting the evaluation itself. The evaluation endured long hours and late nights to gather the large volumes data and other evidence as well as in-depth analysis of the findings. The leadership and vision of Plan USA's headquarters' backstops Laban Tsuma and Pierre Marie Metangmo brought the framework and methodology of C-IMCI, Care Groups, PD/Hearth and making the overall "bottom-up" approach of involving empowered women, households and communities in their own health and "making it work" within the formal Kenyan health care system. They also brought significant amounts of technical assistance and training to their colleagues in the project and helped them to overcome obstacles. The support of the Plan Kenya national office from David Owuor, and "Mama" Ruth Momanyi, KIDCARE Project Coordinator adapted these global "best practices" to form the Kenyan version. Without a doubt, the strong support and acceptance of the truly integrated partnership between Plan International and the District Ministry of Health can be credited to the District Medical Officer, Dr. David Mulewa, and his predecessors and his team who guided the Government of Kenya's enthusiastic role in the KIDCARE partnership. May this be the first of many such opportunities for the people of Kilifi District.

## **A. Executive Summary**

The KIDCARE program was implemented through a 5 year Cooperative Agreement from USAID in the CSHGP Standard Category and began on October 1, 2004. The total budget was \$2,000,000 included \$1,500,000 from USAID with a match from Plan of \$500,000. Plan actually provided additional match over time to support some activities not in original the DIP, and to hire the extra staff that was recommended to meet needs that were identified at different stages of project implementation. Plan's Kenya Child Survival Project (KIDCARE) was located in Kilifi District, Coast Province of Kenya, about 1 hour north of Mombasa, since 2004, and drew extensively on the lessons learned from Plan's previous CSP that was located in nearby Kwale District, in the same Province. In fact, the KIDCARE project benefited from three technical staff members who had worked in the Kwale project.

The overall goal of the KIDCARE program was to sustainably reduce morbidity and mortality of children and women of reproductive age. KIDCARE seeks to achieve 3 overarching results: improved household behaviors and management of childhood illness through IMCI (and c-IMCI), increased access to quality maternal and child health services, and improved capacity of local partners, systems and structures that allow for sustained CS activities. KIDCARE Project used two complementary strategies to reach project objectives: 1) Development of a community based health system with strong links to MoH service providers, and 2) Design and implementation of the IMCI approach at the facility and community levels using the MOST approach to IMCI training and includes PD/Hearth. Priorities of the program involved extensive community participation in health decision making and financing, community managed decisions about health needs and required actions, and community managed cost recovery systems to support MoH activities at the community level. KIDCARE wanted to improve health outreach at the village level, effective health decision-making at the household level and personal behavior change at the individual level. An objective targeting 9,000 OVCs was dropped at USAID's request because there were other programs targeting OVCs in Kilifi and overall level of effort was going to be low.

Results from quantitative and qualitative assessments conducted during the evaluation fieldwork confirm that the KIDCARE project achieved, and in several cases significantly exceeded, project targets in multiple high-impact child survival interventions. Community members report that morbidity and mortality reductions from the program are obvious. Measles and neonatal tetanus, once common in Kilifi have almost disappeared. Exclusive breastfeeding went from 21% to 55%. The community now says that they can see that EBF infants are significantly healthier and that this motivates them to encourage others to do it. Even though not officially a focus of the project, activities in the community and health facilities increased skilled deliveries from 13% to 35.4%. Health Facility Assessments (HFAs) show that performance has overall improved in key IMCI health worker behaviors, however, some health worker behaviors, especially nutrition assessment and treating non-malarial infections need improvement. National experience with inappropriate management of drug boxes promoted by the Bamako Initiative led to national policies that have discouraged antibiotic use for CCM.

This constrained Plan's attempts to introduce CCM to the project area, even though there were successful models in early child survival projects in Kenya and there remains a clear need for the approach.

The USAID Kenya Mission Health Office has been very engaged and supportive of the KIDCARE project from the beginning. The Mission organizes regular meetings and cross-visits between Plan and other PVOs with CS projects and staff have visited the project several times. Plan debriefed the Mission at the conclusion of the FE.

### Conclusions

The KIDCARE project successfully implemented C-IMCI in Kilifi District with a combination of Care Group community mobilization and behavior change health education that linked communities with the health system through representation on the VHC and DHC structures. Capacity building in IMCI, HIS and program planning and management has significantly built DMOH abilities to sustainably improve the health of mothers and children in the district. PD/Hearth, while covering a modest number of children in the catchment area, continues to prove to be a very acceptable approach for nutrition rehabilitation, both for caregivers and health professionals. The district now serves as a Learning Center for other DMOHs in the country. Based on the Final Evaluation fieldwork there remains a strong need for community-based programs in maternal and newborn care, reducing diarrhea prevalence and linking health programs to the special needs of OVCs. But this is not a reflection of weaknesses in the Plan KIDCARE project as the intervention mix was selected on several factors, including partner capacity to address priority child health needs. As OVC/MVC activities are developed under PEPFAR 2, Plan's CSP lessons learned have much to add to the existing USAID OVC activities in Kilifi District, implemented by Catholic Relief Services. This could be an excellent opportunity to build upon the strengths of both programs in the future.

### Recommendations

Plans are already underway to continue child survival activities through the partners. The project methodology, especially developing strong linkages between the formal health sector (DMOH), the private sector (especially NGOs) and communities is valuable as a foundation for many other health and community development activities within Kilifi District, Coast Province and elsewhere in Kenya. The lessons learned in the program, though already shared with other PVOs at meetings organized by USAID, should be shared through Plan and other venues attempting to help Kenya meet the MDGs.

Specific structures that were established by KID CARE in Kilifi District should also provide the foundation and expansion of other community-based health programs. Expansion is still needed to increase some of the most important indicators that improved during the project. In addition, Promising new approaches to community sanitation introduced by Plan funded by other donors, such as Community Led Total Sanitation (CLTS), that has already proven very culturally acceptable in rural Kilifi communities, could be evaluated for impact on the very high diarrheal disease prevalence using LQAS methodology that KIDCARE introduced to the project (this



would be a brand new activity.). This does not mean that Plan alone should be responsible for securing funding to implement these programs. Due to high HIV levels in Kenya, Plan should also collaborate with future OVC and other programs in Kilifi to strengthen the health component of those programs. While CRS has PEPFAR-funded OVC programs in Kilifi, the two organizations have complimentary strengths in the District that could be synergized. Plan's activities in other sectors (e.g. education, sanitation/water) supported by other donors can strengthen and add value to these programs and help foster the program integration that is now being championed by OGAC and other HIV/AIDS programs.

The Care Group approach to community-mobilization, health education, and household/individual empowerment for health behavior change has demonstrated success in reducing infant and child (and possibly maternal) mortality and morbidity in very poor rural communities in several countries, especially in Sub Saharan Africa in countries that are not "on track" to meet the MDGs by 2015. Approaches to introducing and scaling up the approach in national systems is beyond the capacity of any one PVO or project to accomplish. Therefore, through the CORE Group and USAID CSHGP partners, Plan HQ CS backstops should collaborate with other PVOs that have successfully implemented Care Group community-based CS projects to advocate for the funding to organize a forum on the State of the Art and Lessons Learned of various adaptations of the methodology. Hopefully, USAID will provide technical assistance for professional documentation and dissemination of the evidence to global health forums where they can be shared with the wider public health community.

Plan's programs all include men, women and children in their design and implementation. But since the Final Evaluation fieldwork involved extensive opportunities to discuss health challenges in rural communities, it became obvious that men were unlikely to access HIV and RH services through the MCH activities supported by the CSP. Far fewer men are tested for HIV and knowledge about other RH issues is also low. Therefore, USAID Kenya should encourage APHIA 2 and any future RH/HIV programs working with the DMOH in Kilifi District to develop and expand male-friendly programs, both for the benefit of the men themselves, but also a method to support improvements in maternal and child health.

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Major KID CARE project Inputs, Activities, Outputs and Outcomes are outlined below in Table 1.

Project Goal: To reduce morbidity and mortality in children less than five years of age and pregnant women.

Project Objective # 1 and # 2: Improved household behaviors and management of childhood illness through IMCI

Project Inputs	Activities	Outputs	Outcome
IMCI	Train professional Health Workers Follow up (MOST)	48 trained IMCI including ORT Follow ups done once every year	All rural facilities at least have 1 HW trained and using IMCI protocol
c-IMCI	Train CHWs, CHW/TOTs & PHTs  PD/Hearth training  HIV/AIDS prevention training  Monitoring and Supervision  Refresher meetings	1555 CHWs 119 CHW/TOTs 18 PHO/PHTs  75 CHWs trained in PD/Hearth 12 MOH/Plan staff trained in PD/Hearth  53 MOH Health Workers trained in PITC  Care group meeting bi-monthly, CHWs meetings monthly.  Refresher training for all CHWs and CHW/TOTs.  3 Review meetings for MOH staff trained in PITC	CHW/TOTs taking lead in updating CHWs in the community Caregiver knowledge practices on child care have improved as shown by the LQAS results.  Increased number of ANC accessing Testing and Counseling services.  MOH/APHIA II Coast have committed to continue with review meetings for PITC services.
IEC/BCC	Doer non-Doer,  Community dialogue,  Development of IEC/BCC materials	TT survey reports  Community dialogue reports  250 photo booklets distributed to CHW/TOTs and facilitators	Knowledge and practice has improved.  Volunteers value the IEC material.

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		T-Shirts with messages on Immunization, Malaria, Nutrition and TT purchased and distributed to CHWs, VHCs and DHCs. 2,000 Laminated leaflets with dangers signs of sick child.	
Supplies	ORS, ITNs, Salter scales, Water treatment Kits	48,000 LLITNs, 93 Salter scales, Water Treatment Kits (15456 Water guard bottles and 32000 PUR sachets)	Water treatment is gradually gaining acceptance and growth monitoring at village level
Objective # 3: Improved capacity of local partners and systems and structures that allow for sustained CS activities.			
	Facilitated formation and operation of KDHSF	KDHSF holds regular quarterly meetings	Review of AOP and implementation. Joint Health Action days by all partners. Sharing of information.
	LQAS training	69 Health Workers trained 7 LQAS surveys done	Survey results shared and used for focusing effort. Increased uptake of most Indicators. Joint implementation of surveys.
	HFA training	3 HFA surveys done	Joint follow up and on job training done. MOH capacity to conduct HFA.
	Training and Introduction of MOST	20 IMCI facilitators and 1 Course director trained On job training using MOST	MOH capacity in conducting on job training using MOST enhanced
	Collaboration of KEPI outreach	149 Professional Health Workers updated on EPI 40 outreach sites established Support to DHCs/MOH for established sites	DHCs conducting Immunization outreaches without project support. Integration of services at outreach sites. Defaulter tracing and referral improved.

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	Training in PD/Health	29 TOTs, 3 DHCs, 75 CHWs and 12 MOH/Plan staff trained in PD/Hearth	PD/Hearth rolled out in 21 villages and 182 out of 261 children graduated to normal weight. Percentage of underweight children reducing
	HIS training	14 DHCs, 1555 CHWs	Use of HIS to make decisions & map out Immunization outreach sites

## B. Overview of the Project

Beneficiary Population	
Infants < 12 months:	9,270
Children 12-23 months:	9,270
Children 0-23 months:	18,540
Children 24-59 months:	27,814
Women 15-49 years:	64,381
Total Beneficiaries	110,735
Population of Target Area:	257,522

Although located within 2 hours of a major city (Mombasa), Kilifi District is mostly poor, and local resources for development are scarce. At the beginning of the CSP, maternal and Child health indicators overall were low and lagged the rest of the country. During the design of the program, Plan, the DMOH, partner NGOs (Amkeni, PSI, AKHS and KEMRI-Wellcome), and affected communities identified six priority MCH health problems contributing to high morbidity and mortality: malaria, malnutrition, childhood diarrheal diseases, lack of immunizations, pneumonia and HIV/AIDS. Other factors

contributing to mortality and morbidity of children U5 and WRA included the high cost of health care; poor access to health services and qualified personnel; poor caregiver attitudes; harmful cultural practices; exacerbation of malnutrition by poverty, poor diet, water-borne disease; and reliance on popular but ineffective practitioners and practices. The baseline KPC showed that 46%, 45% and 35% of children had a fever, diarrhea or cough respectively in the 2 weeks prior to the survey and the MOH HIS showed that over half of all neonatal tetanus in Kenya were found in Kilifi District. In 2003, U5 mortality in Coast Province in 2003 was 117, comparable to the rural Kenyan average of 115.

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KIDCARE used two complementary strategies to reach project objectives: 1) development of a community based health system with strong links to MoH service providers, and 2) design and implement the IMCI approach at the facility and community levels, using the MOST approach to IMCI training and including PD/Hearth. Priorities of the program involved extensive community participation in health decision-making and financing, community managed decisions about health needs and required actions, and community managed cost recovery systems to support MoH activities at the community level. KIDCARE improved health outreach at the village level, effective health decision-making at the household level and personal behavior change at the individual level.

The project's primary partner was the DMOH, but other partners included 2 international NGOs (also USAID partners) a USAID bilateral reproductive health project, as well as communities themselves. The project provided extensive technical and managerial capacity building to facility DHCs (Dispensary Health Committees) to strengthen their

ability to provide effective services and to improve their decision-making and financial management. The DMOH managed the rural health infrastructures and the project worked with them to increase their capacity to provide technical and operational support in IMCI, c-IMCI, monitoring and evaluation, and to supply essential drugs and vaccines to dispensaries. Community outreach was coordinated through Miji (Homestead) and Village Health Committees (VHCs), CHW-TOTs, CHWs and introduction of Care Groups (CG), a proven approach to reaching all households and care-givers in the catchment area. Plan also strengthened development of the Village Health Committees' technical and managerial capacity to plan and supervise health activities locally, as well as effectively participate in the Dispensary Health Committees. The project also strengthened functioning of dispensaries themselves and for communities to foster joint responsibility for child survival activities. As part of the project, Aga Khan Health Services Community Health Department (AKHS-CHD) strengthened District Health Management Team (DHMT) staff and DHCs on governance, HMIS and financial management. AKHS, in partnership with DHMT and Plan, customized aspects of the existing national HMIS tools and trained Plan staff and partners on use of HMIS tools and health facility financial management. This will contribute to the on-going HMIS tool upgrades at the national level.

USAID's Amkeni Project was the bilateral RH project working in Kilifi District at the beginning of the project, but this changed to APHIA II when AMKENI ended. APHIA II is charged with strengthening the capacity of DHMT by providing training in Reproductive Health, with strong emphasis on HIV/AIDS. The Kenya Medical Research Institute (KEMRI)/Wellcome Trust Research Collaboration is the premier malaria-related research and behavioral studies institute in East Africa. KEMRI/Wellcome Trust's original role in the KIDCARE project was to train shopkeepers in malaria case management and increase access to appropriate treatment services at the community level. When first-line malaria treatment in Kenya changed to ACTs, however, government took over as sole distributor of first line antimalarial drugs and shopkeepers were no longer included in either the government or the project's malaria strategy. KEMRI's role in the project significantly decreased at that time.

Population Services International (PSI) was already working with the MoH to supply ITNs to dispensaries for the ANC program at a lower than market cost. PLAN and the MOH worked with PSI to increase access and appropriate use of ITNs, as well as promote Point of Use (POU) water treatment using Waterguard (home chlorination kit). Over the life of the project, supply and distribution strategies for LLITNs changed in the District and the need for the KIDCARE project to be substantially involved in net procurement decreased.

Project interventions and activities were selected specifically from evidence for their potential to reduce maternal and child mortality and morbidity from malaria, diarrhea, and pneumonia among children under five years; improve nutritional status of children under five years and pregnant women; increase immunization coverage for children under five years and pregnant women and increase knowledge and positive behavior change to decrease risk of HIV/AIDS transmission, especially during pregnancy. Capacity strengthening objectives included improved capacity to finance and carry out

quality and equitable child-centered services by MoH and local organizations. The development of an Annual Operating Plan (AOP), is led by the DMOH and his team with inputs from members of the KDHSF, (comprised of representatives from Plan, APHIA II, PSI, AKHS and KEMRI-Wellcome). KDHSF members jointly identified priority causes of maternal and child mortality and collaborate to implement specific maternal and child health interventions and activities that are recognized to reduce mortality using a facility-based and community IMCI strategy. The highest relative levels of effort selected were (at 25% and 20% respectively) were devoted to malaria and nutrition. The HIV/AIDS intervention was the lowest LOE (10%) because there were other HIV/AIDS programs in the area such as AMKENI/APHIA II and CRS' OVC program. The intervention mix addressed all of local and national priorities for IMCI and was designed to contribute to meeting the MDGs. Interventions targeted to women promoted increased utilization of ANC, appropriate ITN use, IPTp during pregnancy and voluntary counseling and testing (VCT)<sup>1</sup>. Although the project did not have a separate MNC component in the intervention mix, ANC and promoting facility (skilled) deliveries had to be included in the project to meet other project objectives.

Multiple implementation strategies were used to engage several community and health system stakeholders to provide health education and better quality MCH health services. The approach included delivering health education with culturally-sensitive information to prevent and effectively manage diseases at the household level as well as encouraging appropriate care seeking at health facilities. The project devoted significant effort to mobilizing communities for improved health behaviors and strengthening the performance of existing health providers in the community and in health facilities by 1) introducing the Care Group (CG) model for community mobilization and action, 2) strengthening community health delivery systems and creating effective linkages with the formal health system; 3) increasing the availability of quality facility based IMCI services at first level health facilities and promoting Community IMCI (c-IMCI); 4) improving supportive supervision and monitoring by trained health providers 5) supporting, scaling-up and sustaining intensive implementation of high impact interventions including community-based health and nutrition interventions such as immunization outreach, PD/Hearth and use of LLITNs.

Communities and households were reached through Care Groups using 10 homesteads called the "miji kumi" as the functional unit of operation for the CG model. Each 'mji' or homestead consists of 5-20 households of relatives with a head of the household usually an elderly relative. Each of these 'mji's' selected a family member to serve as a "health contact" and 10 health contacts from neighboring homesteads formed one CG. Out of these health contacts, one especially motivated volunteer who demonstrates specific leadership abilities is appointed by the CG as the Community Health Worker (CHW). CHWs from 10 CGs, in turn, appoint one CHW-TOT, someone with at least 8 years of formal schooling and also willing to provide oversight of the 10 CGs. The CHW-TOT eventually serves as a member of the Village Health Committee (VHC). This

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<sup>1</sup> As of 2009, use of the term VCT was decreasing in favor of Provider-Initiated Testing, where all women coming to ANC were offered HIV testing, with the opportunity to opt-out.

provides this structure directly linking the individual and household to the formal health structure.

### **C. Data Quality: Strengths and Limitations**

Plan International was one of the first PVOs to adopt Lot Quality Assurance Sampling (LQAS) into their child survival programs. Joe Valadez, who originally introduced LQAS to child survival, and is now at the London School of tropical Medicine and Hygiene, was working for Plan at the time. Plan has used LQAS extensively throughout the world. The DIP included plans to conduct LQAS and HFA every 6 months to monitor the program. By the time of the MTE, however, the partners concluded that the frequency of such intensive monitoring was too labor intensive and was significantly detracting from other project activities, especially in community capacity building and monitoring. Surveys were reduced to once a year. Even with the reduction, however, the KIDCARE project conducted more frequent quantitative monitoring than most child survival projects in the CSHGP. The project also devoted more time to examining the quality and effectiveness of the CBHIS and the recording of vital events. By reducing the frequency of sampling they were able to devote more time to analyzing results and using them to plan adjustments in the program to meet their objectives. The HFA tool in use at that time was too lengthy and detailed to prove sustainable over the long term and a replacement tool was used at baseline, midterm and for the final HFA.

Reducing time conducting surveys and compiling reports provided the program with more time to focus on providing timely feedback on the findings from the CBHIS and LQAS, making them more relevant for DMOH and partner management decisions through the KDHSF.

Compiling data and generating reports was the responsibility of the M&E staff person. The first person who held that position left for a job with another organization more than one year before the project ended. Like many PVOs, Plan discovered that high demand for qualified M&E staff made recruiting a replacement was difficult, but they were able to find a replacement before the final surveys were conducted.

The MTE found that strengthening the HMIS in the project was “ensuring sustainability and providing a solid platform for the launch of other programs and services. The integration of the community based health information system (CBHIS) in the district health information system (HIS) facilitates the continuous dialogue between the health system and community and creates an effective forum for joint discussion and problem solving.”<sup>2</sup>

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<sup>2</sup> Ambrasi, E. KID CARE Child Survival Project Midterm Evaluation Report, 2008.



**D. Presentation of Project Results**

Indicators	Baseline	Target	End Of Project		Measurement
			Coverage	Confidence Interval	
<b>Immunization</b>					
Children age 12-23 months fully immunized***	62%	74%	76.5%	5.7	Baseline and Final KPC, Biannual LQAS with examination of immunization cards for children 12-23 months
Children age 12-23 months who received Measles vaccine*	64%	80%	77.5%	5.6	
Mothers with TT2 coverage before birth of last child*	24%	60%	66.7%	7.9	Baseline and Final KPC, Biannual LQAS with examination of maternal vaccination cards
<b>Diarrhea</b>					
Mothers with children aged 0-23 months who report that they wash their hands with soap/ash before food preparation, before feeding children and after defecation, and after attending to a child who has defecated**	4%	14%	15.3%	6.5	KPC baseline, MTE and final evaluation/survey, biannual LQAS
Households treating water before drinking**	1%	10%	31.1%	6.2	KPC baseline, MTE and final evaluation/survey, biannual LQAS
Children aged 0-23 months with diarrhea in the past two weeks who received ORS*	31%	41%	68.9%	7.1	KPC baseline, MTE and final evaluation/survey, biannual LQAS
Mothers able to prepare ORS correctly	32%	50%	48.3%	6.7	
Children age 0-23 months who received increased fluids and continued feeding during an illness in the last two weeks	3.4%		34.6%	7.2	KPC baseline, MTE and final evaluation/survey, Qualitative research Biannual LQAS

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<b>Pneumonia</b>					
Mothers of children age 0-23 months who know one danger sign of pneumonia (fast breathing or chest in drawing)	38%	60%	72.4%	6.1	Baseline and final KPC, Biannual LQAS
Cases of cough and difficult breathing in children age 0-23 months which received any health care	79%	90%	82.8%	7.4	Baseline and final KPC, Biannual LQAS
Cases receiving care from a health facility	87%	95%	85.4%	7.6	
<b>Malaria</b>					
Children who slept under ITNs the night prior to the survey*	21%	50%	76.7%	5.7	Baseline and final KPC Beginning and end of project Biannual LQAS
Women who took malaria prophylaxis/treatment during pregnancy*	39%	60%	87.2% for SP1 (and 38% for SP2)	4.6	Baseline and final KPC Beginning and end of project Biannual LQAS
Caretakers who sought treatment within two days (48 hours)	45%	75%	87.7%	6.0	Baseline and final KPC Beginning and end of project Biannual LQAS
Children getting the correct treatment within 24 hours of onset of fever (treatment commenced by 'next' day)*	18%	40%	67.5%	8.6	Baseline and final KPC Beginning and end of project Biannual LQAS
<b>Nutrition</b>					
Children aged 0-23 months who are less than 2 SD below the median weight-for-age for the reference population	26.6%	21.6%	14.4%	3.4	KPC- baseline, MTE and final (anthropometric) Sentinel nutritional surveillance in implémentation and comparison villages Biannual LQAS

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Children aged 0- months who are fed breast milk only*	21%	31%	54.9%	9.1	KPC baseline, MTE and final evaluation/survey, biannual LQAS, Qualitative research
Children aged 6-9 months who received breast milk and solid foods in the last 24 hours*	92%	95%	98.2%	3.4	KPC baseline, MTE and final evaluation/survey, biannual LQAS, Qualitative research
Mothers who received a vitamin A dose during first six weeks postpartum after delivery of the youngest child less than 24 months	5%	30%	46.9%	6.7	KPC baseline, MTE and final evaluation/survey, biannual LQAS, CBR
Children 6 –23 months who received Vitamin A within the last 6 months*	61%	80%	85.2%	4.0	Hearth Reports
Children who are enrolled into Hearth who complete it			69.7%		
<b>HIV/AIDS</b>					
Mothers able to give 2 ways of avoiding HIV infection	41%	70%	66%	6.4	KPC baseline, MTE and final evaluation survey, LQAS
Mothers availing of the VCT service from 18% to 30%	18%	30%	96.7%	2.6	VCT center and PMTCT clinic – (nevirapine) records, records of referral to post-test clubs and other support services KPC, LQAS

\* High impact child survival indicator from Lancet Child Survival series. \*\* High impact indicator combined as water, sanitation, hygiene in Lancet Series. \*\*\*Identified as high impact because Kenyan EPI program includes both Hib and measles vaccination.

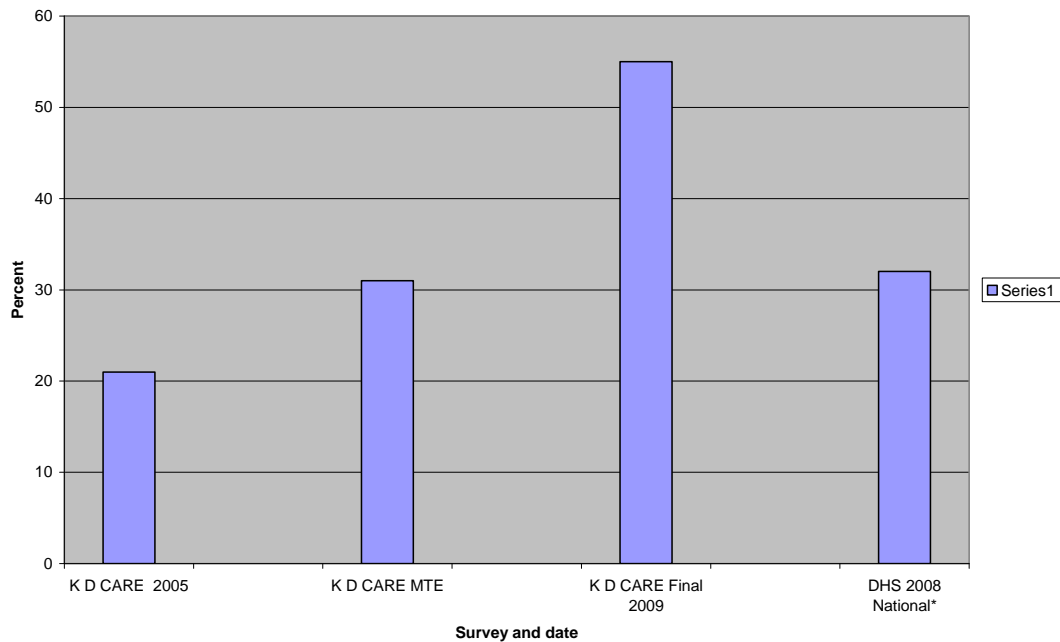
## E. Discussion of Results

Results displayed in the table in Section D show that Plan's KIDCARE Child Survival Project met, and significantly exceeded population based coverage targets in most project objectives, including several proven high-impact child survival activities. In addition, health system capacity strengthening and emphasis on sustainable systems have left the Kilifi DMOH in the position to serve as a continuing "Learning Center" for other DMOH in Kenya. KIDCARE also subjected the final evaluation results to the lives

saved calculator. The project saved at least 989 lives with up to 396 in its final year. There is an estimated drop of Under 5 Mortality Rate of 31% from baseline levels. The greatest success at saving lives was achieved for Malaria and Measles. In spite of significant improvements in several MCH indicators neonatal causes, HIV/AIDS, pneumonia and diarrhea continue to be major causes of childhood deaths in the area.

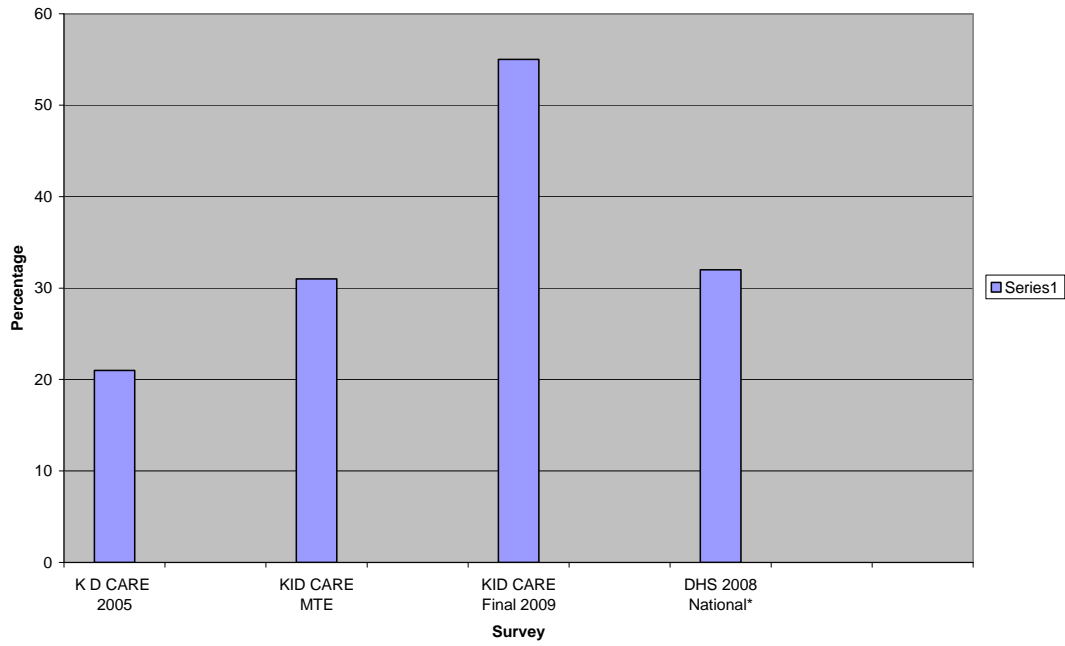
The following graphs compare selected high-impact child survival indicators with preliminary findings from the 2008-2009 DHS. The full report will not be available until early 2010. Province level data is not yet available for all indicators, so national rural results are provided in some cases. Coast Province includes one major (Mombasa) and several smaller urban and periurban areas, whereas the KIDCARE project was implemented in the rural areas only. Data should be interpreted with caution since sample sizes and methodology in surveys are not exactly comparable. Even the DHS report states that samples in any given Province are small. Nevertheless, it is helpful to compare findings within the same population over time. There were other major maternal/child, HIV/AIDS and malaria activities going on in Kenya and in the District at the same time. The Kilifi DMOH attributed the extent and magnitude of improvements in the indicators that were recognized at the national level, were the direct result of the assistance provided by KIDCARE project.

Percentage of children who slept under LLITN night before survey

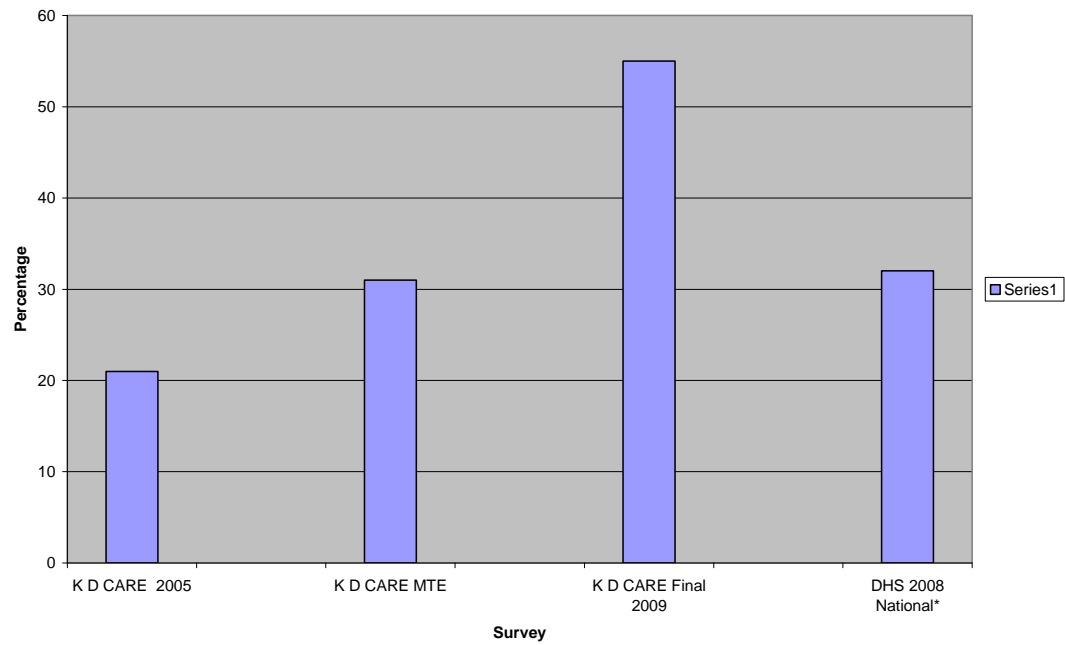


# KIDCARE Final Evaluation Report September 2009

## Percentage children receiving correct treatment for fever within same/next day



## Children 0-5 months exclusively breastfed in last 24 hours



Contribution toward Objectives

The KIDCARE Project used variations of two complementary strategies to reach project objectives: development of a community based health system with strong links to MoH service providers, and designing and implementing the IMCI approach at the facility and community levels which employs the MOST approach<sup>3</sup> to IMCI training that includes PD/Hearth. The particular mix of approaches was not new, but Plan's adaptation to and strong integration with the Kenyan MOH system, without additional networks of other supporting networks of institutions (e.g. churches, local NGOs) places it within the minority of Care Group programs that include those projects who are primarily linked with district-level health services and provide capacity-building without those other supportive structures. The KIDCARE partnership "made it work" within the Kenyan MOH structure and local political/cultural context and, facilitated by USAID Kenya and the central MOH Child Health program, shared the results at the national level.

Specific to meet Objectives 1&2: Improved household behaviors and management of childhood illness through IMCI

The MTE found, and the FE confirmed that "promoting appropriate health behaviors through health education strategies implemented by the Plan's adaptation of the Care Group (CG) model, among other complementary efforts to engage community stakeholders through the CORPs (Community Own Resource Persons), resulted in community ownership and empowerment. The CG model and PD/Hearth proved to have the additional advantages in motivating and sustaining the volunteer workforce in the community. Acceptance and function of the "new" community model was facilitated by building upon existing political and administrative structure clusters (e.g. homesteads). Linkages between the health system and these community structures facilitated the collection and use of health information, improved service utilization and disease prevention and health promotion,"

Plan also responded to the MTE findings and recommendations and refocused project priorities by giving significantly more attention to reinforcing efforts for behavior change in specific technical interventions at the community level. They were also able to sustain the health promotion gains by strengthening community governance structures and streamlined incentives systems for the community providers of care: VHC, DHC, PHO, PHT and Community Volunteers.

At the time of the DIP workshop, Plan reexamined staffing patterns and management oversight needs for CGs in 357 villages to ensure there was adequate support and supervision of community activities. As a result, they hired 6 additional Community Based Facilitators (CBFs), thus reducing the number of villages that each CBF was expected to cover. Since these positions were not included in the original budget, Plan provided additional "match" to fund these positions.

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<sup>3</sup> Mobile O Sustainable Training

Objective 3 Improved capacity of local partners and systems and structures that allow for sustained CS activities:<sup>4</sup>

Plan devoted considerable amounts of effort to facilitating joint implementation of both LQAS and HFA surveys, developing the DIP, developing joint management and supervisions structures through the AOP (Annual Operation Plan), sharing results within the partnership with the MOST IMCI monitoring tool, with stakeholders, and with the national-level implementers of child health programs (especially USAID and MOH). Through the project's connection with the Global CSHGP network, capacities in PD/Hearth, BEHAVE and overall technical intervention expertise were introduced and reinforced.

#### Contextual Factors

Beyond a doubt, involvement of experienced Plan child health experts at the project and national levels facilitated "making it work" within the larger Plan Kenya system. Program implementation also took place in Kenya while other international health initiatives and donor programs were also implemented. Some examples included: Global Fund for AIDS, TB and Malaria, PEPFAR, Clinton Foundation and major efforts to take measures to meet the MDGs. At the same time, donors and GOK were grappling with significant "brain drain" of health professionals to developed countries and other health system and human resource challenges. Along with poor compensation and low health worker morale, there were significant health worker shortages in most rural health facilities. Health workers trained in IMCI by the project were frequently transferred out of the district and replaced with workers unfamiliar with IMCI. Although IMCI was adopted by the Kenyan MOH in 1997, funding and capacity to train and supervise all health workers has still not been realized. CSP funds are not sufficient to provide on-going refreshers and training new employees over a long period of time. The Clinton Foundation provided short-term support to hire some health personnel, but at the time of the FE it was unknown if this support would be renewed. The MOH was making plans to take over the personnel onto her payroll.

#### Project Strategy

Multiple strategies were used to engage several community and health system stakeholders to provide health education to mothers with children below five years. These messages provide culturally sensitive information to prevent and effectively manage diseases both at the household level and by encouraging appropriate care seeking practices for disease signs and symptoms at the health facility. The strategies also focused on strengthening the performance of specific providers in the community and facility level as indicated below:

The project adapted the CG model to ensure equitable and cost-effective delivery of health promotion services in a way that has already demonstrated additional advantages for motivating and sustaining the volunteer workforce in the community. The

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<sup>4</sup> A third separate objective targeting OVCs was integrated into the overall equity approach of reaching all vulnerable and hard to reach beneficiary children after feedback from the USAID DIP feedback recommended a decrease of the HIV component. A separate PEPFAR funded OVC project, managed by Catholic Relief Services, was introduced to Kilifi District shortly after the CSP began.

existing political and administrative structures were the basis for organizing the Care Groups so that they were comprised of women who already know each other, and in most cases were relatives. At the same time, working in partnership with the DMOH encouraged best use of health system resources and cost effective synergies of partner capabilities.

#### Role of Key Partners

The KDHSF, with the DMOH as Secretary includes: Plan, APHIA 2, PSI, AKHS and KEMRI-Wellcome among other health partners working in Kilifi organizes activities in selected evidence-based interventions and activities to reduce morbidity and mortality in children and pregnant women. Plan Kenya's other programs in Kilifi, were also included as partners. They strengthened and leveraged organizational core competencies for child health and promotion through the child sponsorship, including child to child and school health activities to scale up health promotion in the communities through households and schools. In addition, Plan introduced the Community-Led Total Sanitation programs (CLTS) to address the wide-spread problem open defecation, a major factor in the high diarrhea prevalence rate in the area. Communities implementing CLTS are wildly enthusiastic about addressing the problem and were already building and using latrines to a much larger extent than is usually seen in traditional latrine/sanitation programs. By the end of the KIDCARE project, approximately 20% of project communities were implementing CLTS and there was high demand from other communities to start organizing CLTS in their communities.

Population Services International (PSI) was already working with the MoH to supply ITNs to dispensaries for the ANC program at a cost lower than market prices when the project started. Plan and the MOH worked with PSI to increase access and appropriate use of ITNs, as well as Point of Use (POU) water treatment using Waterguard (home chlorination kit). National policy changed to free ITN distribution through ANC, significantly increasing net possession in the CSP beneficiary population. PSI also introduced Waterguard to increase point of use water treatment.



The table below explains the roles of the major KID CARE partners during the project.

Partner	Role in Project	Result of Collaboration
DMOH	Responsible for implementation of government health policy and the majority of health services in the District; provided drugs, staffing and supplies	As Secretary of KDHSF provided continuous leadership and implementation of the CSP. Partner coordination fostered synergies of partner's capacities.
Aga Khan Health Services	HMIS development and training in governance and Financial Management Joint follow ups	Improved data for decision-making. Experiences that are shared at MOH are now in new national HMIS. AKHS is involved in revising national HMIS.
PSI	Supply of ITNs and Water treatment Kits (Water guard and PUR)	Source of subsidized ITNs early in project; (nets later also provided through MOH for ANC and children under one year); supplied Waterguard for local sales. Both ANC and POU water treatment increased during the program.
APHIA II	Collaborated with DMOH to introduce Provider Initiated Counseling and Testing	Mothers of children under 2 tested for HIV rose from 18% to 97%

#### Capacity of the DMOH

There was evidence of increased performance of the overall DMOH in providing health services to the community. There was also evidence of increased performance of health workers, but in some indicators such as nutritional task assessment the increase was not as great as was anticipated. Plan experienced one common training problem common to many PVO-MOH IMCI training partnerships. Workers who were trained are often transferred to other districts and the health workers whose performance is assessed during the evaluations were not the same as those who were trained. Ironically, the evaluation team reported that in several cases, the health workers trained during MOST performed better than those who were trained through the formal IMCI. (See HFA results report).

PSI and APHIA II (and AMKENI prior to them) had more defined roles in the project in relation to improving health services in Kilifi District. Both PSI and APHIA II provided one full time staff person to the Final Evaluation team. From their perspectives, working with the KIDCARE project was beneficial for them to meet their own objectives. The

KIDCARE staff said that those additional partners added to the project's intervention specific activities, as well as joint activities in the field (such as immunization campaigns). AKHS' ability to focus on the information system components of the program greatly helped the overall functioning of the DHCs and also increased the ability to articulate programs results in relation to the rest of the Kenyan Health System.

#### Overall Design Factors that Influenced Results

Participants in the Final Evaluation who had also been involved in Plan Kenya's earlier CSP in Kwale district commented that the KIDCARE project had several design features that they felt were more effective and sustainable than the earlier project. They commented, "in the first project we went there with what we wanted to do and implemented it, while in this program we worked with the community to find out what they needed and worked with them to implement it."

Each component of the project strategy was aligned to the same priorities as those of the national child health programs and also served to reinforce the effectiveness of the other components. Using the Community IMCI framework at each level, as well as aspects of the multi-sector platform serves as another example that confirms the validity of the framework as the basis for designing effective programs.

### **F. Discussion of Potential for Sustained Outcomes, Contribution to Scale, Equity, Community Health Worker Models, and Global Learning**

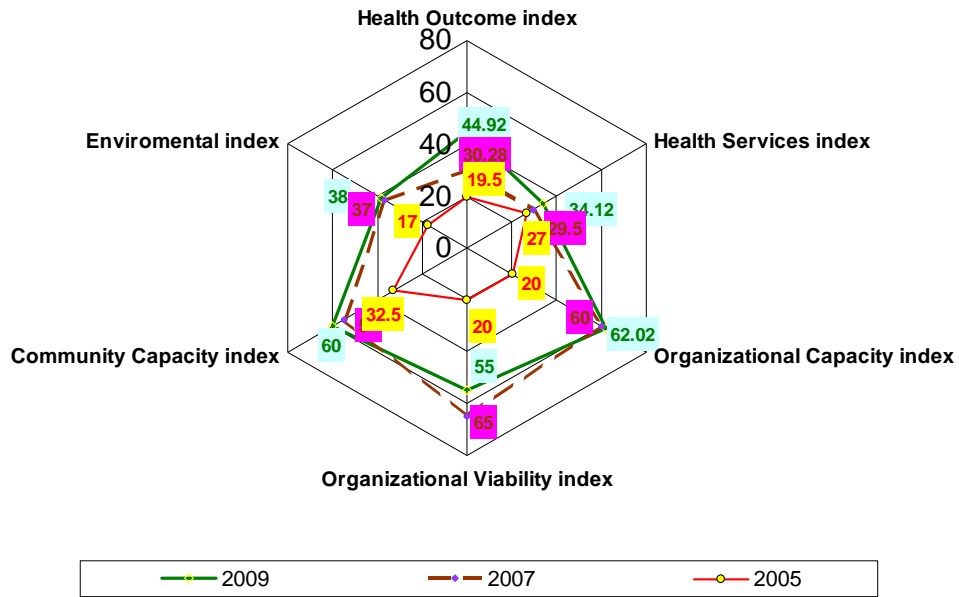
#### 1. Progress Towards Sustained Outcomes

The project used the CSTS Sustainability Framework with the partners during the DIP stage, revisited the status at the MTE and again at the end of the project. Progress was seen in all domains, with community areas showing the most progress. Partners began discussing turnover and phase-out of project activities in depth after the MTE, including a 2 day workshop in the first quarter of 2009. Activities that would be continued by other partners were specified at that time. These included: Counseling and Testing (APHIA 2), MOH capacity strengthening , especially the HIS (AKHS), Social Marketing of ITNs and water treatment kits (PSI), support to DHCs (DMOH), Child to Child (MOE), AND activity monitoring (DMOH). To continue PD/Hearth in Kilifi, more CHW TOTs will need to be trained to use the approach for it to be sustained. It was not specified how this would be accomplished at the time.

In the week prior to the FE fieldwork, the KIDCARE partnership convened a specific workshop focused on the Sustainability Assessment. (See Appendix 2 for the report of the workshop). Overall, in addition to specific activities that will be continued by the partners, it was felt that the extensive capacity building and training provided to communities, health workers and the DMOH would have long lasting positive impact on the health status of mothers and children in Kilifi.

The dashboard demonstrating changes over the life of the program is shown in the Figure below. There were improvements in all domains with the largest increases in domains that are not directly dependent on the formal health system.

**KIDCARE Sustainability (Trend) Mapping 2005-2009**



## 2. Contribution to replication or scale up

Plan's KIDCARE project represents scale up of the Care Group approach, originally developed in Mozambique in the late 1990's to community mobilization reaching every household in the target area in Kilifi, Kenya. Plan's model also is one of the few CG projects implemented by a secular, not a faith-based PVO. This is significant because results of the program demonstrated that while collaborating with religious institutions and networks can be desirable, it is not required for the model to work.

The KIDCARE project has further developed the "how" and "how much" DMOH collaboration is useful to result in full incorporation of the major components into the DMOH system. It has also provided insights into what can be continued without requiring significant additional outside support. Plan says that the project was integrated with the DMOH from "day one." Thus, KIDCARE must be viewed as a Health Systems Strengthening project, a health development category that generally does not include CSPs. The Health Systems Strengthening of KIDCARE has resulted in the Kilifi DHMT now recognized as a national "Learning Center" for effective MCH strategies including capacity to measure impact using LQAS without outside assistance. Even though the project implementation period is over, it will continue to impact on scale up of many approaches. Recognition of Kilifi District's high performance by the National and Provincial MOH has established Kilifi District as a role model DHMT and DMOH for the rest of the country.

Plan Kenya has completed two successful child survival projects spanning a period of almost 10 years and acknowledges that strong partnerships and the more "ground up" approach of the Care Group model are more effective than the more "top down" approach of their earlier child survival project. This recognition will probably result in long term adoption of the health behavior changes promoted by the program as well as change the perspective of future Plan health programs in Kenya.

The USAID Kenya Mission's active involvement and support of networking and shared learning between Child Survival PVOs in Kenya has fostered adoption of successful strategies between PVOs/NGOs, most of them are also working with the DMOH in their program areas.

## 3. Attention to Equity

There are large differences in food security, agricultural output and access to health services in the different areas. By organizing the project into Supervision Areas (SAs) for LQAS monitoring, it was possible to assess and monitor different areas of the project from the beginning to end. While ensuring that all areas of the project were provided the same services, it allowed for extra attention to be directed towards areas where performance was lagging. The DMOH helped to address some access and quality inequities by building and staffing 3 new health facilities. In hard to reach areas, the project advocated for quality health services through the DHC representation and gave them skills to write proposals for Constituency Development Funds (CDF) to address priority needs. Joint outreach strategies with DHCs, MOH and partners helped increase EPI and Vitamin A coverage and provide supportive supervision to health workers.

The DHCs have now assumed leadership for the planning role. This provides opportunities for local people to represent the community as a liaison to the health center. Aga Khan Health Services (AKHS) provided training in DHC governance and proposal writing and Plan paid for it with project funds. Plan assisted in planning and financing Health Action Days that were organized by the DHCs, VHCs and community members as an additional community mobilization strategy. Some DHCs were working in particularly hard to reach areas and extra effort was devoted to develop joint plans in those areas. Early assessments found that some SAs had significantly higher child malnutrition and food insecurity than the other parts of the district and these areas were targeted for additional programs, including PD/Hearth and Ministry of Agriculture outreach programs.

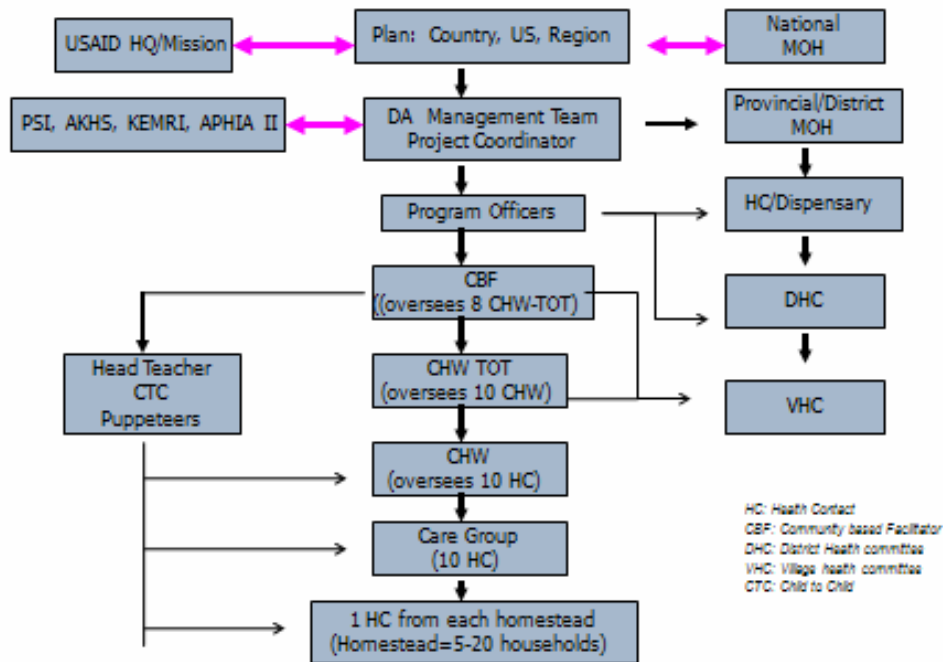
AKHS helped to address gender equity issues by ensuring that both men and women were appointed onto Dispensary Health Committees (DHCs must be at least 30% women.) The project found that IGA groups that had men as members had more problems than women-only groups, primarily related to financial management. Care Groups have had a significant impact on civil society that has gone beyond the CSP, especially empowering women to talk more in public and work together to solve problems. In Kilifi District, Plan has another strong gender program by Norway that will continue beyond the time the CSP ends. Child rights are specified in government programs and are a key focus area of Plan programs in Kenya. Training in child rights was included in community trainings for the project. At the beginning of the program, the project had intended to have an in-depth intervention on HIV/AIDS that included supporting OVCs, but this was dropped during the DIP because the planned level of effort for HIV prevention was only 10% and there are other HIV programs in Kilifi District. APHIA II works in PITC and Catholic Relief Services implemented a PEPFAR-funded OVC program. High poverty, food insecurity and a HIV prevalence rate of 6% justified targeting all children in the district as “vulnerable.” This is aligned with current thinking in OVC/MVC programs. The KIDCARE project was charged with specifically focusing on the younger children often missed in current OVC/MVC programs.

By identifying the most challenging supervision areas in the beginning and measuring progress throughout the program, Plan was able to document improvements in some of the most challenged and marginalized populations in the district. Although severe conditions during the drought caused some PD/Hearth groups to cease meeting together, caregivers were encouraged to prepare and use the PD foods and practices in their own households even though they could not attend the sessions. The children continued to gain weight.

Some of the most disadvantaged supervision areas showed better performance in attaining coverage targets than the more advantaged areas. In the most stressed areas, community members stated that IGAs and Food Security assistance facilitated by Plan’s program had enabled them to cope with the severe food insecurity caused by the drought better than those without assistance or who did not take advantage of the assistance that was offered.

#### 4. Role of Community Health Workers

The figure below shows the relationship of community health workers to the overall structure of the program. CHWs connect a Care Group consisting of 10 Health Contacts, who in turn are connected to a homestead consisting of 5-20 households that are comprised largely of families that are related to each other.



CHW TOTs supervised CHWs and they were, in turn, supervised by CBFs hired by the project. The CBF support role will be taken over by DMOH Public Health Officers (PHOs) and facility health workers (HWs) from the health centers. Representation through the VHCs and DHCs will provide venues to advocate for continued support from the DMOH to the CHWs and Care Groups. The project worked extensively to build DHC capacity to be proactive and address community health needs. They will continue to be involved in the entire community- health facility continuum after the project ends. Care Group members, the CHWs selected by them, and the CHW TOTs were all volunteer workers developed by the KIDCARE project. This structure was in place long before the current National Community Health Strategy that now provides for limited numbers of paid Community Health Extension Workers (CHEWs). It was the strong opinion of the Final Evaluation team that the existing CSP CHW TOTs would be ideally suited to fill the role of the new national MOH CHEWs. (See Annex 7 for the CHW Matrix and details on the CHW training that took place in the project.)

#### 5. Contribution to Global Learning

Rather than establish a brand new approach to CSP programming, Plan's KIDCARE project adapted Care Groups into an extensively integrated partnership within the DMOH and then introduced or strengthened supervision systems and local governance (VHCs, DHCs). The new systems (Care Groups and links to health facilities) provided communities with the skills to speak for themselves. Plan also refined and expanded upon CSP techniques that have been proven successful in C-IMCI programs over the past several years. Thus the project model served to meet the community and the national health system MCH objectives to the extent that DMOH performance was recognized by the Kenyan national MOH as the third highest performing district in the country after Nairobi East and Nairobi West.

To take it to the "next level" in terms of global scale-up of successful methodologies there should be a regional or international conference where PVOs who have implemented similar project strategies using variations of the Care Group approach can share their experiences with community based primary health care professionals and with each other. Representatives of the local MOH who have worked closely in integrated programs could provide their perspective on the value of the model and impact on results. This would need outside support.

Research is needed on the "critical" elements and costs associated with scaling up Care Group community based programming so that governments and donors who are interested in implementing the approach on a larger scale can estimate the resources, both financial and human that would be needed to do it. In general a PVO does not have the capacity to do economic analysis like this, so it would require outside technical assistance to make these determinations.

The Operations Research that was included in the original proposal proved to be more difficult than anticipated. There was not enough capacity within the project staff, and the budget didn't make it possible to subcontract for the type of OR activity that would have been useful to either the project, or the global child survival community. OR was not required in CSHGP projects when KIDCARE was designed. Current CSHGP projects are required to specify an OR activity, along with the budget and management elements needed to carry them out. This change by USAID will probably make it possible to have stronger, and more useful OR activities in future programs. Nevertheless, implementation of OR activities must be monitored from the very beginning of programs. If too much time elapses before they are started, the project has little opportunity to benefit from the findings.

## **G. Conclusions and Recommendations**

The KIDCARE CSP met, and in many cases significantly exceeded, project targets in several important high-impact interventions known to reduce child mortality. Reductions in mortality and morbidity are obvious to members of the community as well as representatives of the formal health system who mentioned "no more measles", "neonatal tetanus is almost gone" and "many fewer children are sick and dying now".

Health workers say, and DMOH HIS data confirm, that overall child morbidity in malaria, diarrhea and pneumonia have decreased.

The KIDCARE CSP partnership structure, especially the heavy integration with planning and the day to day function of DMOH was so successful that Kilifi District received national recognition. The District was the #3 highest performing district health program in the country (the 2 higher-performing districts are in the Nairobi area). There remains a commitment by Kilifi District DHMT to remain as a “Learning Center” for the rest of the country. The CSP was an important component of Plan Kenya’s programs. Country and Regional Offices provided support during the project and participated in the final evaluation. Health is one of Plan core programs and a few staff from the CSP will remain within Plan Kenya’s other programs in the country, with the intention of integrating some of the lessons learned into Plan’s continuing programs.

With the conclusion of the KIDCARE project, Plan Kenya now has over 10 years experience implementing community-based child survival programs in the challenging Coastal Province of the country mean that Plan now has significant knowledge of “what works” in the Kenyan context. Community structures such as Care Groups and community-based approaches to difficult and chronic health problems, such as PD/Hearth as well as user-friendly appropriate population data collection methodologies, such as LQAS can be applied to expansion of the KIDCARE model to other districts as well as other types of programs (e.g., maternal/newborn, HIV/AIDS, reproductive health, food security).

## Recommendations

*Plan should take the lead on a collaboration to share the global lessons learned and develop the way forward for the Care Group approach to health systems strengthening.*

There is now a sufficient number of different types of organizations and settings in Africa where the Care Group approach has been used with equally successful impact on increasing coverage of highly significant evidence-based child survival interventions. Through the CORE group or other venues, Plan should join with other PVOs who have experience implementing the Care Group model and advocate for an opportunity to share results of their programs in different kinds of settings with each other and with public health colleagues interested in effective community based programs and partnerships. This is an extremely valuable contribution to the current Health Systems Strengthening discussions but will probably require outside funding and technical assistance to organize. Community-based primary health care and health education projects are not currently major considerations in current Health Systems Strengthening discussions. This could be a significant missed opportunity in global health.

Where Care Group project results are presented, the question of “cost effectiveness” is often raised. At this point it is only possible to calculate cost/beneficiary/year. There is a need to develop a scale-up methodology that includes cost analysis for the Care Group approach that goes beyond the research capacity of any individual PVO. It would be helpful if USAID Kenya and the CSHGP could advocate for the USAID research agenda



to include opportunities to pilot various scale-up approaches to refine what has shown to be an effective approach at the District level, but applicability within national health systems is not yet proven. This would enable PVOs to discuss opportunities and costs of adopting Care Groups into national health systems.

The community and partnership foundation developed in the project is strong. The value is not limited to child health outcomes. KIDCARE partnership should seek opportunities to implement other programs to build on the foundation established in the project, both community and district-wide. Plan and USAID should seek ways to support Kilifi District to remain a Learning Center for public health programs.

#### **H. Other Issues Identified by the Team**

[The following comments do not reflect on any weaknesses of the Plan KIDCARE program, but are the results of using the foundation of the KIDCARE partnership to highlight areas where the partners could expand to address problems that remain in Kilifi District.]

##### **Need to expand the KIDCARE model to include Maternal and Newborn Care**

Although it was not the focus of the KIDCARE project, the epidemiologic patterns of maternal and infant mortality, experience in project implementation and results from focus group discussions and key informant interviews reveal that more needs to be done to increase skilled delivery and address newborn mortality. As overall U5 mortality decreases, newborn mortality represents an increasing percentage of child deaths. Newborn mortality is largely hidden in Kilifi and babies who die are not buried in the open as are older children. The team heard anecdotal reports that dead newborns are buried in the floor of the house, There is a need for a maternal and newborn program that expands the focus on the special interventions that can have an impact in that area. Recent research results from other countries can provide lessons learned that should be tested in Kenya.

Due to the key importance of family planning in reducing maternal and infant mortality, it should be included as an integral component of a maternal and newborn program. Addressing transportation challenges for access to EmOC will need to be included for women in distant rural areas far away from referral facilities. Kenya is unlikely to make progress in MDG 5 without significant community-health facility linkages to increase skilled deliveries. Community mobilization alone, however, will have limited impact in this area. But the Kilifi DMOH has shown remarkable commitment to collaborative planning to develop mutually-identified health system solutions to problems. Hence, this could be a good environment to “show how it can be done” in a poor and challenged environment in Kenya if attempted soon after the completion of the KIDCARE project.

##### **Diarrhea Prevention Strategies Need to be Expanded to Decrease Prevalence**

Although significant improvements were made in factors known to contribute to diarrhea, prevalence (50% in 12-24 months olds) remains too high. FGDs conducted during evaluation field work attempted to determine some factors contributing to the high prevalence. Open defecation, inconsistent compliance with all key hand washing behaviors, water shortages and overall poor personal and household hygiene still contribute to high diarrhea rates. Plan has introduced Community Led Total Sanitation to Kilifi District and now covers about 20% of the District. Research on CLTS programs in other countries has not yet demonstrated a direct link with decreased diarrhea prevalence in young children, but has been shown to prove a powerful motivator for latrine construction and use. Linking programs such as CLTS and expansion of overall household hygiene, clean water sources and consistent hand-washing with soap or/ash at all critical times, to monitoring diarrhea prevalence in children under 5 using LQAS could prove to be a valuable contribution to global learning in diarrhea programs.

There is a need for male-friendly HIV services

Low uptake of CT by men in Kilifi as compared to women and significant misunderstandings among men about testing point to the need for male-friendly HIV services in the district. The team heard comments such as “My wife was tested, so I know what my status is.” Men would not be expected to access testing services at ANC even though many nurses conducting the testing are male. Communities told of the significant disincentives to revealing one’s own HIV status. While understanding of prevention methods has increased, it still remains low. All Plan Kenya programs include men, women, boys and girls, but as a child survival project the KIDCARE CS project focused on children and their care takers, who are primarily women. Men were involved as support groups for Care groups, PD/Hearth, CHWs, VHCs and DHCs. Tools used to measure VCT/PMTCT uptake were applicable to women of reproductive age only. While programs for adult males are generally not a major component of Plan’s programs, community structures developed in the program could assist in mobilizing communities to encourage men to access services through other programs. Stigma remains high in the area and targeting men for RH/HIV services would require assistance from programs/partners that are not necessarily focused only on women and children. But addressing RH/HIV issues with men would benefit women and children as well.

KIDCARE approach could be linked with OVC services

Even though there was a PEPFAR-supported OVC program in Kilifi District, there is evidence that more community-based HIV/AIDS services are needed in Kilifi District, including linking OVC and child health services, stigma reduction and moving towards universal testing (depending on national policy). Evaluations of OVC programs in other countries have shown health and nutrition needs are unmet in many cases, especially where there is severe poverty and food insecurity. Globally, OVC/MVC programs tend to target older children than child survival programs, but many of the lessons learned in child survival over the past 25 years can be applied to meeting the considerable challenges of meeting needs of OVCs (or MVCs). This provides an opportunity to insist on developing integrated child HIV programs.

## Annex 1: Results Highlight

### Integrated Partnerships with the MOH Yields High-Impact Results

Strong integration of KIDCARE partners with the DMOH, shepherded by Plan Kenya, significantly contributed to achieving major increases in coverage for multiple high-impact<sup>5</sup> child survival interventions. Even though the DMO changed four times during the life of the project, DMOH commitment to the partnership and the CSP was so strong that each new DMO became fully engaged with the jointly-designed workplan as soon as they arrived.

Plan facilitated DMOH leadership in child survival interventions by helping to form and support the District health Stakeholders Forum, a group charged to develop a joint district workplan or Annual Operational Plan (AOP) and coordinating all activities of the partners. The AOP also served as a template for assessing progress towards the goals and objectives of the program and developing activity action plans. Partnership collaboration (DMOH, Plan, AKHS, PSI, and APHIA II) was strong enough that synergies of each partner's specific capacities were credited with the ultimate results. This all took place in the context of implementing the National Child Health Plan in Kilifi. This was so successful that the national MOH recognized Kilifi District as the highest performing district in Coast Province and third highest in the nation (only two Nairobi-area districts performed higher). High coverage increases were possible in spite of high food insecurity, drought, low literacy rates and poor infrastructure in some parts of the district. (Kenya declared a Food Security State of Emergency during the Final Evaluation in August 2009).

The DMOH further demonstrated commitment and constructed 3 new health centers, locating them in some of the hardest to reach and most underserved areas. In addition, beneficiary communities cited project-initiated structures such as Care Groups and CHWs and linking them to health centers and health workers through Village Health Committees (VHCs) and health facility Dispensary Health Committees (DHCs) as factors responsible for significant improvements in their health behaviors. These communities said that everyone could see the decreases in sickness and deaths of mothers and children. Neonatal tetanus and measles, once common in Kilifi communities has all but disappeared. DHCs were trained how to write proposals and now have capacity to apply for Constituency Development Funds (CDF) from MPs. HIS capacity building provided by the project gave DHCs information to support their requests, thus contributing to civil society development. One health center DHC was able to get funds to add a room for skilled deliveries to their health center. The CSP partnership mobilized all levels of the partnership to conduct outreach for the KEPI, cited as a major factor that contributed to large increases in complete immunization (62% to 76% and vitamin A (61% to 85% children; 5% to 47% mothers) coverage. Among several additional high-impact CS indicators that increased, exclusive breastfeeding to 6 months increased from 21% to 55%; child ITN use from 21% to 77%;

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<sup>5</sup> *The Lancet Child Survival Series*

care seeking for fever within 24 hours from 18% to 68% and households that treat their drinking water rose from 1% to 31%. Even though MNC was not a specific intervention in the CSP, skilled delivery was promoted through Care Groups and Village Health Committees (VHCs). The DMOH also increased the number of facilities providing deliveries. As a result, Skilled Deliveries rose from 13% to 35%.

CSP project indicators are the basis for the HIS, DHC workplans and joint supervision efforts by DMOH and partners. Capacity building provided by Plan and AKHS in data collection, analysis and use in management decision making were cited by the DMOH as a major sustainable contribution to increasing their understanding of the local situation and performance. Normally, the facility-based HIS, and periodic surveys (such as the DHS) are their major information sources. LQAS training was cited as particularly helpful in providing short turn-around access to population-based data about key maternal and child health indicator coverage and to detect changes in a shorter period of time. (By contrast, the 2008 DHS results had not yet been released as of August 2009). LQAS also provides a way to assess sub-district supervision areas to determine high and low performing areas and target the lower performing areas for additional support. According to the DMO, Kilifi health managers now use LQAS independently and are sufficiently proficient to teach other MOH workers. They now serve as a "Learning Center" for the rest of the country. (A team from the Central Province MOH is already scheduled to visit Kilifi.) They say they feel honored to be able to teach their colleagues and are committed to maintain and continue in that role after the end of the KIDCARE project. AKHS is also involved in the national effort to integrate these common child health indicators into the Kenya Package of Essential Health Services information system to meet the MDGs and is currently awaiting approval by the national MOH.

All Plan CSP trainings included MOH staff. In spite of multiple demands on their time, several DMOH staff members, including the DMO himself, participated full-time in the project Final Evaluation fieldwork, analysis and debriefing activities. The deputy national MOH Director of Child Health traveled to Kilifi to participate in the final debriefing and stated that Plan Kenya is now considered a major child health partner for the government. Although the KIDCARE project has ended, Plan Kenya will remain in Kilifi District and is committed to continued partnership with the MOH to meet the health needs of children and families.

**Annex 2: List of Publications and Presentations Related to the Project**

1. Presentation by Laban Tsuma: BEHAVE Framework Panel during CORE Spring Meeting April 2007 Easton MD
2. Presentation by David Owuor: PD/HEARTH Experiences during Plan East and South Africa Regional Meeting May 2008 Addis Ababa, Ethiopia
3. Presentation by Laban Tsuma: HYGIENE Panel during CORE Spring Meeting April 2009 Annapolis MD
4. Presentation by Laban Tsuma: EQUITY Panel during CORE Fall Meeting October 2009 Washington DC

### **Annex 3: Project Management Evaluation**

#### **Planning**

The planning process was exceptionally participatory throughout the project. By the end of the project, the DMOH was leading the partner planning and the CSP activities were integrated with partners in the District at every level. Plan's Kilifi District and Coast Province Offices were also extensively involved during the entire project. At the health facility level, project capacity building focused extensively on DHC planning and decision making. The national MOH, Office of Child Health, as well as USAID Kenya's Health Office were involved in project plans, evaluations and sharing results.

Although there is research expertise within Plan Kenya, it is in the national office and it was not possible resource wise for staff members to be earmarked only to design and implement a relevant OR study for the project. Plan attempted to conduct the OR study using an outside consultant, but was unable to identify a consultant given the time and budget restrictions. During the last month of the program, Plan staff conducted a documentation effort to distill learning from the care groups formation and operation and how this can be of help in the roll out of the Community Strategy of the MOH. This documentation is part of the final report document.

The major gap in the DIP was the high volunteer to CBF ratio, which made training and supervision of volunteers, including formation and training of Care Groups and Village Health Committees very difficult. This was addressed around the midterm by hiring 3 additional CBFs which significantly improved the quality of the community based program activities. By the end of the project, field staff acknowledged that the ratio was better, but still not ideal to reach communities (homesteads) that are situated far from each other.

#### **Supervision of Project Staff**

PLAN project managers have worked together for several years and staff state they feel supported and well supervised. CBFs have supervised CHW TOTs and through them, Care Group CHWs. CHW TOTs will stay in place and are already linked to the DMOH through the health facility staff.

The Kenya national MOH has a new community strategy that includes plans for paid CHWs, who will also be linked to health facilities through existing Public Health Officers. In the past, these PHOs focused on environmental sanitation and prevention activities. Plan acknowledges that all CSP CHWs or CHW TOTs will probably not be absorbed into the new system but at the time of the Final Evaluation, the scheme was not yet in place in Kilifi District. Since the CSP supervision system was designed and implemented prior to the national strategy, it will not be carried over after the program ends, but the DMOH has benefited from the examples of community supervision demonstrated by the KIDCARE project. There is potential for some of the supervisory methods to be incorporated into the new system and Plan would like to see some of the

CHW TOTs selected to be paid CHWs in the new program. Since CHWs in the CSP and in the new national program are not the same, there may be some confusion in the future when the same name is used to describe them.

## **Human Resources and Staff Management**

Plan Kenya's Coast Province and Kilifi District programs will continue after the program ends. Elements of sound child health programs and community based support systems (e.g. Care groups, PD/Hearth, Village Health Committees) have demonstrated their effectiveness in improving health programs in very challenging environments.

Morale amongst the staff has been high and cohesion between staff is high. The first program manager left very early in the program and was replaced by an experienced health manager who already had child survival, MOH and Plan Kenya experience. Her maturity and strong leadership skills have provided partners and staff solid guidance in implementing the program. This was facilitated by both the country office and HQ technical backstops, both of whom had experience working with the previous Plan Child Survival project in Kwale District.

Staff turnover has not been high. After the first PM left, the staff that have left have gone on to better jobs. A few will be absorbed into Plan Kenya, one in the Kilifi office, and others in other parts of Kenya. The previous Plan M&E staff person was hired by another PVO program.

The short term contract retired nurses described in the DIP were not necessary after the Clinton Foundation and DANIDA provided funds to the DMOH to hire additional nurses to fill vacancies in the health facilities. The funds were used to support other activities.

## **Financial Management**

There are sufficient funds to complete all activities except the OR study<sup>6</sup> by the end of the project. A few remaining items will be bought by the time the project ends on September 30. Plan provided additional match from their private funds several times during project, including when the needs of the project required them to hire more staff than were included in the original budget. This was not due to shortfalls or poor financial management, but to support needs that could not have been anticipated during the proposal or project planning stage.

## **Logistics**

There were no problems with logistics management during the program. The MOH was responsible for providing most drugs and equipment during the program and will continue as that is their role in the health system. Plan Kenya's long term presence in

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<sup>6</sup> Funds were not the only reason the OR study as detailed in the MTE was not completed. See Management Lessons Learned. Plan undertook a documentation study instead to help inform the roll-out of the MOH Community Strategy nationally.

the country as well as continued presence has meant that there is a good understanding and capacity to deal with logistic issues in the Kenyan context.

### **Information Management**

Information management has been one of the real strengths of the program. Partnership with AKHS enabled the project to build data management capacity for the DMOH, while also collaborating with Plan's own internal systems for project management and reporting. The original plans to do LQAS and HFA every 6 months turned out to be too ambitious; it was resource intensive and diverted attention from organizing at the community level. Frequency of measurement was decreased to annually, and still occurred more frequently than in other child survival projects.

### **Technical and Administrative Support**

The project received frequent support from HQ backstops as well as PLAN Kenya technical and management specialists from the country office in Nairobi. Technical backstops provided support for baseline surveys, midterm and final evaluations, BEHAVE training, sustainability planning, they also participated in follow-up to the MTE and FE. KID CARE is one of the projects that Plan's new US CEO has visited. Donna Sillan, a consultant, provided training in PD/Hearth. LQAS training was done by an experienced consultant from London. Trainees from other PLAN projects (using other funds) came to Kenya to learn LQAS at the KID CARE site. Plan's CSP HQ backstop, Dr. Laban Tsuma comes from the Coast Province of Kenya and worked in the previous Child Survival project that was located in nearby Kwale District.

Plan's US headquarters has participated in the CS program for 25 years. The SSDS thematic evaluation assessed child survival programs through Plan International. The report said Plan had learned greatly from participating in the CS grants program. There are significant challenges, however, in scaling up programs supported with private funding, especially with the economic downturn and decreases in donations to charitable organizations that started in 2008. The report also called for a greater Plan investment from the other 17 national and 4 regional offices to "buy into" child survival. Plan is committed to it and has currently established a multi-level committee working on implementing these recommendations. On-line training about child survival issues for country offices, customized for individual country offices has been developed. Plan contracted with UNC to pilot it in Ethiopia and Southern Sudan do develop and pilot test some of the modules. Plan will also appoint a Child Survival champion to work with country offices to integrate child survival into their programs. (Up until now, child survival technical specialists had to be "invited" before they could initiate project development in a country program.) The SSDS report said there also needed to be a champion with Plan USA to ensure that they would raise funds specifically for child survival. This individual should be someone who is both a CS specialist and also familiar with Plan as an organization.

### **Management Lessons Learned**



As of the MTE, it was clear that building health facility capacity and completing frequent HFA and LQAS surveys were taking so much time that community mobilization and community based interventions were not receiving the attention that they would need to reach program objectives and indicators. Plan reduced the frequency of the surveys.

If the Care Group model of community mobilization and capacity building is used in a CS program, there should be an appropriate ratio of facilitators to the communities and transportation to get from one to another. There is probably no ideal ratio for all project situations, but personnel at this level are critical and must be considered in project design and budgeting. If Plan had not been able to provide additional funds, it is likely that cuts would have been necessary in some other part of the program.

The evaluation team observed that implementing the project model was more difficult in periurban areas around the center of Kilifi district where communities were not as stable or cohesive, the District Hospital served as the referral health center, and where more women are employed and harder to organize. New approaches to adapt the model to these situations would be needed for them to be successful.

Turnover of qualified M&E staff is common in CSHGP programs, as qualified M&E personnel are in high demand in many programs. USAID missions and international organizations are in a position to offer better benefits and job security than PVO programs. Recruiting replacements can be difficult because of the shortage.

The Operations Research activity was included in the project proposal at a time before OR became a requirement in CSHGP programs. The evaluation team postulated that it was probably an “afterthought” in the proposal and was under-resourced both in terms of funds and human resource capacity. Efforts to find a qualified consultant to conduct the study were not successful. At the DIP review, there was discussion that the OR would concern community case management, but changes in MOH policy about malaria management of ACTs and continued strong resistance from the MOH against antibiotics in communities remains. This was reinforced by the bad experiences with Bamako Initiative community pharmacies in Kenya which were poorly supervised. There were reports that pharmacy managers had set themselves up as “quack” doctors and the MOH is concerned the same thing will happen with CCM. It appears that USAID has now benefited from some of the OR lessons learned because current proposals to CSHGP must provide 1) for adequate and ear-marked funding and 2) a requirement that the OR activity be well-described, along with provision for measuring the results.

LQAS and HFA sampling is too labor intensive to conduct every 6 months on a project-wide basis and detracts from organizing and supporting community-based activities. The project wisely adjusted the level of effort from surveys to community support after the first few years to a more manageable level.

### **Other Issues Identified by the Team**

Drought and food insecurity are constant threats to some areas of the district. Severe water shortages and overall drought affected some parts of the project for most of the

time. Plan made programmatic adjustments and modified the PD/Hearth approach when the drought threatened results. In order to respond to the food security needs identified in the MTE, the project networked with the Ministry of Agriculture to encourage them to train communities in appropriate water-sparing growing techniques.

Insecurity related to the post election violence caused a drop in several project indicators, especially those that were dependent upon health system inputs, while community behavior change activities were less affected. Analysis of the serial LQAS results showed that indicators dropped, but recovered quickly to resume their previous upward trends.



#### Annex 4: Workplan and Training Status Table

<b>Malaria Objective: Reduced mortality and morbidity among children U5 and pregnant women</b>		
<b>Activity</b>	<b>Objective met (Yes/no/partially)</b>	<b>Activity Status</b>
PSI/DHC/VHC distribution of bednets	YES	Completed
PSI social marketing of bednets and BCI regarding ITNs, Malaria danger signs, IPT	YES	Education carried out by all partners (MOH, KEMRI, PSI, Project staff, CHW/TOTs and CHWs)
Retreatment of bednets in community	Partially	Most ITNs purchased were long lasting
IMCI trained CHWs provide case management **	NO	MOH policy did not advocate for this cadre to manage sick children
Procurement of Bednets, Treatment kits (Deltamethrin), Malaria Drugs, IEC materials	YES	48,600 Long lasting ITNs purchased and distributed
Mark the World Malaria Day	YES	Marked annually on 25 <sup>th</sup> April
<b>Nutrition: Improved nutritional status of children U5 and pregnant women</b>		
Implement PD/Hearth	YES	Rolled out PD/Hearth to SAs with over 30% malnutrition
Community based education on feeding, Iron/folic supplementation, Vitamin A, Deworming	YES	Included in training of Health Workers, CHW/TOTs, and CHWs
Initiation of Kitchen Gardens	Partially	Grandparents of PD/Hearth given seeds for Kitchen gardens, schools with CTC.
Community growth monitoring and counseling on child feeding	YES	Implemented at village level by CHWs, DHCs and VHCs
CBNP, FSA and FFS linkages for education and micro-credit	Partially	Some CARE groups have taken up
Procure Vitamin A, Mebendazole, Iron/Folate supplements, IEC Materials	YES	Issued to Health Facilities and IEC to CHW/TOTs and CHWs
<b>Diarrhea: Reduced mortality and morbidity among children U5 and pregnant women</b>		
Educate mothers/caretakers on ORS use	YES	Included in training curricula of CHWs and VHCs
Educate mothers/caretakers on Home chlorination and other household measures for water safety (kata) and hand washing	YES	Done by CHW/TOTs, CHWs, VHCs, DHCs, CBFs and MOH staff
Procure ORS, Water Guard	YES	Procured from PSI and issued to health facilities for distribution
<b>Pneumonia: Increased use of effective case management at health facility and healthy practices at community level for children U5</b>		
BCI regarding Pneumonia danger signs	YES	Developed IEC on danger signs and Issued to volunteers reaching care givers
<b>Immunization: Increased immunization coverage for children U5 and pregnant women</b>		
CBR Analysis and Planning	Partially	Used mainly by MOH, DHCs and VHCs for planning
HAD for immunization	YES	Developed an annual schedule with MOH, community and project staff
Participate in NIDs	YES	Participated in bi-annual NIDs and Child health & maternal nutrition weeks
Procure Child and Maternal vaccination cards	YES	Purchased and given to MOH for distribution

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<b>HIV/AIDS</b>			
	Work with CORPs on reducing MTCT	YES	Counseling and Testing uptake has increased
<b>Community Outreach and behavior Change Activities</b>			
	HAD for all interventions	YES	Integrated HADs undertaken on a quarterly basis
	Review, pretest/adapt Kwale CS and other BCC materials	Partially	Adapted material to local needs among volunteers. Used PHC curricula for training CHWs and VHCs
	Community mobilization/BCI		
	PRA exercises	YES	Done part of pre-PD/Hearth roll out in three sites, midterm and End of project
	Home visits by care group members (assess immunization status, child census, peer education about key health family behaviors)	YES	Undertaken by CHWs, CHW/TOTs, VHCs, DHC and CBFs
	VHC/TOTs/CHWs maintain CBR	Partially	Some maintain regularly, while others are constrained by severe drought

**Training Plan 2004-2009**

#	Training in	Participant Profile	Objective Met yes/no/partially	Activity Status (completed/not completed)
1	Facility IMCI for MOH and logistics management	10 dispensary nurses, 20 district hospital nurses	YES	Completed with 48 HWs trained and follow up done
2	IMCI case management/home care	10 PHO/PHT, CBF, 100 CHW-TOT, 1000 CHWs	Partially	
3	C-IMCI concepts for MOH	10 PHO/PHT, Dispensary nurses	YES	18 PHO/ PHTs and CBF
4	C-IMCI concepts and community drug box management	10 PHO/PHT, CBF, 100 CHW-TOT, 1000 CHWs	Partially	Note no drugs were issued for case management and encouraged to refer
5	Immunization and seeking treatment for sick children	Church/religious leaders	YES	Completed –All Community leaders involved without bias
6	Recognition of childhood danger signs and timely referrals	10 PHO/PHT, CBF, 100 CHW-TOT, 1000 CHWs	YES	completed
7	Infection control	26 nurses (Hospital/Dispensary)	YES	Completed (Joint supportive supervision and HFAs)
8	Correct dispensing of antimalarial and fever drugs	CHW-TOTs/Shopkeepers	NO	Change of MOH policy on Malaria treatment
9	PD/HEARTH	Dispensary staff/ 10 DHC/ 100 CHW-TOT/Plan CBF/ District Nutritionist	YES	Dispensary staff and 4DHC/75CHWs,
10	Deworming training in accordance with MOH guidelines	100 CHW-TOTs/ 1000 CHWs	YES	Completed
11	Breastfeeding practices	VHC/CHW-TOT/CHW	YES	Completed
12	Weighing and counseling of children	VHC/CHW-TOT/CHW	YES	Completed

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13	Water chlorination and other household practices within the PHAST Framework	CHW-TOTs/CHWs	YES	Completed
14	ORS preparation and administration	CHW-TOTs/CHWs	YES	Completed
15	EPI training in maintenance of cold chain-vaccine, VVM and cold chain during HAD, safe injection techniques and reducing wastage and missed opportunities	Dispensary Staff	YES	Completed 149 health workers updated on EPI
16	VCT, PMTCT includes use of nevirapine and OVC issues	30 DHMT/Hospital/Dispensary/Private Clinic staff	YES	Completed -53 Health Workers trained in Provider Initiated Testing and Counseling
20	Effective strategies for client inter personal counseling	Dispensary staff, 12 DHMT/MOH, CHW-TOTs, CHWs	YES	Completed (IMCI and c-IMCI)
21	Introduction to BCI doer-non-doer analysis methods, development and use of BCI materials, community education to deliver key health messages	10 DHC, 357 VHC, 100 CHW-TOTs, Amkeni, Dispensary Staff, Plan Staff	YES	Completed and developed/adapted key health messages for use by CHW/TOTs and CHWs
22	CTC training on immunization, malaria and HIV/AIDS, hygiene and nutrition	30 pupils per school in 37 schools	YES	Completed 40 pupils per school in 38 schools
23	Governance and financial management	10 DHC and 357 VHC	YES	14 DHC members drawn from the 357 villages-(new 4 DHC)
24	Sustainability workshop (Developing sustainability framework, assessment methods and review)	12 DHMT, 10 DHC and Local Partners e.g. CBOs	YES	Completed (3 Workshops at Baseline, midterm and ETE)
25	Advocacy training based on lessons learnt and findings of operational research studies	Coordinating and Steering Committee members	NO	Budget not adequate for operation research, however LQAS data used to lobby for increased action
26	KPC baseline and final survey	Plan staff, 12DHMT/MOH, Dispensary staff	YES	Completed
27	Health Facility Assessment	Plan staff, 12DHMT/MOH, Dispensary staff	YES	Completed (3 surveys done)
27	LQAS training for data collectors	Plan staff, 12DHMT/MOH, Dispensary staff, Partners	YES	Completed (7 LQAS surveys conducted)
28	Qualitative research methods	Plan staff, Partners	YES	Completed (MTE, ETE, PD/Hearth)

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29	DIP workshop, review of KPC and qualitative research findings, selection of indicators and target setting for indicators	10 DHCs Partners, 12DHMT/MOH, Plan staff	YES	Completed
30	Planning, analysis and utilization of IMCI or (MOST checklist) supervisory checklists	12DHMT/MOH	YES	Completed
31	Use of CBR, chalk boards, community behavior maps, verbal autopsy, data interpretation and use of data for decision making	12 DHMT/MOH 357 VHCs, 10 DHCs, 100 CHW-TOTs, 1000 CHWs	Partially	Completed -Use of Chalkboard, use of data for decision making by DHMT, DHC, CHW/TOT and project staff done.
32	Use of PRA tools for community mapping of disease and services	DHCs, VHCs	YES	Completed (14 DHCs and 357 VHCs training)

\* Includes case management for other childhood interventions using IMCI

**Annex 5: Rapid Catch Indicator Results (\* indicates statistically significant difference)**

Indicators	Baseline coverage	EOP coverage		EOP target
		%	Confidence Interval	
Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	<b>26.6%</b> (n = 391)	<b>14.4% *</b> (n = 418)	<b>3.3</b>	<b>21.6%</b>
Percentage of children age 0-23 months whose births were attended by skilled health personnel	<b>12.9%</b> (n = 209)	<b>35.4%</b> (n = 209)	<b>6.6</b>	
Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	<b>24.0%</b> (n = 391)	<b>66.7% *</b> (n = 135)	<b>7.9</b>	<b>60%</b>
Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	<b>21.1%</b> (n = 90)	<b>54.9%*</b> (n = 113)	<b>9.1</b>	<b>31%</b>
Percentage of infants age 6-9 months receiving breast milk and complementary foods	<b>92.2%</b> (n = 77)	<b>98.2%</b> (n = 57)	<b>3.4</b>	<b>95%</b>
Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday	<b>62.2%</b> (n = 209)	<b>76.5% *</b> (n = 209)	<b>5.7</b>	<b>74%</b>
Percentage of children age 12-23 months who received a measles vaccine before the first birthday	<b>64.1%</b> (n = 209)	<b>77.5%*</b> (n = 209)	<b>5.6</b>	<b>80%</b>
Percentage of children age 0-23 months who slept under an insecticide-treated bed-net the previous night (in malaria-risk areas only)	<b>20.7%</b> (n = 391)	<b>76.7%*</b> (n = 202)	<b>5.8</b>	<b>60%</b>
Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment	<b>74.2%</b> (n = 209)	<b>86.1%*</b> (n = 209)	<b>4.6</b>	



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Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	<b>3.4%</b> <b>(n = 175)</b>	<b>34.6%*</b> <b>(n = 165)</b>	<b>7.2</b>	
Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	<b>41.4%</b> <b>(n = 391)</b>	<b>66%*</b> <b>(n = 209)</b>	<b>6.4</b>	<b>70%</b>
Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	<b>4.3%</b> <b>(n = 391)</b>	<b>15.3%</b> <b>(n = 206)</b>	<b>6.5</b>	<b>14%</b>

**Annex 6: Final KPC (LQAS) Report and HFA Report**

**PLAN KILIFI KIDCARE PROJECT**

**KIDCARE INDICATOR LEVELS  
(LQAS '7' RESULTS)**

June 2009

## **Forward**

Plan Kenya is implementing a five year Child Survival Project (KIDCARE) in Kilifi district of the Coast Province. The KIDCARE Child Survival Project is funded by the generous support of the American people (USAID) and covers four divisions (Ganze, Vitengeni, Bahari and Chonyi) of Kilifi district.

The goal of the project is to assist the MOH reduce in a sustainable way the morbidity and mortality of children below five years and women of child bearing age in Kilifi district. The project targets 46,354 children of less than five years of age and 64,381 women of reproductive age in 357 villages. The project is being implemented in close collaboration with partners that include; the community, MOH, APHIA II, AKHSK-CHD, PSI and KEMRI. The project is in its final year of implementation having started in October 2004 and expected to end in September 2009.

To achieve its goal, the project seeks to address six priority health problems in Kilifi which include Malaria, Malnutrition, Pneumonia, Diarrhea, low Immunization coverage and HIV/AIDS. Key strategies being used to implement interventions aimed at addressing these health problems are, the Care-group model for community mobilization, Strengthened Facility and Community IMCI, PD/Hearth for rehabilitation of Children with Malnutrition alongside Quick wins for Malaria and Immunization Interventions.

## Acknowledgements

Without the support of the persons mentioned here below, the completion of this report would not have been possible.

The DMOH for Kilifi Dr. David Mulewa assisted by Edward Mumbo played a vital role in coordinating the LQAS survey and ensuring that all the necessary data was collected. Ruth Momanyi, the CS project Coordinator managed the activities of the exercise from data collection to report writing and provided valuable information about the project. In addition, Stella Oduori, the program officer in charge of training provided all the necessary information concerning training. The Plan Kilifi Program Unit was activated for the study courtesy of the Area Manager, Jacqueline Jumbe.

The fundamental nature of this report is the data that was collected and this was a joint effort of MOH staff and Plan staff.

The MOH staff included: Ann Gitau, Daniel Yawa, Nicholas Nzioka, Jumaa Mwadunye, Grace Mbui, Ramtu Mwinyi, Sigomba Omar, Michael Kazungu, Leonida Chepchirchir, Harrison Kalu, Anatolia Marura, Nelson Kalama, Violet Chaka, Faith Mutiso, Bridget Uleli, Augustus Lugo, Catherine Munywoki, Christine Mataza, Daudi Madawa, Hezel Ngongondi, Patience Chea, Rebecca Kosgei, Phylis Gatitu, Ronald Mbunya, Julius Jilo, Henry Mutiso and Kadenge Vinya. The Plan staff who participated in data collection included: David Katana, Alex Chakacha, Carolyne Wangire, Emmanuel Baya, Wilfred Ileri, Beatrice Barasa, Stella Oduori, Japhet Kashuru, Fredrick Dambala and Peter Ndung'u.

Emmanuel Kabindo, CS Project Accountant supported in organizing finances and Teresa Kwinga, CS Program Assistant, Matano Omar and Griffith Mbeka both Plan drivers supported in organising logistics during the LQAS study.

The community members were very cooperative and voluntarily gave valuable information that constituted the project's data.

Finally, the data was entered in a computer program and this work was properly done by Eric Njagi and Felisters Wairimu

Much gratitude goes to all the above mentioned people for their valuable contribution.

Peter Ngigi Ndung'u  
Programme Officer – M&E CSP  
Plan Kenya, Kilifi Development Area

## List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AKHSK-CHD	Aga Khan Health Services Kenya-Community Health Department
ANC	Antenatal Care
APHIA II	AIDS Population and Health Integrated Assistance program
CL	Chlorine
CORP	Community Own Resource Persons
CSP	Child Survival Project
DHC	Dispensary Health Committee
DHMT	District Health Management Team
DIP	Detailed Implementation Plan
HIV	Human Immunodeficiency Virus
H2O	Water
IMCI	Integrated Management of Childhood Illness
ITN	Insecticide Treated Nets
KEMRI	Kenya Medical Research Institute
LLITN	Long Lasting Insecticide Treated Net
LQAS	Lots Quality Assurance Sample
MOH	Ministry of Health
ORS	Oral Re-hydration Solution
PD/Hearth	Positive Deviant Hearth
PSI	Population Services International
TOT	Training of Trainers
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
VHC	Village Health Committee
SA	Supervision Area
SP	Sulfa / Pyrimethamine

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## **Introduction**

For regular monitoring of the progress, KIDCARE project uses LQAS (Lots Quality Assurance Sampling). Annually the project is required to conduct two LQAS studies to inform project progress. This is the seventh and final LQAS study for the final evaluation of the project

This report intends to inform the Child Survival project on the progress made on key indicators in the intervention areas. The progress is examined overall for all the SAs and for each SA so as to compare the SAs for the purpose of identifying which SAs have performed better to serve as learning examples in the different interventions. This report is transcribed from the LQAS 7 results whose data was collected in June 2009.

This report also looks at the trends in some interventions on some of the indicators from the baseline to the current LQAS. It shows periods of poor performance, periods of stagnation and periods of good performance.

## **Scope**

Similar to the preceding LQAS studies, the seventh LQAS covered all the four divisions in all the eleven supervision areas (SAs). The same sets of questions were presented to the respondents and the same number of respondents was selected in a similar sampling method.

### ***Sampling methodology***

Lot Quality Assurance Sampling (LQAS) procedure has been used in the CS KIDCARE project for monitoring and formative evaluation, and this final LQAS is for evaluating the project. The survey endeavoured to study two groups of caregivers, i.e. caregivers of 0 – 11 months children (Module 1) and caregivers of 12 – 23 months children (Module 2). The procedure was that each of the 11 supervision areas was taken as a unit (lot) upon which identical samples were randomly selected. A sample of 19 respondents for each group of caregivers was randomly selected from each supervision area adding up to a total sample size of 209 respondents for each group of caregivers and a grand total sample size of 418 in the project area.

### ***Data Collection***

As described in the Seventh LQAS Activity Report by Dr. David Mulewa data collection was preceded by a training/sensitization for all the participants which took three days. During the training, highlights were made on the KIDCARE project, introduction to LQAS and other monitoring tools used in the project.

### ***Data management and analysis***

After the data was collected, it was manually analysed by tabulating the responses by hand. The totals for each variable were then entered in Ms Excel and further analysis done.

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To assess the performance of the supervision areas, decision rules are determined for the average coverage targets vis-à-vis monitoring targets and baseline results. Using the decision rules, a supervision area performance can then be determined as either below or above the average coverage target. Supervision area performance can also be determined as below or above the baseline coverage mark which shows the progress a supervision area has made. Performance of a supervision area can also be determined as either below or above the monitoring coverage targets to show if a supervision area has reached the required target.

In some cases the sample sizes in different SAs were below the acceptable size for the LQAS table for determining the decision rule and were therefore double up to produce an acceptable sample size for purposes of monitoring.



## Results

Table 1 below shows the Rapid Catch (Core Assessment Tool on Child Health) indicators that the project was able to assess in comparison to the baseline and the target. The project was able to reach the target of all the Rapid Catch indicators listed below. The biggest strides were made on exclusive breastfeeding where five years later, over half of all the mothers practiced it. Skilled delivery also greatly improved from 13% to 35%. Another major improvement was on children who were of correct weight. Five years ago, almost a 1/3 of the children were underweight. Through the project this proportion was almost halved.

### Target Beneficiaries:

<b>Infants &lt; 12 months:</b>	9,270
<b>Children 12-23 months:</b>	9,270
<b>Children 0-23 months:</b>	18,540
<b>Children 24-59 months:</b>	27,814
<b>Women 15-49 years:</b>	64,381
<b>Population of Target Area:</b>	257,522

Table 1: Rapid Catch Indicators:

Indicators	Baseline coverage	EOP coverage		EOP target
		%	Confidence Interval	
Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	<b>26.6%</b> (n = 391)	<b>14.4%</b> (n = 418)	<b>3.3</b>	<b>21.6%</b>
Percentage of children age 0-23 months whose births were attended by skilled health personnel	<b>12.9%</b> (n = 209)	<b>35.4%</b> (n = 209)	<b>6.6</b>	
Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	<b>24.0%</b> (n = 391)	<b>66.7%</b> (n = 135)	<b>7.9</b>	<b>60%</b>
Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	<b>21.1%</b> (n = 90)	<b>54.9%</b> (n = 113)	<b>9.1</b>	<b>31%</b>
Percentage of infants age 6-9 months receiving breast milk and complementary foods	<b>92.2%</b> (n = 77)	<b>98.2%</b> (n = 57)	<b>3.4</b>	<b>95%</b>

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Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases)	<b>62.2%</b> (n = 209)	<b>82.3%</b> (n = 209)	<b>5.1</b>	<b>74%</b>
Percentage of children age 12-23 months who received a measles vaccine	<b>64.1%</b> (n = 209)	<b>84.7%</b> (n = 209)	<b>4.8</b>	<b>80%</b>
Percentage of children age 0-23 months who slept under an insecticide-treated bed-net the previous night (in malaria-risk areas only)	<b>20.7%</b> (n = 391)	<b>74.2%</b> (n = 202)	<b>5.9</b>	<b>60%</b>
Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment	<b>74.2%</b> (n = 209)	<b>86.1%</b> (n = 209)	<b>4.6</b>	
Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	<b>3.4%</b> (n = 175)	<b>34.6%</b> (n = 165)	<b>7.2</b>	
Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	<b>41.4%</b> (n = 391)	<b>66%</b> (n = 209)	<b>6.4</b>	<b>70%</b>
Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	<b>0.5%</b> (n = 391)	<b>15.3%</b> (n = 209)	<b>4.9</b>	<b>14%</b>

**Immunization**

The project saw 85% of children 12 – 23 months receiving immunization against measles, a proportion that was above the project’s target of 80% (Table 2). Constricting the indicator of the same cohort to children who received measles immunization by the age of 12 months, a slight difference is observed as the proportion drops to 78%. Only about 8% of all the children 12 – 23 months immunized against measles were not immunized by their first birthday.

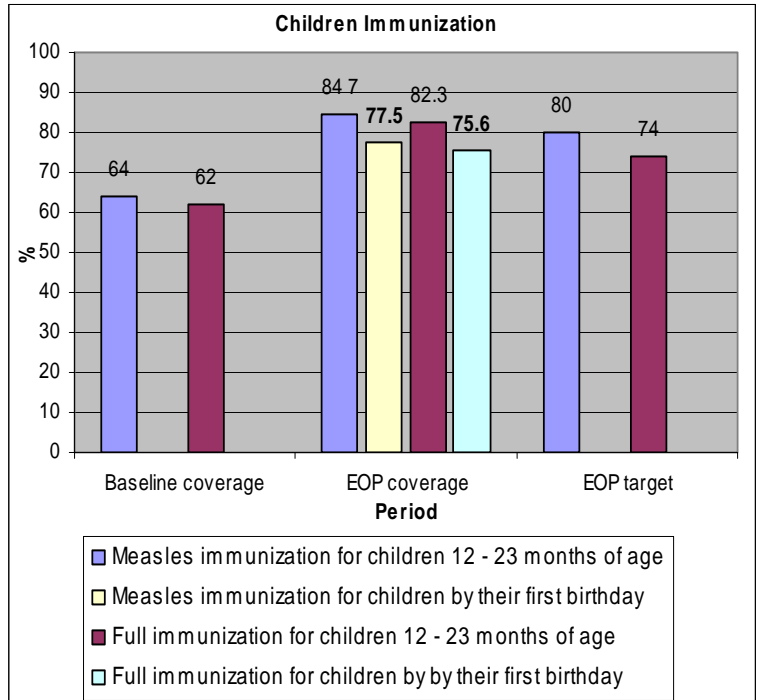
Children who received BCG, Penta 3, Polio 3 and Measles immunization were considered fully immunized. By the time of project evaluation, 82% of children 12 – 23 months were fully immunized weighed against the project’s target of 74%. On quality check, the proportion of children 12 – 23 who were fully immunized by the age of 12 months was 76%. This means that 24% of the children were not fully immunized by their first birthday.

Figure 1 and Figure 2 shows a graphical presentation during the three periods in the life of the project. In Figure 2, a slight decrease is seen in May-06 in the proportion of children immunized. An increase then followed to over 80% and held steady.

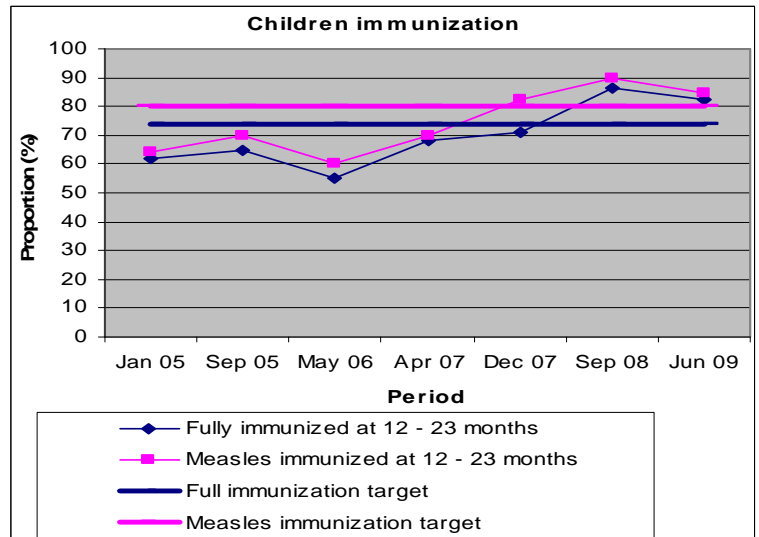
**Immunization for women**

By the time the project began only 24% of mothers of children 0 – 11 months had received at least two Tetanus Toxoid injection. The project endeavoured to achieve a proportion of 60% in this indicator, and from the final evaluation, the project achieved a proportion of 67%.

**Figure 1: Children immunization**



**Figure 2: Trends in children immunization**



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**Table 2: Immunization**

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachak	Ngerenya	Pingilikani	Vitengeni	Baseline coverage		EOP Average coverage		Monitoring target coverage		
												%	D/rule	%	D/rule	%	D/rule	
<b>Immunization</b>																		
Measles immunization for children of 12 – 23 months (n= 19 for each)	14	17	14	18	12	18	17	17	15	16	19		64%	10	84.7% (CI = 4.8)	14	80%	13
Measles immunization for children by 12 months of age (n= 19 for each)	12	15	13	18	11	17	16	15	14	13	18				77.5%	13		
Full immunization for children of 12 – 23 months (n= 19 for each)	14	17	13	16	12	18	17	17	13	16	19		62%	10	82.3% (CI = 5.1)	14	74%	12
Full immunization for children by 12 months of age (n= 19 for each)	12	15	13	16	11	17	16	15	12	13	18				75.6%	13		
Mothers who received 2 or more TT shots before birth of last child (n= 19 for each)	5	13	6	6	4	11	3	17	3	10	12		24%		66.7% (CI = 7.9)		60%	

In Table 2, immunization was generally performing well in Vitengeni considering that all the 19 cases sampled had received measles immunization and only one had not received full immunization. KDH was performing poorly for both children and mothers immunization. Considering the confidence interval (CI), the project met its target in all the three indicators in immunization.

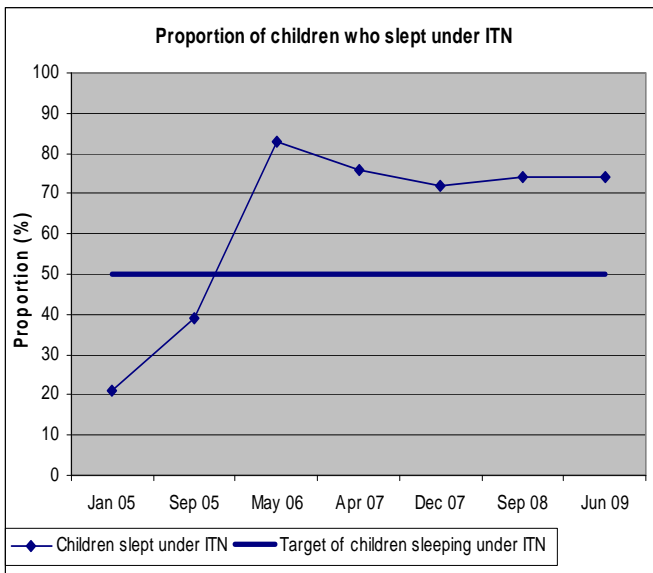
**Malaria**

In the fight against malaria the project targeted by the end of 5 years, a proportion of 50% of households with children sleeping under insecticide treated nets (ITNs), up from 21%. The final evaluation revealed that this target was exceeded by about 24 percentage points to stand at 74% as shown in Figure 3. The project also targeted a proportion of 60% of pregnant women to be prevented from contracting malaria by taking SP. The final year of the project saw about 87% of the women to have taken SP.

Caregivers were advised to seek treatment for fever/malaria early enough, within 24 hours. Five years ago only 18% of caregivers sought treatment within 24 hours and now, about 68% of the caregivers seek treatment for fever by the next day. The project targeted a proportion of 40% - a figure that was evidently surpassed.

Looking at the trends, the proportion of children who slept under ITNs increased rapidly to the 2<sup>nd</sup> year of the project and then dropped slightly to level of at between 70 and 80% (Figure 3). The proportion of mothers using SP to prevent them from malaria has increased even though in volatile trend (Figure 4). In the 2<sup>nd</sup> year, the project reached the target and then fell below the target in the following year and then surpassed the target in the other year.

**Figure 3: Trends in proportion of children sleeping under ITNs**



**Figure 4: Trends in mothers using SP prophylaxis**

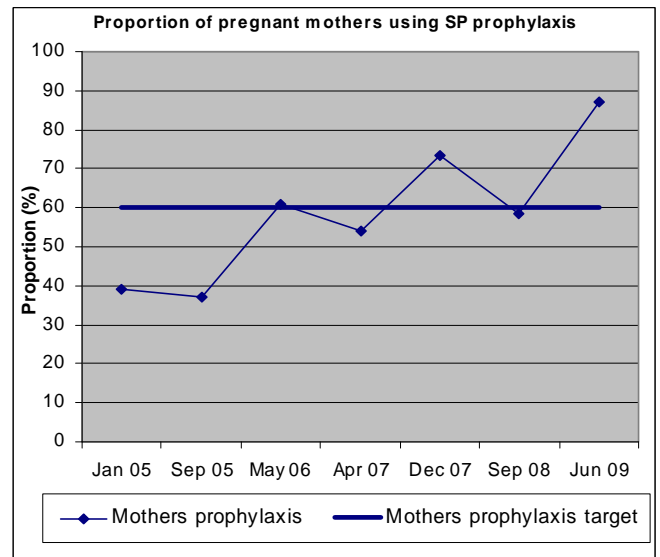


Figure 5: Caregivers seeking treatment within 2 days

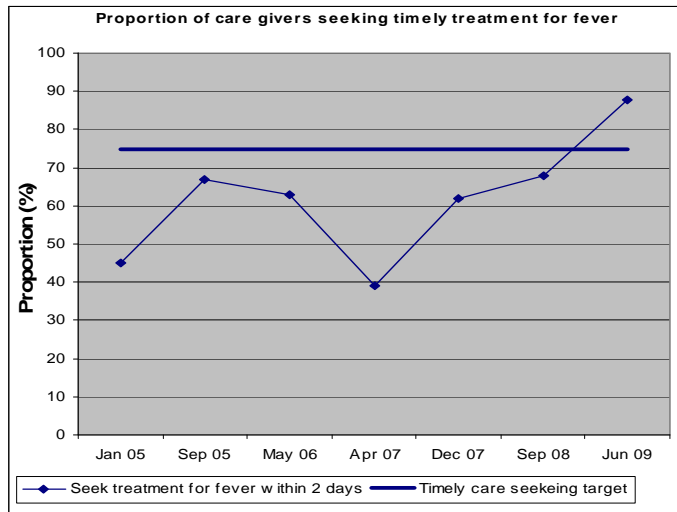


Figure 5 shows the trend in proportion of caregivers seeking timely treatment for fever which is within 2 days. After the onset of the project, there was an increase but then it plummeted to a proportion below the baseline. By the end of the third year, more women had started seeking timely treatment marking a sharp increase to even surpass the target by the end of the project.

In Table 3, the confidence intervals confirm that the project exceeded the set target in the three indicators.

Table 3: Malaria

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pingilikami	Vitengi	Baseline coverage		EOP Average coverage		Monitoring target coverage		
												%	D/rule	%	D/rule	%	D/rule	
<b>Immunization</b>																		
Households with children 12 – 23 months who slept under an ITN the previous night (n= 19 for each)	15	11	13	15	12	12	14	18	13	15	17		21%	2	74.2% (CI=5.9)	12	50%	9
Mothers who received SP2 during pregnancy	17	19	17	15	12	17	11	17	10	18	18		39%		87.2% (CI=4.6)		60%	
n=	19	19	19	17	18	18	15	18	15	19	19							

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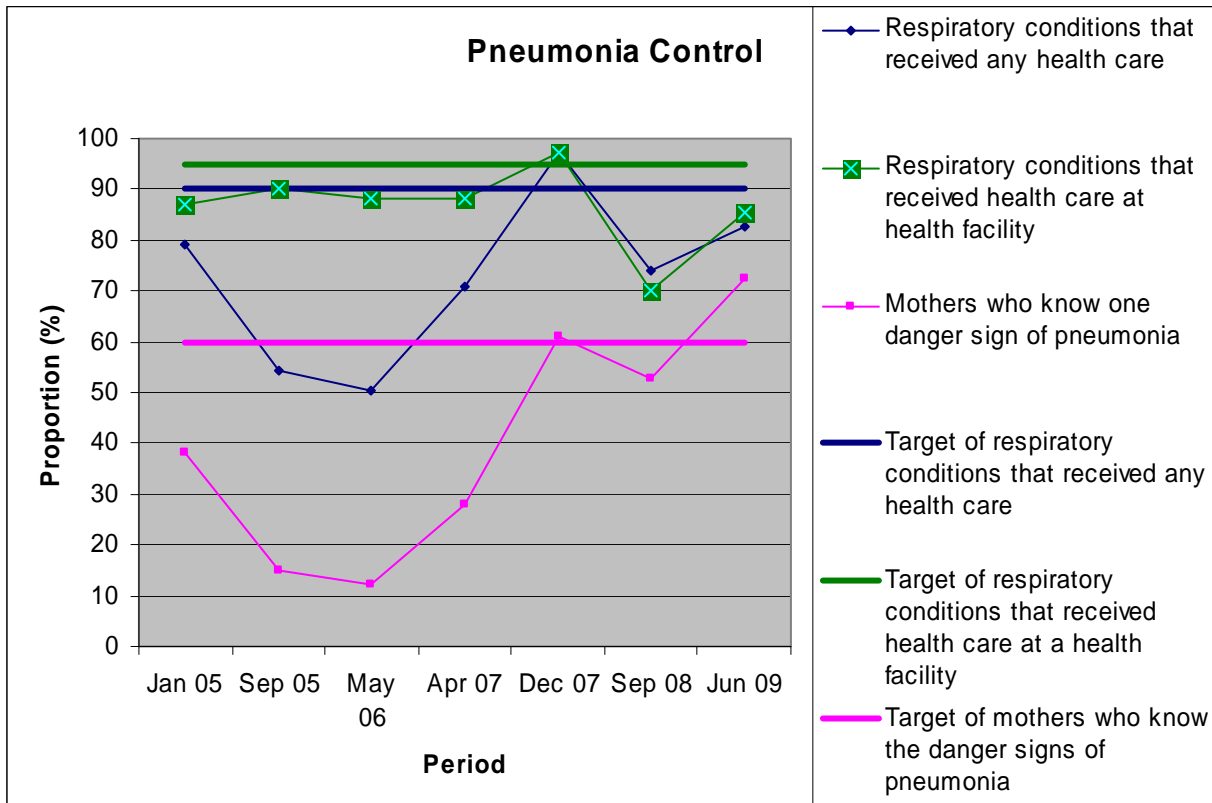
Care givers who sought treatment for fever within 2 days	7	6	8	3	7	9	4	8	7	10	8		45%	87.7% (CI=8.6)	75%
	<i>n=</i> 16	13	19	11	15	16	16	16	8	14	14				

**Pneumonia**

Table 4 shows that knowledge on danger signs of pneumonia increased among the caregivers in the last 5 years, evident from the fact that about 72% of the caregivers now know at least one danger sign of pneumonia, up from 38%. This proportion exceeds the project target of 60%. In the final year of the project, the number of cases of difficult breathing that sought any health care was 82 which represent a proportion of 83% of all such cases. This proportion showed a slight increase from the situation as it was 5 years ago (79%). Out of the 82 cases that sought any health care, 70 sought health care from a health facility.

Looking at the trends in Figure 6 there was a drop after the onset of the project for knowledge and care-seeking that went to a low all the way to the mid of the 2<sup>nd</sup> year of the project. An improvement from the baseline was only achieved in the mid of the 3<sup>rd</sup> year of the project. It will be interesting to note that the knowledge and care-seeking show a co-relation, i.e. knowledge on danger signs and general care-seeking for respiratory conditions. They change in the same gradient from period to period. The 4<sup>th</sup> year of the project saw a regression and then a recovery to the final year in all the three indicators

**Figure 6: Knowledge of at least one danger sign of pneumonia**





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Table 4: Pneumonia

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pingilikani	Vitengeni	Baseline coverage		EOP Average coverage		Monitoring target coverage		
												%	D/rule	%	D/rule	%	D/rule	
<b>Immunization</b>																		
Mothers who know at least one danger sign of pneumonia <i>n</i> =	13	16	11	12	13	12	10	15	15	12	18	38%		72.4% (CI = 6.1)		60%		
	19	19	19	18	19	18	16	19	19	18	19							
Cases of cough and difficult breathing in children which received any health care <i>n</i> =	14	4	10	6	5	7	9	7	7	6	7	79%		82.8% (CI = 7.4)		90%		
	16	4	11	9	7	9	11	8	9	7	8							
Cases receiving care from a health facility <i>n</i> =	12	4	9	5	4	7	8	5	5	4	7	87%		85.4% (CI = 7.6)		95%		
	16	4	11	9	7	9	11	8	9	7	8							

The eventual proportion of mothers who know at least one danger of pneumonia was significantly above the target. However there was no evidence that the proportion of cases that received care from a health facility met the target in view of the confidence interval (85.4 ± 7.6 vs. 95%). But then again, by factoring in the confidence interval for cases that received any health care (82.8% ± 7.4 vs 90%), there is no evidence that the target was not met.

**Diarrhea**

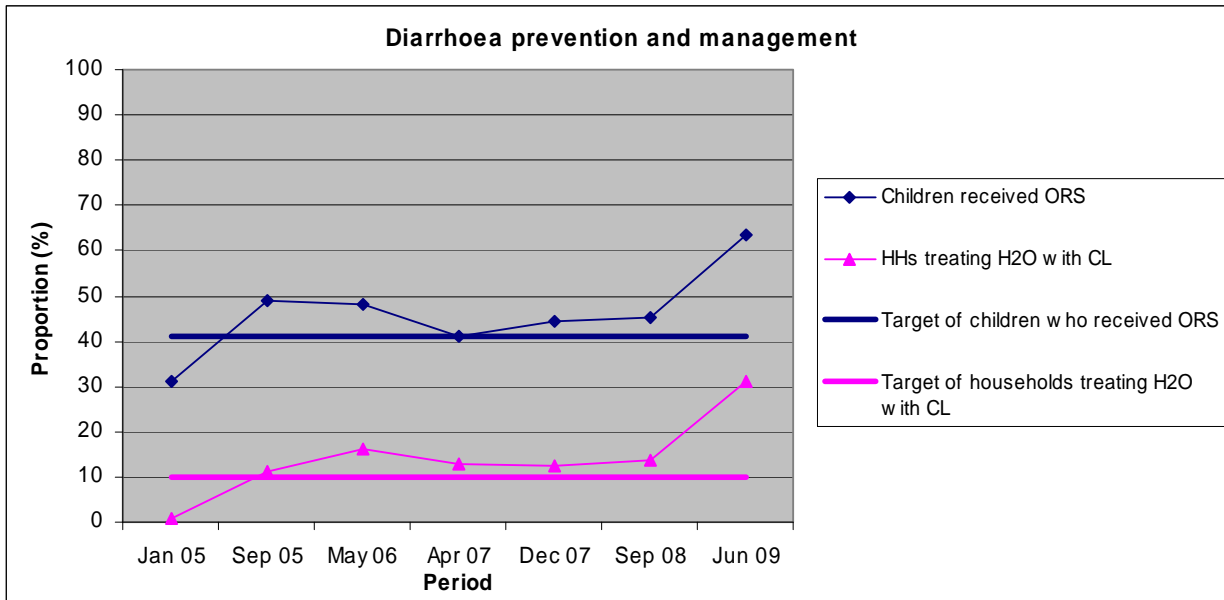
Five years ago, almost all households put children at risk of diarrhea as they fed them on dirty hands. The project endeavored to reduce the proportion by seeking to have 14% of caregivers practicing proper hand washing. The project can now boast to have changed the behavior of about 15.3% of caregivers to practice proper hand washing (Table 5).

Still on the agenda of reducing diarrhea cases, the project aimed at influencing households to treat water for drinking. Close to none of the households were treating drinking when the project began. By the end of 5 years, the project intended 10% of the households to be drinking safe water. This target was achieved and now about 31% of the households treat water in one way or the other before drinking.

During the study, 164 out of 418 children went through a diarrhea episode. Of this, about 64% received ORS for management of diarrhea. This proportion was above the target of 41% the project aimed to achieve. Besides understanding the practice in diarrhea management, the study also sought to know the caregivers knowledge on preparation of ORS. About 48% described preparation of ORS correctly. This was just about the target the project strived for.

The practice of prevention and management of diarrhea seemed to have generally been embraced in the same keenness over the period as Figure 7 shows. These two indicators changed at the same pace. By the second year, the indicators had reached the target and maintained level only to increase from the 4<sup>th</sup> year well above the target.

**Figure 7: Diarrhoea prevention and management**



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Table 5: Diarrhea

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pingilikani	Vitengeni	Baseline coverage		EOP Average coverage		Monitoring target coverage		
												%	D/rule	%	D/rule	%	D/rule	
<b>Immunization</b>																		
Mothers with children (0-23) who wash their hands with soap/ash before food preparation, before feeding children and after defecation, and after attending to a child who has defecated <i>n=</i>	10	7	7	3	5	6	5	9	3	8	12	0.5%		15.3% (CI = 4.9)		14%		
	19	19	19	19	19	19	19	19	16	19	19							
Households treating water for drinking <i>n=19 for each</i>	5	6	9	3	7	3	4	11	3	7	7	1%		31.1% (CI = 6.2)		10%		
Children with diarrhea who received ORS <i>n=</i>	13	13	16	7	10	11	6	10	8	9	10	31%		68.9% (CI = 7.1)		41%		
	15	16	21	16	15	14	15	13	11	16	12							
Mothers able to prepare ORS correctly <i>n=19 for each</i>	12	12	8	4	7	6	12	11	3	12	14	32%		48.3% (CI = 6.7)		50%		
Sick children age 0-23 months who received increased fluids and continued feeding during an illness in the last two weeks																		

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Most indicators in this intervention were well above the target. As for proportion of mothers able to prepare ORS correctly, there is no evidence that the target was not met considering a CI of 6.7 to 48.3% against the target of 50%.

**Nutrition**

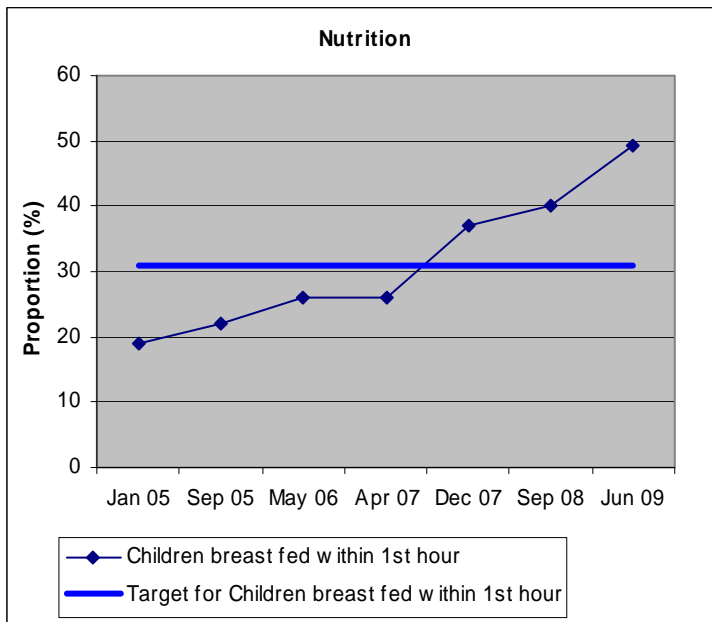
Before the project began, about 26.6% of children 0 – 23 months were less than 2 SD below the median weight- for-age for the reference population. The project formulated interventions that would improve the nutrition of children 0 – 23 months so as to reduce the proportion of underweight children to 21.6%. The interventions bore fruits and after 5 years, the proportion of children 0 – 23 months considered underweight reduced to 14.8% (Table 6). It is interesting to note that the proportion of children 12-23 months who are underweight is far much higher than for children 0 – 11 months.

Exclusive breastfeeding is among the practices that the project advocated for. The fifth year of the project has seen about 55% of mothers practicing exclusive breastfeeding for children 0 – 5 months, up from 21% in the base year. The project’s target was 31%. The project also endeavored to ensure proper weaning for children is practiced. Out of the 57 children who were between 6 – 9 months, 56 profited from proper weaning.

Another achievement of the project is an increase in the proportion of children 6 – 23 months who receive vitamin A every six months. The project reached the target and saw about 85% of the children receiving vitamin A every six months as compared to 61% five years ago.

After five years in to the project, the proportion of mothers who received vitamin A dose 45 days after delivery was about 47%, up from 5% in the base year. This exceeded the project’s target of 30%.

**Figure 8: Initiation of breastfeeding**



Initiation of breastfeeding has improved steadily over the project period from the base of 19%. By the third year in to the project, the target had been met and more improvement was realized even after this. By the end of the project, close to half of all the children born were initiated to breast feeding during the first hour.

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Table 6: Nutrition

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pingilikani	Vitengeni	Baseline coverage		EOP Average coverage		Monitoring target coverage	
												%	D/rule	%	D/rule	%	D/rule
<b>Immunization</b>																	
children aged 0-11 months who are less than 2 SD below the median weight- for-age for the reference population <i>n=19 for each</i>	0	1	0	0	5	2	2	1	2	2	3			8.6%			
children aged 12-23 months who are less than 2 SD below the median weight- for-age for the reference population <i>n=19 for each</i>	3	3	7	8	2	6	1	5	1	2	5			20.6%			
children aged 0-23 months who are less than 2 SD below the median weight- for-age for the reference population <i>n=19 for each</i>	3	4	7	8	7	8	3	6	3	4	8	26.6%		14.8%		21.6%	
children aged 0-5 months who are fed breast milk only <i>n=</i>	3	7	6	8	8	6	0	10	6	2	6	21%		54.9%		31%	
	6	13	12	14	8	12	10	10	10	8	10						

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DIP M&E indicators	Chasimba	Dida	Ganze	Jaribumi	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pingilikani	Vitengeni	Baseline coverage		EOP Average coverage		Monitoring target coverage	
												%	D/rule	%	D/rule	%	D/rule
children aged 6-9 months who received breast milk and solid foods in the last 24 hours <i>n=</i>	6	3	7	2	7	4	5	6	7	3	6	92%		56/57		95%	
	6	3	7	2	7	4	5	6	7	4	6						
mothers who received a vitamin A dose during first six weeks postpartum after delivery of the youngest child less than 24 months <i>n=</i>	5	14	8	4	11	7	8	9	11	4	16	5%		46.9%		30%	
	19	19	19	17	19	19	19	19	19	19	19						
children 6 –23 months who received Vitamin A within the last 6 months <i>n=</i>	26	22	18	19	26	21	26	26	25	24	26	61%		85.2%		80%	
	32	25	26	24	29	27	29	28	28	29	27						
Children breastfed within the first hour of birth <i>n=19 for each</i>	8	9	9	8	9	4	9	13	12	8	14	19%		49.2%		31%	

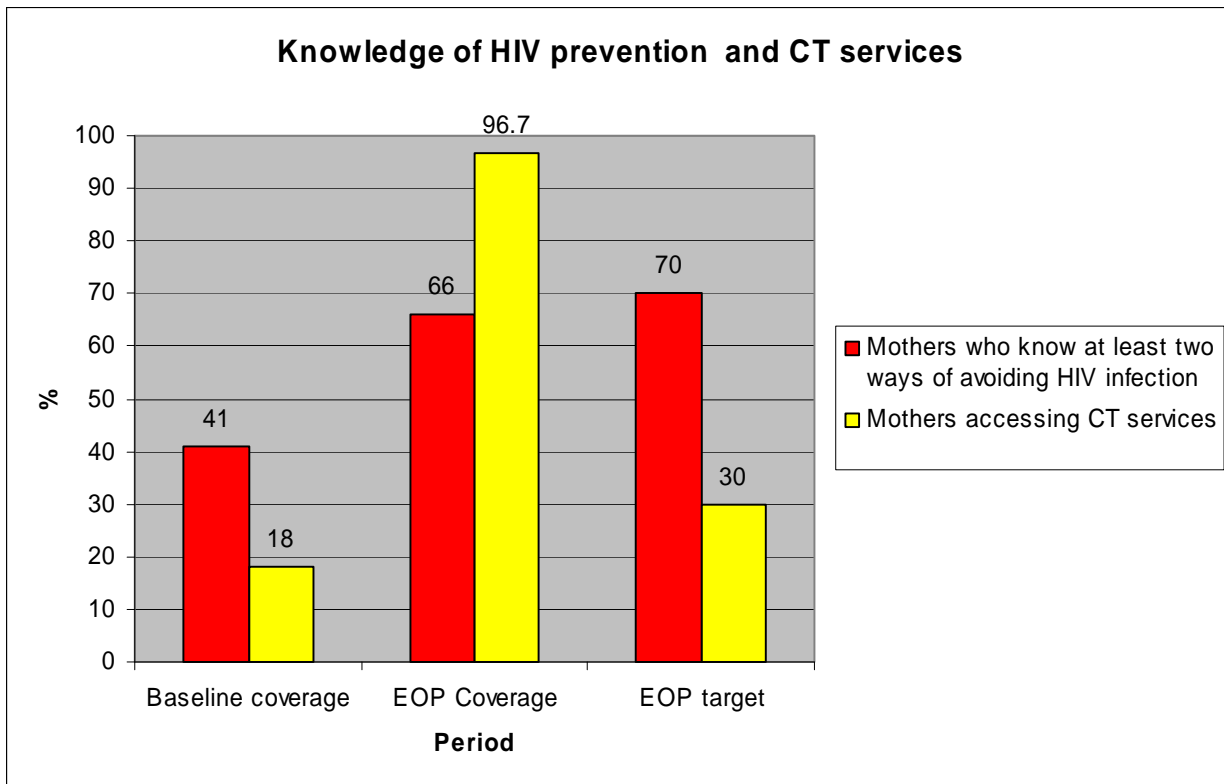
**HIV / AIDS**

HIV testing and counselling is now almost mandatory for every pregnant woman availing herself in the clinic according to an MOH policy. This policy boosted the projects intervention of encouraging women to avail themselves for testing and counselling. Only 18% of women availed themselves for testing during the time when the project began. Five years later, nearly every woman who has a child 12 – 23 months had been tested for HIV.

Mothers’ knowledge on HIV prevention has also increased from 41% to 66% (proportion of mothers who know at least two ways of avoiding HIV infection). The project’s objective was to instil knowledge to 29% more of mothers to reach to 70%.

One interesting observation as seen in Figure 9 is that the proportion of mothers who knew at least two ways of avoiding HIV infection was considerably higher than the proportion of mothers accessing counselling and testing services in the base year. Five years after, the former became considerably low than the latter.

**Figure 9: Knowledge on HIV prevention and CT services**





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Table 7: HIV/AIDS

DIP M&E indicators	Chasimba	Dida	Ganze	Jaribuni	KDH	Kizingo	Matsangoni	Mryachakwe	Ngerenya	Pinglikani	Vitengi	Baseline coverage		EOP Average coverage		Monitoring target coverage		
												%	D/rule	%	D/rule	%	D/rule	
<b>Immunization</b>																		
Mothers who know at least two ways of avoiding HIV infection <i>n=19 for each</i>	16	13	8	10	17	11	15	8	9	14	17		41%		66% (CI = 6.4)		70%	
Mothers availing for counseling and testing services <i>n=</i>	18	14	14	15	18	13	17	16	18	15	18		18%	96.7%		30%		
	18	14	14	18	18	13	17	17	19	16	18							
Mothers tested and got their results <i>n=</i>	18	14	14	14	18	12	17	16	18	15	17			95%				
	18	14	14	18	18	13	17	17	19	16	18							

**Annexes**

*Annex 1: Decision Rules table*

Decision Rules for Sample Sizes of 12-30 and Coverage Targets/ average of 5% - 95%.

Sample Size	Average Coverage (Baselines) / Annual Coverage Target (Monitoring and Evaluation)																		
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%
12	0	0	0	1	1	2	2	3	4	5	5	6	7	7	8	8	9	10	11
13	0	0	0	1	1	2	3	3	4	5	6	6	7	8	8	9	10	11	11
14	0	0	0	1	1	2	3	4	4	5	6	7	8	8	9	10	11	11	12
15	0	0	0	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13

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16	0	0	0	1	2	2	3	4	5	6	7	8	9	9	10	11	12	13	14
17	0	0	0	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	0	0	0	1	2	2	3	5	6	7	8	9	10	11	11	12	13	14	16
19	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
20	0	0	0	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17
21	0	0	0	1	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18
22	0	0	0	1	2	3	4	5	7	8	9	10	13	13	14	16	16	18	19
23	0	0	0	1	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20
24	0	0	0	1	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21
25	0	0	1	2	2	4	5	6	8	9	10	12	13	14	16	17	18	20	21
26	0	0	1	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	22
27	0	0	1	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	23
28	0	0	1	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	24
29	0	0	1	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	25
30	0	0	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	24	26

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# **PLAN KILIFI KIDCARE PROJECT**

## **Health Facility Assessment**

**May 2009**

## **Forward**

Plan Kenya is implementing a five year Child Survival Project (KIDCARE) in Kilifi district of the Coast Province. The KIDCARE Child Survival Project is funded by the generous support of the American people (USAID) and covers four divisions (Ganze, Vitengeni, Bahari and Chonyi) of Kilifi district.

The goal of the project is to assist the MOH reduce in a sustainable way the morbidity and mortality of children below five years and women of child bearing age in Kilifi district. The project targets 46,354 children of less than five years of age and 64,381 women of reproductive age in 357 villages. The project is being implemented in close collaboration with partners that include; the community, MOH, APHIA II, AKHSK-CHD, PSI and KEMRI. The project is in its final year of implementation having started in October 2004 and expected to end in September 2009.

To achieve its goal, the project seeks to address six priority health problems in Kilifi which include Malaria, Malnutrition, Pneumonia, Diarrhea, low Immunization coverage and HIV/AIDS. Key strategies being used to implement interventions aimed at addressing these health problems are, the Care-group model for community mobilization, Strengthened Facility and Community IMCI, PD/Hearth for rehabilitation of Children with Malnutrition alongside Quick wins for Malaria and Immunization Interventions.

## Acknowledgement

Health Facility Assessment was completed with the contribution at different stages of the exercise by the following mentioned persons.

The DMOH Kilifi, Dr. Mulewa supported by Edward Mumbo allowed the assessment of the health facility under their jurisdiction and coordinated the activities of the exercise. The CS coordinator, Ruth Momanyi supported by Stella Oduori managed the activities of the project and facilitated training for the assessors.

Data was collected from the health facilities and this was through the tireless effort of the following MOH staff: Julius Jilo, Riziki Mwadena, Christine Mataza, Florence Luganje, Doris Mwanzui, Emma Bahati, Mwatate Ngumbao, Choni Chigulu, Mary Kenda, Meshack Mwagala, Zubeda Famau, Stella Bendera, Samuel Besaro, Susan Munene, James Kungu and Janet Mwero.

Information would not have been gathered without the participation and cooperation of the health workers in the 16 dispensaries that were assessed and the community members that were interviewed.

The complex data collected was then entered into a computer program by Mwanajuma Hamadi.

Much appreciation is to all these people that made this report a success.

Peter Ngigi Ndung'u  
Programme Officer – M&E CSP  
Plan Kenya, Kilifi Development Area

## List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AKHSK-CHD	Aga Khan Health Services Kenya-Community Health Department
ANC	Antenatal Care
APHIA II	AIDS Population and Health Integrated Assistance program
CL	Chlorine
CORP	Community Own Resource Persons
CSP	Child Survival Project
DHC	Dispensary Health Committee
DHMT	District Health Management Team
DIP	Detailed Implementation Plan
HIV	Human Immunodeficiency Virus
H2O	Water
IMCI	Integrated Management of Childhood Illness
ITN	Insecticide Treated Nets
KEMRI	Kenya Medical Research Institute
LLITN	Long Lasting Insecticide Treated Net
LQAS	Lots Quality Assurance Sample
MOH	Ministry of Health
ORS	Oral Re-hydration Solution
PD/Hearth	Positive Deviant Hearth
PSI	Population Services International
TOT	Training of Trainers
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
VHC	Village Health Committee
SA	Supervision Area
SP	Sulfa / Pyrimethamine
SPSS	Statistical Packages for Social Sciences

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## **Introduction**

Health Facility Assessment survey has been undertaken as part of the requirements for the Child Survival Project (CSP) in Kilifi District. Two HFAs have been conducted over the life of the project i.e. baseline and midterm. This is the 3<sup>rd</sup> and last HFA in the life of the project. The objective of the Health Facility Assessment is to generate information that will inform project progress and be used for better planning of subsequent activities. Specific objectives of the HFA are as listed below.

1. To generate information regarding health worker practices during provision of health services
2. To generate information that will lead to the understanding of caretakers knowledge on how to administer medication at home
3. To understand the training needs and supervisory assistance given to health workers
4. To generate information on composition of DHCs and assess how active they are in management of health facilities
5. To assess the equipment status of health facilities in the project area

## Methodology

Data for the HFA was collected between 4<sup>th</sup> and 14<sup>th</sup> May 2009. The study collected information on the case management of the most important causes of infant and child morbidity and mortality in Kilifi District, namely, malaria, measles, diarrhea and malnutrition. It also collected information on health worker communication with caretakers at the time of the caretakers' visit to a health facility with a sick child. In addition, the survey gathered information on facility equipment and supplies required for the management of fever (Malaria, measles, ear infection), ARI, diarrhea and malnutrition.

For each child who had visited the one of the health facilities covered under the study, with one of the clinical presentations listed above, information was collected on the following:

- The assessment, diagnosis and treatment of the child
- Whether the vaccination status of the women of childbearing age and children is checked during the sick child visit and whether women and children are vaccinated appropriately
- How well caretakers are able to provide home treatment for their children
- How well health workers counsel caretakers about preventive and curative care
- The quality of training and supervision received by health workers

On the issues related to facility support, the following type of information was collected.

- Availability of essential equipment
- Availability of essential materials
- Availability of essential drugs and vaccines for the prevention and management of important causes of childhood morbidity and mortality
- Adequate number of staff and sufficient time for them to spend with each caretaker and child
- Adequate number of vaccination sessions to avoid missed opportunities to vaccinate infants and women of childbearing age.

### Assessment tools

Five assessment tools were used for data collection

**Observation checklist for the sick child:** A direct observation tool to assess health worker practice. A total of 207 children were observed

**Exit interview questionnaire:** Administered to the caretaker of a sick child immediately after consultation. A total of 200 cases were interviewed.

**Health worker Interview questionnaire:** Used to interview health workers on issues pertaining to quality of training and supervision and working constraints. For each health facility, a health worker was interviewed; 16 health workers were interviewed.

**Equipment and supplies:** An inventory for assessing the availability and stock of essential equipment and supplies. The survey assessed 16 health facilities.

**Health facility committee assessment tool:** A semi-structured tool to assess the capacity and roles of the dispensary health committees. The survey saw 14 health facility committees assessed.

The health facility assessment tools are standard instruments developed by BASICS (Basic Support for Institutionalizing Child Survival) that were adopted, localized and translated to Kiswahili.

### Sampling

All the health facilities in the project area were visited. This also included the district hospital and a mission dispensary. The health facilities visited were:

Health Facility	Facility type
St. Teresa	Mission
Jaribuni	Government
Kizingo	Government
Palakumi	Government
Ganze	Government
Ngerenya	Government
KDH	Government – District Hosp
Madamani	Government
Matsangoni	Government
Chasimba	Government
Dzikunze	Government
Vitengeni	Government
Mryachakwe	Government
Pingilikani	Government
Roka Maweni	Government
Dida	Government

### Identification of respondents

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The identification and sampling of the respondents was purposive where the researcher picked on cases of children between ages 0 – 59 months. The researcher picked on about 13 cases that availed on the day of the survey.

### **Data analysis**

Data was entered in Epi-Info and analyzed with SPSS

## Discussion

### *Observation Assessment*

#### **General Information**

The number of children observed during the health facility assessment (HFA) was 207. Majority of these children were at the age of 0 – 23 months and they comprised of about 60% of all the cases observed (Table 8). Most of the children observed were brought to the health facility because of fever or malaria (62.3%) as shown in Table 9. About 9.7% of the children had the three conditions (Table 10).

**Table 8: Children observed**

<b>Age category</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
0 - 11 Months	62	30%	30
12 - 23 Months	63	30.4%	60.4
24 - 35 Months	31	15%	75.4
36 - 47 Months	22	10.6%	86
48 - 59 Months	29	14%	100
<b>Total</b>	<b>207</b>	<b>100</b>	

**Table 9: single reasons for bringing child to health facility. n = 207**

<b>Reason for bringing child to health facility</b>	<b>Count</b>	<b>Column %</b>
Diarrhea/Vomiting	78	37.7%
Fever/Malaria	129	62.3%
Difficulty breathing / cough / pneumonia	97	46.9%
Other	54	26.1%

**Table 10: Combined reasons for bringing child to health facility. n = 207**

<b>Reason for bringing child to health facility</b>	<b>Count</b>	<b>Column %</b>
Diarrhea/Vomiting & Malaria	48	23.2%
Diarrhea & difficult breathing	23	11.1%
Fever/Malaria & Difficulty breathing	73	35.3%
Diarrhea/Vomiting, Fever/Malaria & Difficult breathing/cough/pneumonia	20	9.7%

## Health Worker Practice

### Screening

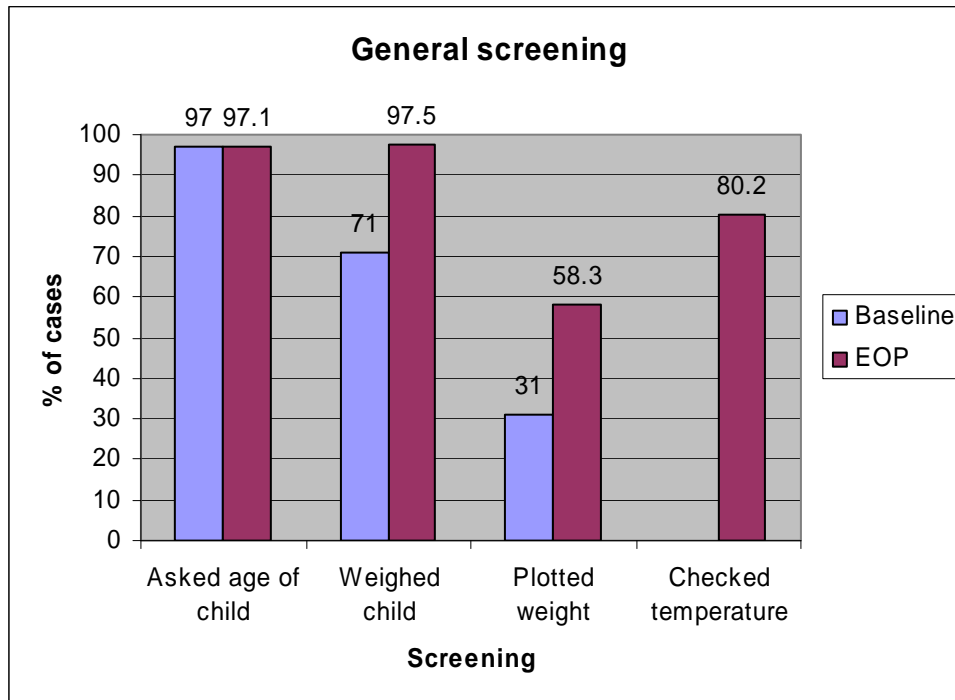
Table 11 shows the proportion of cases screened for age, weight and temperature. The assessment found that about 97.1% of the cases were asked about their ages and 80.2% had their temperature checked. Nearly all the cases were weighed but only 58.3% had their weights plotted.

**Table 11: General Screening**

Action	Yes	No	n
Asked age of child	97.1%	2.9%	205
Weighed child	97.5%	2.5%	203
Plotted weight	58.3%	41.7%	199
Checked temperature	80.2%	19.8%	202

Comparing to the baseline, there was no change the proportion of cases whose age was asked. There were some observable differences however, on cases whose weight was assessed and plotted. Five years ago, the probability that a case of a child of less than five years of age would have the weight checked was 71%. Five years later, this has improved where only less than 3% of the cases missed on this assessment. There was also an improvement on the proportion of cases whose weight was plotted, from 31% to 58.3%.

**Figure 10: General screening**



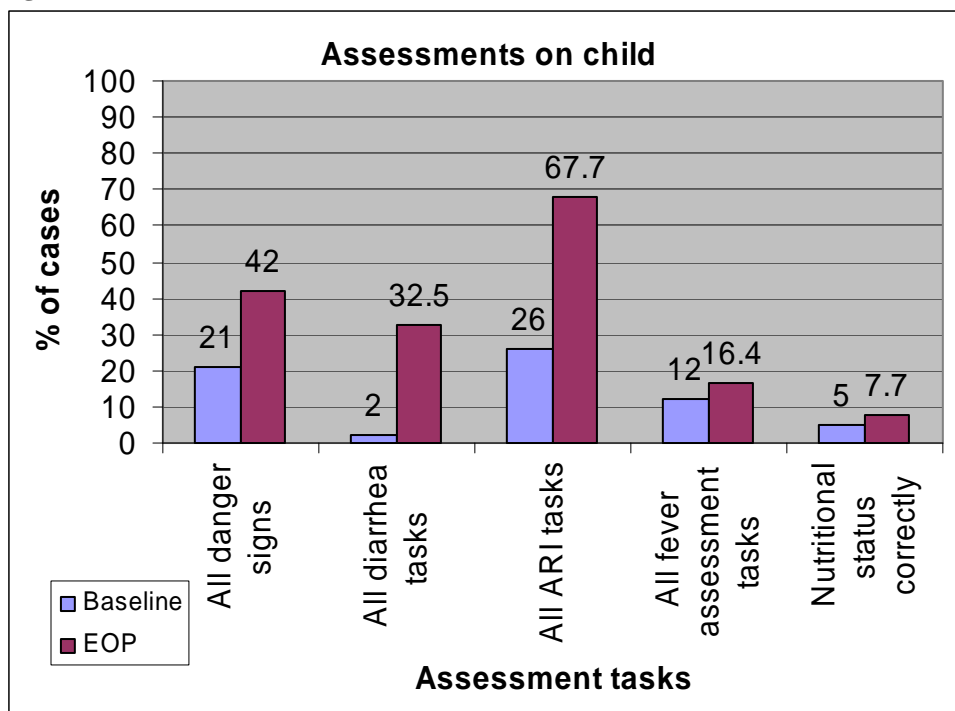
Among all the children that were observed, 42% had all the danger signs assessed and only 7.7% were correctly assessed for nutrition status (Table 12). Diarrhea, ARI and fever assessments were only done to cases exhibiting the same. Just about a third (32.5%) of all diarrhea cases had all diarrhea assessments tasks done and about two thirds (67.7%) of ARI cases were assessed comprehensively. Few cases of fever (16.4%) received complete assessments despite fever being the single most major reason why children were brought to the health facility.

**Table 12: Assessments**

Task	Cases %	n
All danger signs assessed	42%	207
All diarrhea assessments tasks	32.5%	77
All ARI assessment tasks	67.7%	96
All fever assessment tasks	16.4%	128
Nutrition status correctly assessed	7.7%	207

There has been an improvement since baseline on child assessment. Diarrhea task assessments are now done in about 33% unlike five years ago when almost none of the cases was assessed. After five years there was hardly any change on the proportion of cases whose nutritional status were correctly assessed.

**Figure 11: Assessments done on children**



**Immunization**

On immunization screening, a case of children under 5 years has a 91.7% chance of being asked for the immunization card as shown in Table 13. Out of 195 children observed, 55.4% had their immunization cards and accordingly only 13.5% of all the children were referred for vaccination. Some cases were not referred because they had completed their immunization and this comprised of 63.7% of all the cases (Figure 14). Cases referred for that day were about the same proportion of cases referred for another day (6.7%). About 22.8% of the cases were not referred and were not complete. Assuming that any case not ascertained to have completed immunization is due for referral, then, 44 out of 70 cases were not appropriately advised on immunization status and only 26 cases received appropriate advice as shown in Table 14 and Figure 15.

**Table 13: Immunization and Vitamin A screening**

		Cases %	Count
Health worker asks for child's immunization card	Yes	91.7%	189
	No	8.3%	17
	<b>Total</b>	<b>100.0%</b>	<b>206</b>
Does the child have an immunization card	Yes	55.4%	108
	No	44.6%	87
	<b>Total</b>	<b>100.0%</b>	<b>195</b>
Is the child referred for vaccination	Yes	13.5%	26
	No	86.5%	167
	<b>Total</b>	<b>100%</b>	<b>193</b>
When is the child referred for vaccination	Today	6.7%	13
	Not referred	22.8%	44
	Completed	63.7%	123
	Another day	6.7%	13
	<b>Total</b>	<b>100.0%</b>	<b>193</b>
Is the child due for Vitamin A	Yes	50.3%	98
	No	49.7%	97
	<b>Total</b>	<b>100.0%</b>	<b>195</b>
When is the child referred for Vitamin A	Today	37.8%	73
	Not referred	0%	0
	Up to date	50.3%	97
	Another day	11.9%	23
	<b>Total</b>	<b>100.0%</b>	<b>193</b>

**There was an improvement from the baseline in the proportion of cases of children that were asked for their immunization cards (73% to 92%) as shown in**

Figure 12. The proportion of cases of caretakers that were asked for their immunization was still below 10% despite the fact that this procedure was not performed at all half a decade ago. The proportion of children who had their vaccination cards were slightly above half (55%).



Figure 12: Cases asked for immunization card

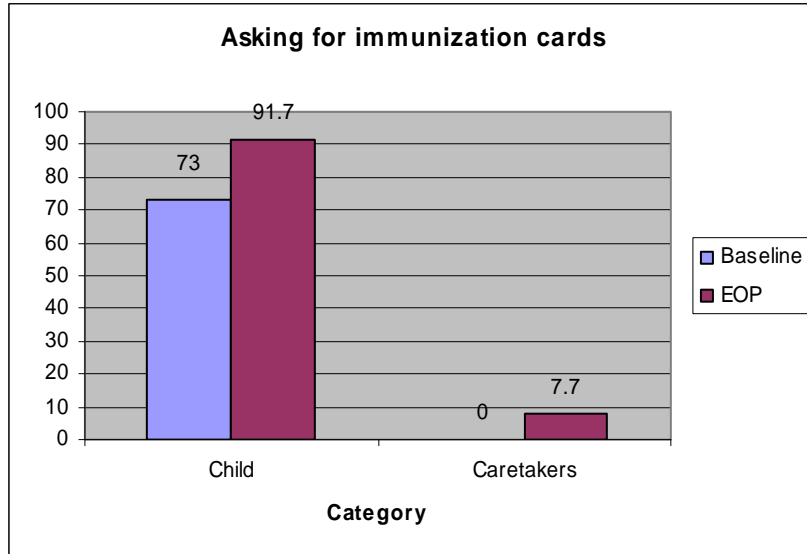


Figure 13: Children with vaccination

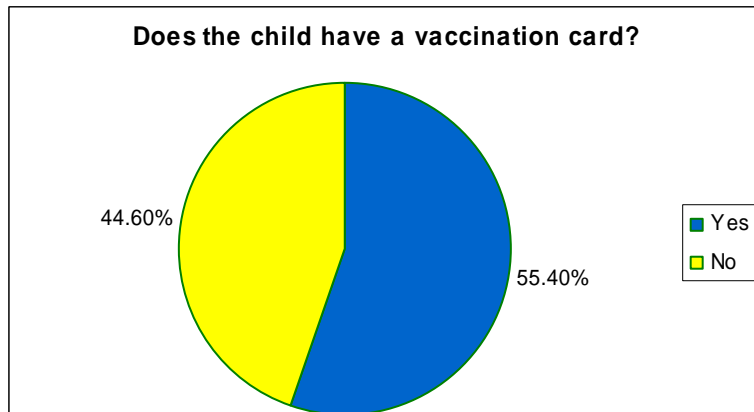
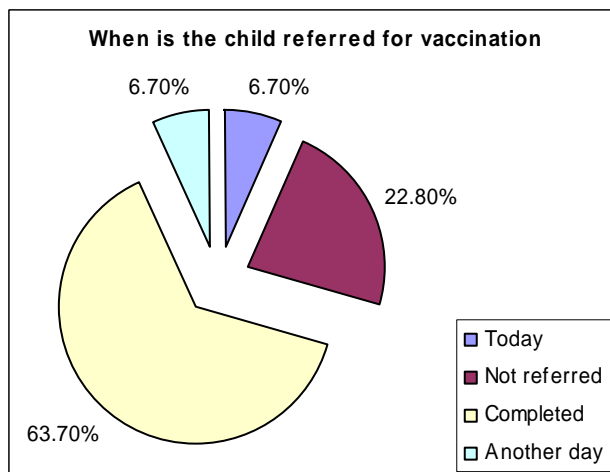


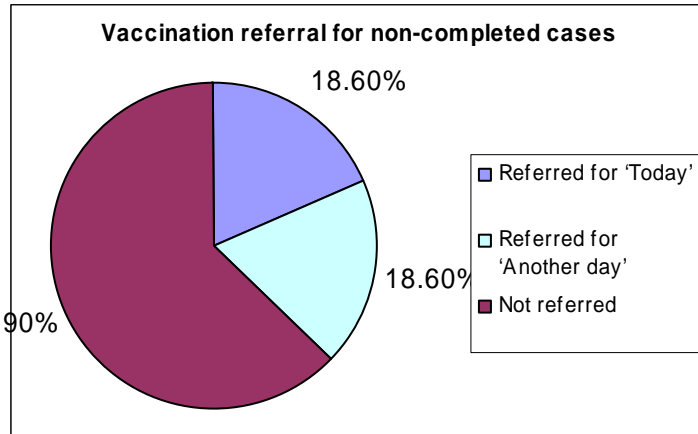
Figure 14: Vaccination referral



**Table 14: Immunization referral for non-completed cases**

	Cases %	Count	Cumulative %	Cumulative count
Referred for 'Today'	18.6%	13	18.6%	13
Referred for 'Another day'	18.6%	13	37.2%	26
Not referred	62.9%	44	100.0%	70
<b>Total</b>	<b>100%</b>	<b>70</b>		

**Figure 15: Vaccination referral for non-completed cases**



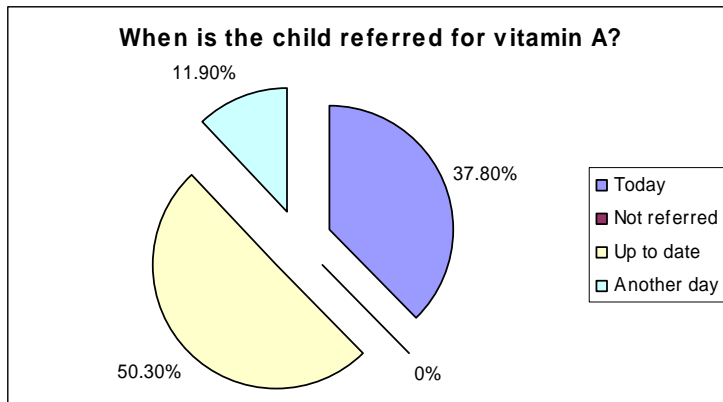
Of the 13 cases referred for immunization for that day during observation, 12 were encountered on exit and of the 12 only one was not immunized.

Table 15 shows the health worker's practice on contact with the caretaker as the secondary client. The assessment found that the probability of a health worker asking for the caretaker's TT immunization card was 7.7%. Three caretakers were referred for vaccination for that day and the same number for another day.

**A hundred and ninety five (195) cases were observed for vitamin A screening. About half of the cases were due for vitamin A (**

Figure 16). All cases due for vitamin A were referred; 37.8% for that day and 11.9% for another day.

**Figure 16: Child referral for Vitamin A**



**Table 15: Caretaker’s immunization screening**

		Cases %	Count
Does the health worker ask for the caretakers vaccination card	Yes	7.7%	15
	No	92.3%	181
	Total	100.0%	196
Does the caretaker have the vaccination card	Yes	7.8%	5
	No	92.2%	59
	Total	100.0%	64
When is caretaker referred for vaccination	Today	5.1%	3
	Not referred	89.8%	53
	Another day	5.1%	3
	Total	100.0%	59

**Intercommunication skills**

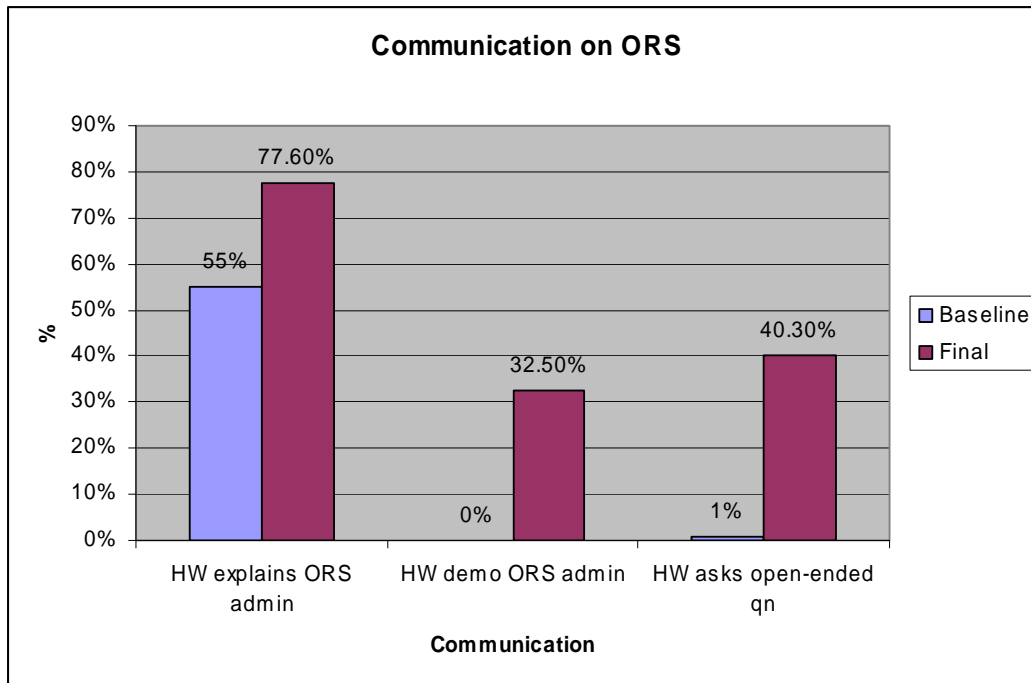
About 77.6% of cases were explained to on how to administer ORS but only 32.5% of the cases were demonstrated for (Table 16). To assess whether the caretaker has understood how to administer ORS, health workers asked an open-ended question 40.3% of the time.

Looking at the progress made in Figure 17, there has been a drastic change in communication on ORS. At the start of the project its only in 55% of the cases that the health worker explained on how to administer ORS, what’s more, virtually none of the health workers demonstrated how to administer ORS or allowed the caregiver to ask an open ended question to gauge his/her understanding. Presently, as described above, these tasks are happening.

**Table 16: Communication on medication /ORS**

		Column %	Count
HW explains how to administer medications / ORS	Yes	77.6%	59
	No	22.4%	17
	Total	100.0%	76
HW demonstrates how to administer medications / ORS	Yes	32.5%	25
	No	67.5%	52
	Total	100.0%	77
HW asks an open-ended question to understand comprehension of how to administer medication / ORS	Yes	40.3%	31
	No	59.7%	46
	Total	100.0%	77

**Figure 17: Communication on medication of ORS**



The assessment also observed communication of the health worker on follow-up. In **Error! Not a valid bookmark self-reference.**, about 71.4% of the cases were informed on when to return for follow-up. Accordingly, 41 out of 77 cases were explained to on the need to give more food and 31 out of 58 cases on the need to continue breastfeeding at home.

**Table 17: Communication on follow-up**

		Column %	Count
HW explains when to return for follow-up	Yes	71.4%	142
	No	28.6%	57
	Total	100.0%	199
HW explains the need to give more food	Yes	53.2%	41
	No	46.8%	36
	Total	100.0%	77
HW explains the need to continue breastfeeding at home	Yes	53.4%	31
	No	46.6%	27
	Total	100.0%	58

The details that the health workers gave to the caretakers on when to bring back the child were assessed as shown in Table 18 and

Figure 18. In most cases, the health workers advised the caretakers to bring the child back if s/he becomes sicker (71.8%). Improper drinking or feeding was not emphasized and it was in only 17% and 20% of the times respectively that it was explained. However nutrition advice was provided to most cases (61.5%). About 27% of the cases were advised to bring the child back if fever develops, 28% if child develops difficult breathing and 24% if develops blood in stool.

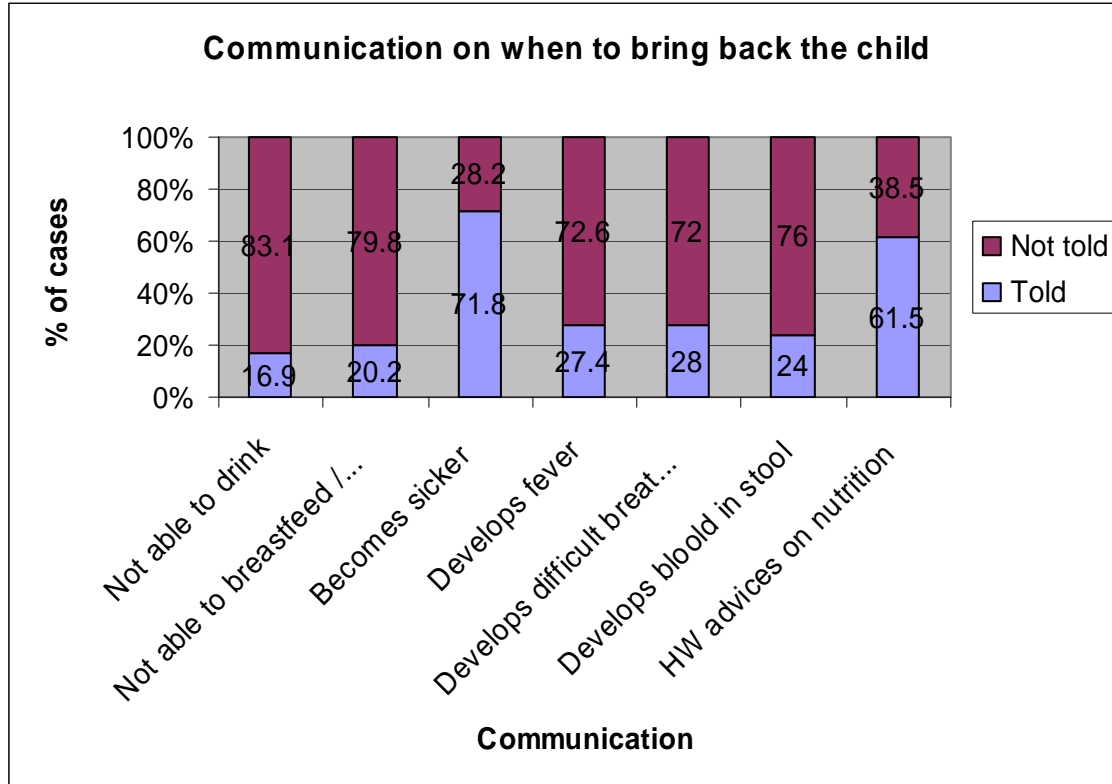
**Table 18: Communication on when to bring back the child**

		Column %	Count
When child not able to drink or drinking poorly	Yes	16.9%	31
	No	83.1%	152
	Total	100.0%	183
When child is not able to breastfeed / eat	Yes	20.2%	38
	No	79.8%	150
	Total	100.0%	188
When child becomes sicker	Yes	71.8%	145
	No	28.2%	57
	Total	100.0%	202
When child develops fever	Yes	27.4%	40
	No	72.6%	106
	Total	100.0%	146

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When child develops difficult breathing	Yes	28.0%	30
	No	72.0%	77
	Total	100.0%	107
When child develops blood in stool	Yes	24.0%	25
	No	76.0%	79
	Total	100.0%	104
HW gives advice on nutrition	Yes	61.5%	120
	No	38.5%	75
	Total	100.0%	195

Figure 18: Communication on when to bring back the child



**Validation**

The health worker classification of conditions and treatment was validated for 102 out of 207 cases. On classification, just about half of the health worker classification agreed with the validator's classification. The study encountered three severely ill children and of this, one was not correctly classified (Table 19).

Table 19 shows that cases administered with appropriate medication for the diagnosis were 53 out of 88. Validation of treatment revealed that 10 out of 41 diarrhea cases did not receive appropriate medication and similarly, 10 out of 23 cases of pneumonia. Malaria cases recorded a much higher proportion of cases (60 out of 70) that received appropriate medication.

About 63.4% of children were treated correctly. The proportion of pneumonia and malaria cases treated correctly was the same as cases that received appropriate medication for the same condition.. Out of the two children the health worker classified as severely ill, one was correctly referred. This means that two severely ill children were not correctly referred. i.e. the child who the health worker did not correctly classify as severely ill and the child classified as severely ill but not correctly referred.

**Table 19: Validation**

<b>Validation</b>	<b>Count of cases</b>	<b>Total</b>
Health Worker classification agrees with validator	48 (48.5%)	99
Severely ill children classified correctly	2	3
Medication appropriate for the diagnosis	53	88
Diarrhea case received appropriate medication	31	41
Pneumonia case received appropriate medication	13	23
Malaria case received appropriate medication	60 (85.7%)	70
Child treated correctly	64 (63.4%)	101
Severe classification correctly referred	1	2
Pneumonia case correctly treated	13	23
Malaria case correctly treated	60	71

***Exit interview***

After the child was treated, the caretaker was interviewed on her way home to assess what s/he is able to remember and also his/her knowledge. To begin with, the caretaker was asked to describe how to administer all the essential medications given at the health facility. About 52.8% (103/195) illustrated correctly how to give all the essential drugs they had.

Caretakers' knowledge of home case management was also assessed based on the advice they were given at the health facility (Table 20). About 80.5 % of the caretakers interviewed demonstrated knowledge of at least one aspect of home case management. The proportion dwindled by more than half for caretakers that reported knowledge of one more aspect of home case management to stand at 37.5%. About 19.5% of the caretakers did not demonstrate knowledge of any aspect of home case management.

**Table 20: Caretakers who know at least two aspects of home case management: n = 200**

	Percent	Count
Knows at least two aspects of home case management	37.5%	75
Knows at least one aspect of home case management	80.5%	161
Doesn't know any aspect of home case management	19.5%	39

The caretakers were asked how they would know if the child became worse at home and the results were as detailed in Table 21 and Figure 19. Fever featured as the most known sign (63%) whereas difficult breathing, convulsions, blood in stool and chest in-drawing, each recorded less than 10% recognition. Overall, the proportion of caretakers who knew at least two critical signs of a child becoming worse was 59% while 15% could not tell any of the critical signs.

**Table 21: Knowledge of caretakers on when child becomes worse: n = 200**

	Percent	Count
Child unable to drink or breastfeed	16.5%	33
Fever begins or doesn't go away	63.0%	126
Child has convulsions	7.0%	14
Child unable to eat or breastfeed	18.0%	36
Child has difficulty in breathing	8.0%	16
Diarrhea continues	26.0%	52
Blood in stool	3.5%	7
Child has chest in-drawing	3.5%	7
Vomiting begins or continues	16.5%	33
Knowledge of at least 2 signs of child getting worse at home	59%	118
Don't know	15.0%	30



**Figure 19: Caretakers' knowledge on when child becomes worse**

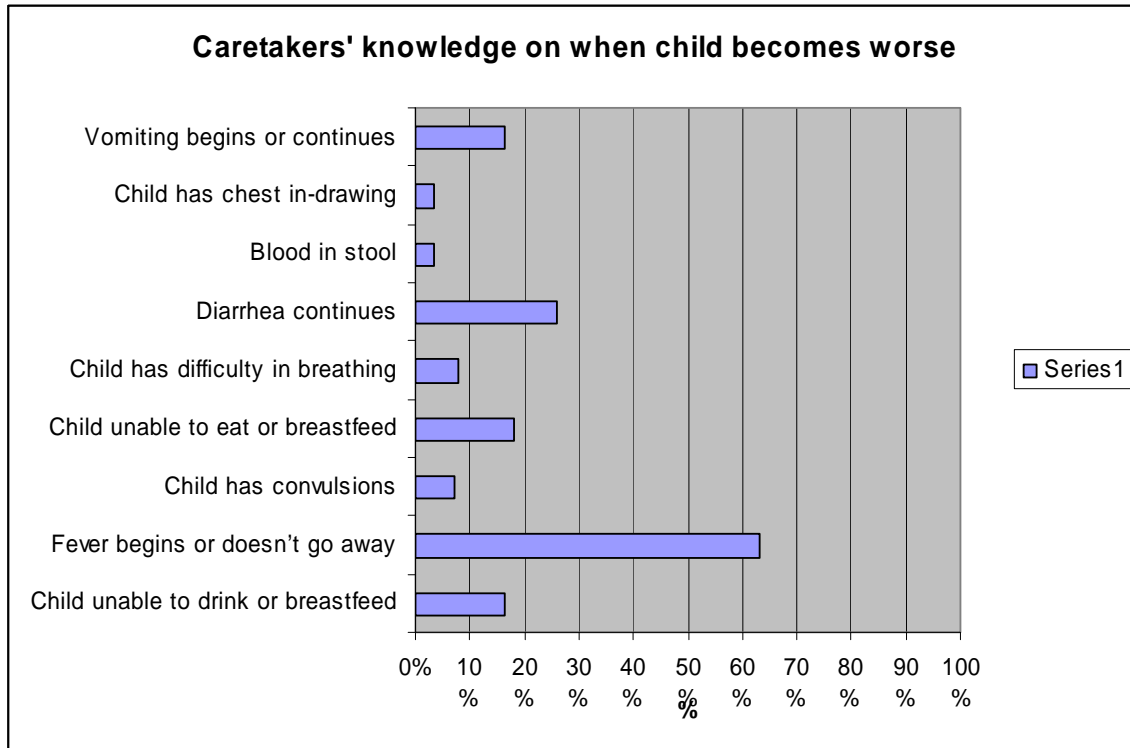
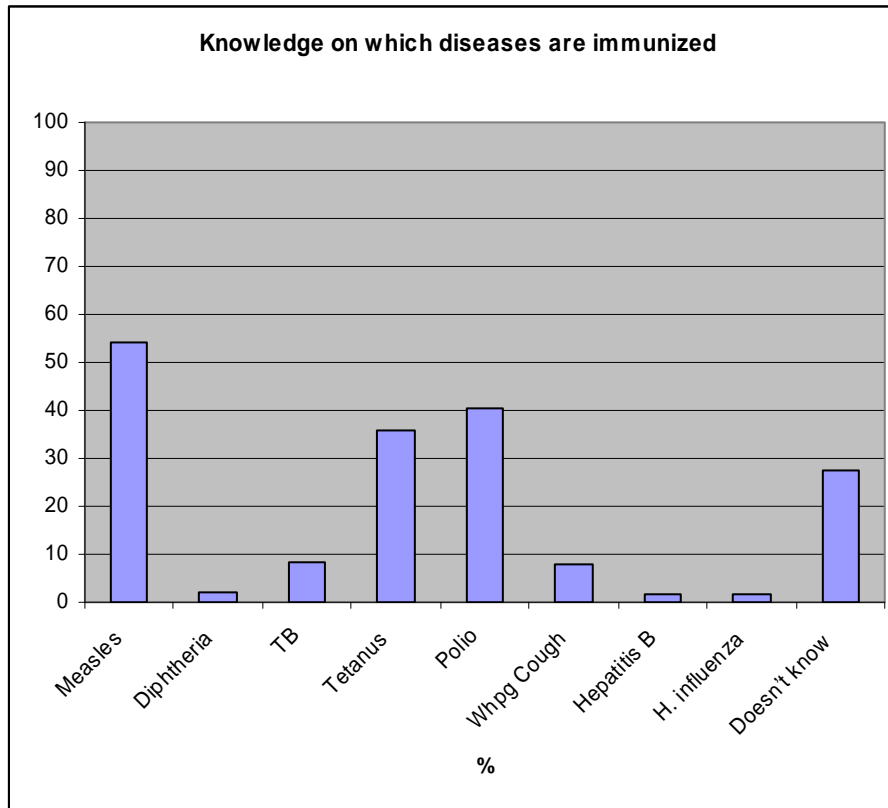


Table 22 and Figure 20 describe the caretakers' knowledge on diseases which are prevented by immunization. Most caretakers were familiar with measles more than any other disease and this recorded just over a half of all the caretakers interviewed. Diphtheria, hepatitis B and H. influenza were least known in this context and each recorded a proportion of about 2%. About 27.5% of the caretakers did not mention any of the listed diseases.

**Table 22: Knowledge on which diseases are immunized: n = 200**

	Percent	Count
Measles	54.0%	108
Diphtheria	2.0%	4
TB	8.5%	17
Tetanus	36.0%	72
Polio	40.5%	81
Whooping Cough	8.0%	16
Hepatitis B	1.5%	3
H. influenza	1.5%	3
Doesn't know	27.5%	55

**Figure 20: Knowledge on which diseases are immunized**



An assessment of caretakers' knowledge on immunization side effect found that 53.5% of the caretakers said of fever and only 6% thought that pain on injection site is a side effect.

**Table 23: Knowledge on immunization side effects: n = 200**

	Percent	Count
Fever	53.5%	107
Swelling	19.0%	38
Irritability	29.5%	59
Pain on injection site	6.0%	12
Other	5.0%	10

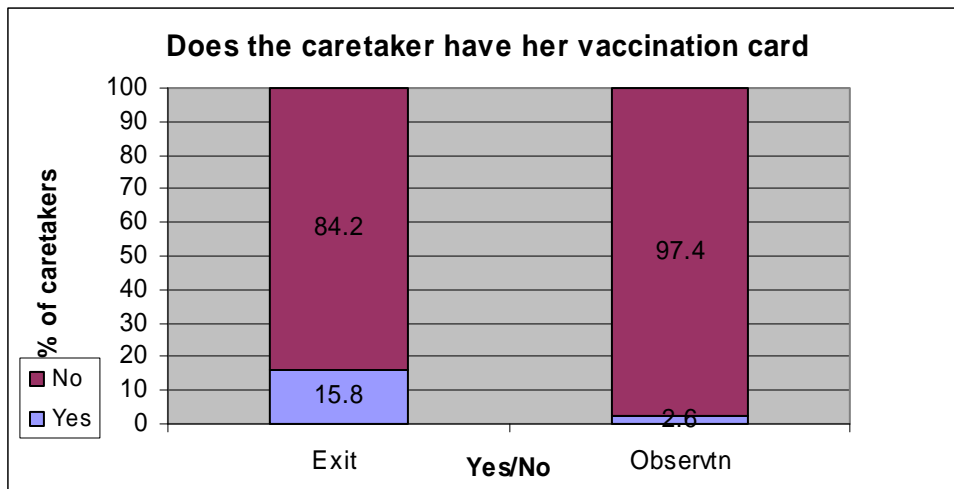
The number of children who were vaccinated during the day of the assessment was 13. The proportion of children who had their immunization cards and left the health facility being up to date was 98.1% (104/106) and the proportion that had completed immunization was 92.9% (79/85). This was also the proportion of children of age who had received measles immunization.

**Caretakers' immunization status**

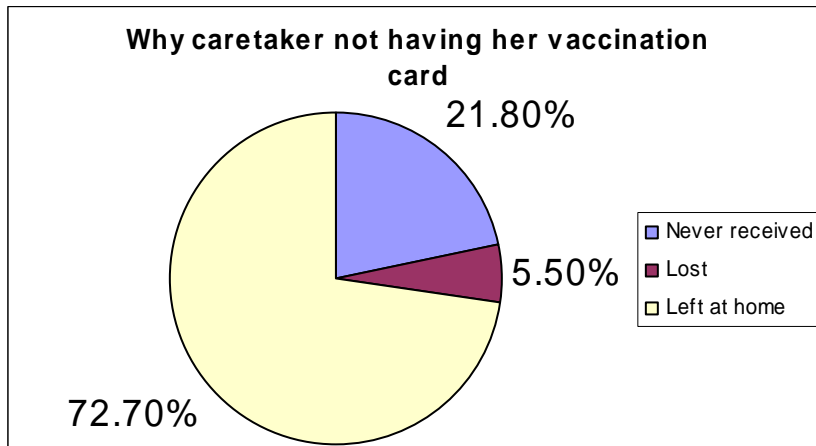
The exit interview found that 15.8% of the caretakers had carried their immunization cards. This is different from the number of caretakers found to be with cards in the observation assessment (2.6%) as seen in Figure 21. The observation assessment recorded only mothers who were asked for their cards. Where as the main reason for not having the card, as expected, is that it has been left at home, a considerable proportion (21.8%) reported never to have received. Only 5.5% reported to have lost their cards (Figure 22).

The number of cases that had received at least two TT immunizations was 19 out of 31. Eight (8) caretakers received a TT immunization that day of the survey. Table 24 shows that the proportion of caretakers who were confirmed to be up to date on TT immunization was 7.4%. About 22.2% of the caretakers who had not been confirmed as up to date were referred for another day. The rest (77.8%) were missed the advice on their TT status.

**Figure 21: Caretakers' immunization cards**



**Figure 22: Reasons why caretakers not having their cards**



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**Table 24: Caretakers' vaccination referral**

	Percent	n
Up to date	7.4%	175
Referred another day	22.2%	162
Not referred	77.8%	162

The assessment also checked on the welfare of the caretakers concerning any other condition that the health facility would resolve. Sixty of the caretakers required a service for themselves other than for the child. Fifty seven out of the sixty were prescribed for medicine and of these, 55 of them were able to get the kind of medicine prescribed. Out of the 55, only one got the medicine outside the health facility. Out of the four who were not able to get the medicines prescribed, three claimed that the reason they were unable to get the drugs was because they had no money. The other one claimed that the drugs were not available.

**Table 25: Caretakers' medication**

		Percent	Count
Caretaker prescribed for medicine	Yes	95.0%	57
	No	5.0%	3
	<b>Total</b>	<b>100.0%</b>	<b>60</b>
Were you able to get the medicine	Yes	93.2%	55
	No	6.8%	4
	<b>Total</b>	<b>100.0%</b>	<b>59</b>
Where did you get the medicine?	This health facility	98.2%	54
	Drug vendor	1.8%	1
	<b>Total</b>	<b>100.0%</b>	<b>55</b>
Why did you not get the medicine	No money	75.0%	3
	No drugs available	25.0%	1
	<b>Total</b>	<b>100.0%</b>	<b>4</b>

*Health Facility Committee Assessment*

Table 26: Profile

Facility Name	No. of members	No. of Villages in the catchments	Population catchments	Registered with Dept. of Social services	Registration Renewed	All villages represented	No. of Women	No. of Men
PINGILIKANI	11	9	11231	Yes	No	Yes	6	5
MATSANGONI	17	18	16337	Yes	Yes	No	4	13
DZIKUNZE	15	62	18047	Yes	No	No	5	10
CHASIMBA	15	33	25870	Yes	Yes	No	4	11
MRYACHAKWE	15	17	7040	Yes	No	No	5	10
MADAMANI	12	11	11200	Yes	Yes	Yes	4	8
NGERENYA	16	15	18511	Yes	Yes	Yes	6	10
KIZINGO	15	13	12987	Yes	No	No	5	10
VITENGENI	9	12	3340	Yes	No	No	5	4
ROKA MAWENI	9	21	16922	No		No	5	5
JARIBUNI	9	31	17480	Yes	No	Yes	5	4
PALAKUMI	15	15	10346	Yes	Yes	Yes	5	10
GANZE	16	31	14571	Yes	Yes	Yes	10	6
DIDA	11	66	23308	Yes	No	Yes	4	7
<b>Total</b>							<b>73</b>	<b>113</b>

The number of villages in the facilities' catchment area ranged between **9** and **66** in all the facilities. Vitengeni had the lowest population catchment of **3,340** whereas Chasimba had the highest population catchment (**25,870**). Roka Maweni was the only committee that had not been registered with the department of Social Services at the time the study was conducted. Out of the **13** registered facility committees, **6** had renewed their registration. All villages were represented in half of the facility health committees.

The total number of committee members was **186** where **113** were men and **73** were women. All committees except Matsangoni and Chasimba had at least a third of the members being women. The number of women exceeded that of men in **4** out of the 14 HFCs i.e. Ganze, Jaribuni, Vitengeni, and Pingilikani while Roka Maweni had equal men and women representatives.

**DHCs Activities****Table 27: DHCs activities**

Facility Name	Frequency of meetings	Minutes available	Minutes copied to the DHMT	Ever written a proposal	Amount of funding received	Support the committee gives to the health facility
PINGILIKANI	Monthly	Yes	No	Yes	33000	Support outreaches, Health Education in the community, sensitize community on the services offered at the facility and hire casuals to maintain cleanness.
MATSANGONI	Monthly	Yes	Yes	Yes	700000	Supported H/Facility with casuals / support staff, we assist in tracing defaulters for e.g. immunizations, tuberculosis, we give health talks in sensitization of community for health, we have an incoming generating activity to support facility link between community and health service facility
DZIKUNZE	Monthly	Yes	99 (Missing)	No		1) Refer Patients to H/Facility 2) Marketing of Facilities 3) Health Educate the Community 4) Problem solving
CHONYI	Monthly	Yes	Yes	No		Support management of the facility EG maintenance of buildings, links health services with community in relation to for example immunization, delivery attendance for antenatal care and overall facility utilization
MRYACHAKWE	Monthly	Yes	Yes	No		Mobilize community to use Health services - Help during outreaches in weighing of children
MADAMANI	Monthly	Yes	No	No		Pay wages, Buy of cleaning materials, Governance, outreaches, resource mobilization
NGERENYA	Monthly	Yes	Yes	Yes	600000	Dissemination of health information to villages Solicit funds for development
KIZINGO	Monthly	Yes	Yes	No		Problem solving - Hiring of support staff - Buying of Drugs
VITENGENI	Monthly	Yes	Yes	No		1) Sensitization of community to utilize facility 2) Sensitization of women (pregnant) to deliver in facility 3) Sensitization of community for VCT services 4) Sensitization of immunization (FP)

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ROKA MAWENI	Monthly	Yes	Yes	No		1) Mobilize community during outreaches 2) Solicit for funds from Donors
JARIBUNI	Monthly	Yes	Yes	Yes	52600	Advise on matters pertaining H Facility development - Assist in planning - Solicit for funds from donors for developments
PALAKUMI	Monthly	Yes	Yes	No		1) Link between the / our community and facility 2) Sensitize / Mobilize community in appreciating the services like immunization treatment care for pregnant mothers, deliveries Family Planning provided at the facility we volunteer in keeping facility clean
GANZE	Monthly	Yes	No	Yes		Referral / linkage, takes information to and from the facility, governance outreaches explain ministerial policies resources mobilization minor repairs employee casuals, income generating activities to increase revenue to the facility conflict resolution
DIDA	Monthly	Yes	No	Yes	40000	Collect report from the CHW to the facility mobilization for outreaches and also attend / take part in the outreach. plan for growth monitoring in the nursery schools mobilization sensitization the community gives Health messages to the community
Total		16				

In all facility committees, meetings were held monthly and minutes of the proceedings filed. These minutes were copied to the DHMT in 9 facilities. Proposal writing had taken place in 6 committees 5 of which had received funding. Matsangoni committee received the highest amount (Kshs 700,000) while Pingilikani committee received the lowest (Kshs 33,000).

## Active Representation in the DHCs

Table 28: Representation

Facility Name	Number of members	Villages	Population	How was the committee identified
PINGILIKANI	11	9	11231	Chief plus the area PHO organised for villages meetings where by every village selected a 10 members village health committed. After the VHC the DHC was identified
MATSANGONI	17	18	16337	Community were sensitized through Baraza, Village Health Committee were selected by the individual communities the chairpersons of VHCs represent Villages specific at DHC
DZIKUNZE	15	62	18047	Selected through VHCs who were letter transferred and elected in a chief's Baraza.
CHONYI	15	33	25870	First there was community sensitization though Barazas, then communities in their respective villages selected their Village health committee members whose chairperson represented specific villages at HFC
MRYACHAKWE	15	17	7040	Selected from grassroots through members of the VHC and CHWs
MADAMANI	12	11	11200	Chief called Barazas and the area PHO was also there, Name of Village health committees were selected then all the VHCs selected chairman to bring to the facility to be the DHC members
NGERENYA		15	18511	Members selected though VHC each village was represented by one member. should be able to read and write
KIZINGO	15	13	12987	Selected though VHC in a chief Baraza
VITENGENI	9	12	3340	There was first sensitization of communities though Barazas, VHC members were selected in every village. The chairperson of each VHC represented the individual villages at HF committee
ROKA MAWENI	9	21	16922	Selected in an open Chief Baraza in the presence of the DPHN and the facility incharge
JARIBUNI	0	31	17480	Information given to Chiefs / Subchiefs to have a representatives from each sublocation. representatives to be male and females at least has attained form 4
PALAKUMI	15	15	10346	The Community in the villages were sensitized then they selected VHC members in their respective villages. in each VHC the chairperson represents his/her villages at DHC.
GANZE	16	31	14571	Chief organised several Barazas for the village Health committees, Names were proposed then voted and the majority votes were selected. All the VHCs selected chairman Secretary and Treasurer, so all the Chairman formed the DHC. Some villages were merged to bring one person



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DIDA	11	66	23308	Through a chiefs Baraza whereby the area PHO was involved. One name proposed then through voting by show of hands. The person with more votes were selected as VHC then VHC chose C/man to represent them in the DHC
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Selection of DHC members involved the community, chiefs/sub-chiefs and MoH staff whereby community meetings were held at the village level. Each village identified village health committee members who elected a chairman among themselves to represent the village in the facility committee. In areas with large number of villages such as Dida and Dzikunze, villages were merged together and a representative elected following the above criteria. The community was encouraged to identify a person who could read and write.

## Funds Utilization

**Table 29: Funds utilization**

Facility Name	Has Bank A/c	Money in the Bank	Statement Available	The 10/20 fund utilization	Danida fund utilization
PINGILIKANI	Yes	31,000	Yes	Staff Motivation and transport	Committee lunches wages, stationary communication, outreached lunches for actors transport
MATSANGONI	Yes	80,810	Yes	incentives specifically lunch for committee members - clearance / improving of Facility - Transport for Health workers - support patients Transport on referral - Minor repairs and maintenance	Wages for casuals - Water bill payments - DHC allowances during meeting - Support lunch during outreach
DZIKUNZE	Yes	50,000	Yes	Buy Water Pay Salaries	Salaries
CHASIMBA	Yes		Yes	Transport for I/C to send report to Kilifi or attend meeting and also to the treasurer chairman on bank transaction -buy drugs -paying casuals -stationery -air time -incentives for committee	Stationery Air time paying water bill paying casual Transport support
MRYACHAKW E	Yes	3,932	Yes	Transport to KLF / Outreaches, Cleaning	Salaries, Sitting allowance Transport

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MADAMANI	No			Paying wages, water bills, buying of Cleaning Materials, Stationary, Communication and Travel	N/A
NGERENYA	Yes	4,620	99 (Missing)	purchase of utilities	Payment of casuals
KIZINGO	Yes	40,123	Yes	Transport Hire casuals buy Drugs	salaries, meeting expenses ,maintenance and repair
VITENGENI	Yes	24.3	Yes	Buying soap and cleaning material like brooms - Airtime for facility call ambulance - Sitting allowance for facility committee members - Transport for H/Workers to Kilifi District headquarters	Payment of staff (Non Government) Salaries / Wages - lunch and Transport for staff during mobile outreach - Maintenance of Facility to include Minor repair of equipment
ROKA MAWENI	No		99 (Missing)	1) Buy water 2) Pay wages for support staff 3) Repair and maintenance	None
JARIBUNI	Yes	12,000	Yes	Outreaches Purchase of stationery fare for H/W	Hiring Casuals
PALAKUMI	Yes	28	Yes	Transport for HC sending Reports - Payments of Casuals that has not been enough - Cleansing material purchases - stationary	None
GANZE	Yes		99 (Missing)	Pay wages , staff motivation (tea) minor renovation uniform for casuals.	Travels communication, wages, electricity and water bills DHC motivation (Lunch)

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DIDA	Yes	9,690	Yes	Cleansing materials, minor repairs, Transport procurement of some supplies e.g. chlorine, Oxytocin etc	Pay Casual travel DHC lunches during meeting water bills communication(Airtime), Outreaches stationary
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Madamani and Roka Maweni committees did not have bank accounts at the time of the assessment. Bank statements were not available for Ganze and Ngerenya committees despite the facilities having bank accounts.

Both 10/20 and Danida funds was used to meet various needs which included paying wages for casual staff, facility repair and maintenance, purchase of cleaning materials and stationery, transport and motivation of facility committee members. Roka Maweni, Madamani and Palakumi facility committees were yet to receive funds from Danida.

### Trainings for the DHCs

Table 30: Trainings

Facility Name	Training	Type of training ever received	Last time trained	Type of training in the last time trained
PINGILIKANI	Yes	Managing a health facility	5/2/2008	Financial management health information system governance
MATSANGONI	Yes	Management of health facility	2/1/2007	Management of health Facility
DZIKUNZE	Yes	Roles of Responsibility	2006	Roles and Responsibility of DHC
CHONYI	Yes	Health facility management Roles of the Facility committee	2008	The above health facility management training
MRYACHAKWE	Yes	Financial management Public health Sanitation	4/1/2009	Health and Sanitation
MADAMANI	Yes	Managing of Dispensary	5/1/2008	Governance, Financial management, HMIS, how to mobilize for resources
NGERENYA	Yes	Definition of Roles and responsibilities of committee members	2/1/2008	Roles of DHC
KIZINGO	Yes	KIDCARE Finance Management Health information	4 weeks ago	Communication

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VITENGENI	No		2006	Management of health facility and roles of health facility committee
ROKA MAWENI	Yes	1) Health Facility 2) Financial Management 3) Proposal writing	2 weeks ago	Proposal writing
JARIBUNI	No			
PALAKUMI	Yes	Roles of DHC in Facility Management		Roles of DHC in Facility Management
GANZE	Yes	Managing a health facility		Governance, HMIS Financial management making an action plan
DIDA	Yes	Managing a health facility	4/1/2008	Collection of information (HMIS) leadership, Financial management, planning follow-up / monitoring

Apart from Vitengeni and Jaribuni all other committees had received training in the aspects of facility management, financial management, health information management and proposal writing.

### Supervision of the DHCs

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**Table 31: Supervision**

PINGILIKANI	DHMT, PHO-Division	once in every 4 months	2 hours	Governance, motivate the committee to be more vigilant in working for the community financial guidance
MATSANGONI	Area PHO / Plan Int. Rep.	Monthly	3 Hours	Health Reports - Encouraging us on what we do though on voluntarism - Discuss Health Report from every village. if Reports are not being accessed or incase of Health Problem we Discuss and agree on intervention or way forward
DZIKUNZE	Doesn't Know	N/A	N/A	N/A
CHASIMBA	District H. Management team - Kilifi	After Every 6 month	Around 3 Hours	Financial Management Display / Reports chalk board update Problems that is affecting the facility e.g. low utilization uptake of indicators e.g. immunization covered  Antenatal care attendance, family planning facility delivered
MRYACHAKWE	FMN & DPHN	2 - 3 months	2 - 3 Hours	Issues of health and Immunization in the villages Communicable diseases
MADAMANI	DHM and FMN	After	2 Hours	Governance, HMSI, Finance Management
NGERENYA	Aga Khan Foundation DHM	Quarterly	2 hrs	Financial Issues, Service delivery
KIZINGO	FMN	Quarterly	3 - 4 hours	Dispensary Development Health in the Community
VITENGENI	Facility in charge	N/A	N/A	N/A
ROKA MAWENI	PHO	Quarterly	2 hours	Financial Management Proposal Writing
JARIBUNI	Plan Kenya, MOH	Quarterly	2 hrs	Financial services delivery, FIF
PALAKUMI	Health workers from D. Hospital DHMT	Every 2 months	2 hours	Reminded us on our roles Sensitized subcommittees on their Roles e.g. Finances Sub-Committee Stressed on the importance of Good relationship

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				Between facility and community
GANZE	DHMT - FMN and Area PHO	Once after 4 months	2 hours	Financial Managements
DIDA	Area PHO and DHMT	Every month	More than 3 Hours	Clarifies issues on how to work e.g. how to work with CHWs especially the ones who were not bringing report.....

Among the 14 HFCs, 8 reported to have received supervision on a quarterly basis from the DHMT, Plan Kenya, PHOs and Aga Khan. The supervision sessions lasted for at least 2 hours in all committees and addressed issues such as financial management, information management, governance, role of sub committees and uptake of health services by the community.

### *Equipment and Supplies*

**Table 32: Equipment and Supplies**

Facility Name	A functioning Ort Corner present	Penicillin Available	Ampi/amoxillin available	Cotrimoxazole available
St. Teresa	No	Yes	Yes	Yes
Jaribuni	Yes	No	Yes	Yes
Kizingo	No	Yes	Yes	Yes
Palakumi	Yes	No	Yes	Yes
Ganze	Yes	No	Yes	Yes
Ngerenya	Yes	No	Yes	Yes
KDH	Yes	No	Yes	Yes
Madamani	Yes	Yes	Yes	Yes
Matsangoni	Yes	No	Yes	Yes
Chasimba	Yes	Yes	Yes	Yes
Dzikunze	Yes	Yes	Yes	Yes
Vitengeni	Yes	No	Yes	Yes
Mryachakwe	Yes	Yes	Yes	Yes
Pingilikani	Yes	No	Yes	Yes
Roka Maweni	Yes	Yes	Yes	Yes
Dida	Yes	Yes	Yes	Yes

Most of the facilities (except St. Teresa and Kizingo) had designated corners for Oral Rehydration Therapy. At the time of assessment Cotrimazole and Ampicillin /Amoxicillin were available in all facilities while Penicillin was available in half of the facilities only.

There was no stock-out of essential drugs, ORS and syringes/needles in any of the 16 health facilities in the last 30 days preceding the assessment.

**Table 33: Vaccine stock-outs**

Facility Name	Items on Stock-out in the last 30 days
St. Teresa	
Jaribuni	OPV vaccine
Kizingo	
Palakumi	OPV vaccine, TT cards
Ganze	
Ngerenya	OPV vaccine
KDH	OPV vaccine
Madamani	
Matsangoni	OPV vaccine
Chasimba	OPV vaccine
Dzikunze	
Vitengeni	
Mryachakwe	
Pingilikani	
Roka Maweni	
Dida	

In the last 30 days OPV was reported to have been out of stock in 6 facilities. Palakumi dispensary also reported a stock out of TT cards within the same period.

### ***Health Worker Assessment***

**Table 34: Health Worker Assessment**



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Facility Name	Has regular supervisor	Have scheduled supervisory visits	No. of supervisor visits in last 6 months	No. of supervisor visits in last 12 months
Kizingo	No	No	2	5
Jaribuni	Yes	Yes	6	12
Ngerenya	No	No	0	1
KDH	Yes	No	Supervisor works here and sees work daily	
Muryachake	Yes	No	2	3
Madamani	Yes	No	3	7
Dzikunze	Yes	No	9	19
Matsangoni	Yes	No	4	8
Chasimba	Yes	No	4	8
Pingilikani	Yes	No	6	21
Vitengeni	Yes	Yes	2	
Roka Maweni	Yes	Yes	1	5
St. Teresa	Yes	Yes	1	3
Dida	Yes	No	2	5
Palakumi	Yes	Yes	1	0
Ganze	Yes	No	19	21

All the H/Workers assessed had a regular supervisor apart from those in Kizingo and Ngerenya dispensaries. Supervisory visits schedules were available for 5 health workers among the 16 assessed. On average each health worker assessed had received 4 supervisory visits in the last six months. (This excludes KDH)

### Supervisors activities to the health worker

Table 35: Supervisor's activities

Facility Name	Delivered supplies	Observed immunization technique	Observed management of sick children	Reviewed reports prepared by health worker	Updated health worker on current information	Discussed problems with supplies and equipment	Others
Kizingo	Yes	Yes	No	No	Yes	No	
Jaribuni	Yes	Yes	No	Yes	Yes	Yes	

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Ngerenya	Yes	No	No	No	No	No	
KDH	No	No	No	No	Yes	Yes	
Mryachakwe	Yes	Yes	Yes	Yes	Yes	Yes	
Madamani	Yes	No	No	No	No	No	Health Service delivery, Financial Supervisor
Dzikunze	Yes	Yes	Yes	Yes	No	No	Assessed Accounts Records
Matsangoni	Yes	No	No	No	No	No	Observed how the (CCC) Comprehensive Care Center. was doing
Chasimba	Yes	No	No	Yes	No	Yes	Finance
Pingilikani	No	No	No	No	No	No	To run TB Clinic
Vitengeni	Yes	Yes	Yes	Yes	Yes	No	
Roka Maweni	Yes	Yes	No	Yes	Yes	No	
St. Teresa	No	No	No	No	No	Yes	Advise on store arrangement
Dida	Yes	No	No	No	Yes	Yes	Discussed health worker on HMS Financial management
Palakumi	Yes	No	No	No	No	No	
Ganze	No	No	No	No	Yes	Yes	

**Feedback from supervisor****Table 36: Feedback from supervisor**

Facility Name	Receive feedback	Mode of feedback communication		
		Supervisory register	Written report	Oral report
Kizingo	No	No	No	No
Jaribuni		No	No	Yes
Ngerenya	Yes	No	No	Yes
KDH		No	No	Yes
Mryachakwe	Yes	Yes	No	Yes
Madamani	Yes	Yes	No	No
Dzikunze	Yes	No	No	Yes
Matsangoni	Yes	No	Yes	Yes
Chasimba	No	No	No	No
Pingilikani	Yes	No	No	Yes
Vitengeni	Yes	No	Yes	Yes
Roka Maweni	Yes	Yes	No	Yes
St. Teresa	Yes	No	No	Yes
Dida	Yes	No	Yes	No
Palakumi	No	No	No	No
Ganze	Yes	No	No	Yes

H/workers in 3 out of 14 facilities (2 didn't respond) received feedback after supervision. Oral reports were the most common modes of feedback communication, and were accompanied by either use of a written report or a supervisory register in some instances.

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**Challenges**

**Table 37: Challenges**

Facility Name	Lack of training	Lack of feedback	Caretakers not bringing children to clinic	Inadequate transport	Staff shortages	Lack of motivation	Lack of supplies and / or stock	Poor working condition	Lack of supervision	Other (Specify)	Have you discussed this with your supervisor
Kizingo	No	No	No	Yes	No	No	Yes	No	No	No clean water	Yes
Jaribuni	Yes	No	No	Yes	Yes	No	No	No	No		Yes
Ngerenya	No	No	No	No	Yes	Yes	Yes	No	Yes		Yes
KDH	Yes	No	No	No	Yes	Yes	Yes	No	No		Yes
Mryachakwe	No	No	Yes	Yes	Yes	No	Yes	No	No	Work long hours as client came late due to distance	Yes
Madamani	No	No	No	Yes	No	No	No	No	No	inadequate funds to enable the facility run her activities	Yes
Dz kunze	No	No	No	No	Yes	No	Yes	No	No	Water Shortage	Yes
Matsangoni	No	No	No	No	Yes	No	Yes	No	No		Yes
Chasimba	No	No	No	No	Yes	No	Yes	No	No		Yes
Pingilikani	No	No	No	No	Yes	No	No	No	No		Yes
Vitengeni	No	No	No	No	Yes	Yes	Yes	No	No		Yes
Roka Maweni	No	No	Yes	No	Yes	No	No	Yes	No	Chlorine sock-outs	Yes
St. Teresa	No	No	Yes	Yes	No	No	No	No	No		Yes
Dida	No	No	No	Yes	Yes	No	Yes	No	No		Yes
Palakumi	No	No	No	No	Yes	No	No	No	No	Lack of Finance to Run Facility	Yes
Ganze	Yes	No	No	No	Yes	No	Yes	No	No		Yes



## Annex 7: CHW Matrix

**KIDCARE Child Survival Project: CHW training matrix (2005 – 2009)**

<b>Project Area (name of district or community)</b>	<b>Type of CHW</b>	<b>Official government CHW or Grantee developed cadre</b>	<b>Paid or Volunteer</b>	<b>Number Trained over life of project</b>	<b>Focus of Training</b>
Kilifi District	Community Health Workers	Grantee-developed cadre	Volunteer	1555	<p><b><u>Community-Integrated Management of Childhood Illness</u></b></p> <ul style="list-style-type: none"> <li>- Focused antenatal care, importance of attending ANC and skilled delivery</li> <li>- Immunization and growth monitoring</li> <li>- Prevention of malaria, diarrhea and HIV</li> <li>- Health Information management</li> <li>- Danger signs in a sick child</li> <li>- Key family health practices (immunization, exclusive breastfeeding, continued feeding during illness, early care-seeking for sick child)</li> <li>- Use of ITNs for children under five and pregnant women</li> <li>- Birth registration</li> </ul>
Kilifi District	Village Health Committee members	Grantee-developed cadre	Volunteer	1844	<p><b><u>Primary Health Care</u></b></p> <ul style="list-style-type: none"> <li>- Focused antenatal care, importance of attending ANC and skilled delivery</li> <li>- Immunization and growth monitoring</li> <li>- Prevention of malaria, diarrhea and HIV</li> <li>- Health Information management</li> </ul>

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Project Area (name of district or community)	Type of CHW	Official government CHW or Grantee developed cadre	Paid or Volunteer	Number Trained over life of project	Focus of Training
Kilifi District	Community Health Workers	Grantee-developed cadre	Volunteer	75	<p><u>Positive Deviance/Hearth</u></p> <ul style="list-style-type: none"> <li>- Growth monitoring for identifying malnutrition</li> <li>- Rapid Rural Appraisal (seasonal calendar, wealth ranking, market survey)</li> <li>- Positive deviance inquiry process (uncommon successful behavior caregivers practice that are accessible to all)</li> <li>- Identifying children for PD/Hearth</li> <li>- Conducting hearth sessions</li> <li>- Developing graduation criteria</li> <li>- Conducting home visits</li> <li>- Establishing kitchen gardens</li> </ul>
Kilifi District	Dispensary Health Committee	Grantee-developed cadre	Volunteer	211	<ul style="list-style-type: none"> <li>- Governance</li> <li>- Financial management</li> <li>- Use of health information for planning and implementation</li> </ul>
Kilifi District	Dispensary Health Committee	Grantee-developed cadre	Volunteer	8	<ul style="list-style-type: none"> <li>- Training of facilitators (TOFs)</li> <li>- Proposal writing for resource mobilization</li> </ul>
Kilifi District	Health Workers	Official government	Paid	48	<p><u>Integrated Management of Childhood Illness</u></p> <ul style="list-style-type: none"> <li>- Skills on identifying, assessing and classifying sick children for management according to IMCI guidelines</li> <li>- Counseling caregivers of sick children, feeding recommendations, home care and when to return back to the health facility</li> </ul>

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<b>Project Area (name of district or community)</b>	<b>Type of CHW</b>	<b>Official government CHW or Grantee developed cadre</b>	<b>Paid or Volunteer</b>	<b>Number Trained over life of project</b>	<b>Focus of Training</b>
Kilifi District	Health Workers	Official government	Paid	22	<p><u>IMCI facilitator</u></p> <ul style="list-style-type: none"> <li>- Review of IMCI modules</li> <li>- Demonstrations</li> <li>- Use of videos</li> <li>- Use of photo booklets and role plays</li> </ul>
Kilifi District	Health Workers	Official government	Paid	149	<p><u>Expanded Program of Immunization (EPI) updates</u></p> <ul style="list-style-type: none"> <li>- Vaccine management</li> <li>- Cold chain maintenance</li> <li>- EPI targeted diseases</li> <li>- Missed opportunities defaulter tracing</li> <li>- Injection safety</li> <li>- Disease surveillance</li> </ul>
Kilifi District	Health Workers	Official government	Paid	53	<p><u>Provider Initiated Testing and Counseling for HIV</u></p> <ul style="list-style-type: none"> <li>- Overview of HIV/AIDS epidemiology</li> <li>- ARVs and opportunistic infections</li> <li>- Overview of HIV/AIDS prevention</li> <li>- Counseling skills and responsibility</li> <li>- Initiating offer of Testing and Counseling</li> <li>- HIV testing protocols and types of testing</li> <li>- Comprehensive care of the infected</li> </ul>
Kilifi District	Health Workers	Official government	Paid	69	<p><u>Lots Quality Assurance Sampling (LQAS)</u></p> <ul style="list-style-type: none"> <li>- History and concept of LQAS</li> <li>- Comparison of LQAS and other approaches</li> <li>- Application of LQAS</li> <li>- Sampling techniques</li> <li>- Household identification for sampled lots</li> <li>- Interviewing skills</li> </ul>



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Project Area (name of district or community)	Type of CHW	Official government CHW or Grantee developed cadre	Paid or Volunteer	Number Trained over life of project	Focus of Training
					<ul style="list-style-type: none"> <li>- Data tabulation</li> <li>- Basic data analysis</li> </ul>
Kilifi District	Health Workers	Official government	Paid	16	<p style="text-align: center;"><u>Positive Deviance Hearth</u></p> <ul style="list-style-type: none"> <li>- Growth monitoring for identifying malnutrition</li> <li>- Rapid Rural Appraisal (seasonal calendar, wealth ranking, market survey)</li> <li>- Positive deviance inquiry process (uncommon successful behavior caregivers practice that are accessible to all)</li> <li>- Identifying children for PD/Hearth</li> <li>- Conducting hearth sessions</li> <li>- Developing graduation criteria</li> <li>- Conducting home visits</li> <li>- Establishing kitchen gardens</li> </ul>
Kilifi District	Health Workers	Official government	Paid	19	<ul style="list-style-type: none"> <li>- Governance</li> <li>- Financial management</li> <li>- Use of health information for planning and implementation</li> <li>- Proposal writing for resource mobilization</li> </ul>
Kilifi District	Primary School Pupils		Volunteers	1327	<p style="text-align: center;"><u>Child to Child clubs</u></p> <ul style="list-style-type: none"> <li>- Childhood immunization, malaria prevention, diarrhea prevention, personal hygiene, child rights, nutrition and importance of weighing babies,</li> <li>- Life skills for positive behavior to deal with challenges of life at school and at home</li> </ul>

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Project Area (name of district or community)	Type of CHW	Official government CHW or Grantee developed cadre	Paid or Volunteer	Number Trained over life of project	Focus of Training
					<ul style="list-style-type: none"> <li>- HIV/AIDS prevention</li> </ul>
Kilifi District	Primary School Teachers	Official government	Paid	62	<ul style="list-style-type: none"> <li>- <u>Patronizing Child to Child clubs</u></li> <li>- Childhood immunization, malaria prevention, diarrhea prevention, personal hygiene, child rights, nutrition and importance of weighing babies,</li> <li>- Life skills for positive behavior to deal with challenges of life at school and at home</li> <li>- HIV/AIDS prevention</li> </ul>

**Annex 8: List of Evaluation Participants and Persons Interviewed****PARTICIPANTS OF FINAL EVALUATION (KIDCARE CSP – 3<sup>RD</sup> TO 10<sup>TH</sup> AUGUST 2009)**

	<b>Full Names</b>	<b>Designation</b>	<b>Organization</b>
1	Dr David Mulewa	District Medical Officer -Kilifi	MOH
2	Dr David Owuor	Lead Health Advisor	Plan Kenya
3	Dr Laban Tsuma	Technical Backstop	Plan USA
4	Kamau Njoroje	Health Advisor	Plan-Coastal region
5	Jacqueline Jumbe	Area Manager Kilifi	Plan
6	Sarah Mutimba	Program Officer	APHIA II Coast
7	Omar M. Tsuma	Program Officer (Coast province -Mombasa	PMOs office MOH
8	Felix Agoi	M& E Officer	Aga Khan Health Services -CHD
9	Michael Mwakazi	Program Officer	Population Services International
10	Vincent Iduri	District Public Health Officer	MOH
11	Christine Mataza	District Facility Nurse	MOH
12	Leonida Chepchirchir	District Health Information officer	MOH
13	Judith Chonga	CHW/TOT	Community (Chonyi)
14	Irene Mbodze	CHW/TOT	Community (Jaribuni)
15	Francis M Nyamwawi	Sub-loc VHC	Community (Bahari)
16	Ancillar Kazungu Shikari	CHW/TOT	Community (Vitengeni)
17	Peter Akim	Program Facilitator	Plan
18	Zainabu Mwanjirani	Program Secretary	MOH
19	Edward Mumbo	District Public Health Nurse	MOH
20	Beatrice Barasa	Community Based Facilitator	KIDCARE CSP
21	David Katana	Community Based Facilitator	KIDCARE CSP
22	Alex Ramia Chakacha	Community Based Facilitator	KIDCARE CSP
23	Wilfred Ileri	Community Based Facilitator	KIDCARE CSP
24	Carolyn N. Wangire	Community Based Facilitator	KIDCARE CSP
25	Emmanuel Baya	Community Based Facilitator	KIDCARE CSP

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26	Peter Ndungu	M & E Facilitator	KIDCARE CSP
27	Stella Oduori	Program Officer (Training)	KIDCARE CSP
28	Mumba Kashuru	Driver	KIDCARE CSP
29	Fredrick Dambala	Driver	KIDCARE CSP
30	Ruth Momanyi	Project Coordinator	KIDCARE CSP
<b>31</b>	<b>Jean Capps</b>	<b>Team Leader</b>	<b>Consultant</b>
32	Margaret Kahiga	M & E Coordinator	Plan

**PARTICIPANTS OF FEEDBACK WORKSHOP – 11<sup>TH</sup> August 2009**

**Mnarani Hotel**

	<b>Full Names</b>	<b>Designation</b>	<b>Organization</b>
1	Dr David Mulewa	District Medical Officer of Health	MOH
2	Dr Priscilla S Migiro	Deputy Director Division of Family Health HQ	MOH –Nairobi
3	Dr David Owuor	Lead Health Advisor	Plan Kenya
4	Dr Laban Tsuma	Technical Backstop	Plan USA
5	Kamau Njoroge	Health Advisor	Plan-Coastal region
6	Jacqueline Jumbe	Area Manager	Plan -Kilifi
7	Sarah Mutimba	Program Officer	APHIA II Coast
8	Dr Dickson Mwakangalu	Tech Advisor Clinical services	APHIA II Coast
9	Kironda Kimbo	Program Officer	APHIA II Coast
10	Omar M. Tsuma	Program Officer (Coast province -Mombasa	PMOs office MOH
11	Felix Agoi	M& E Officer	Aga Khan Health Services -CHD
12	Lucy Nyaga	Program Officer	AKHSK-CHD
13	Mercy Ngoro	Program Officer	AKHSK-CHD
14	Michael Mwakazi	Program Officer	Population Services International
15	Christine Mataza	District Facility Nurse	MOH
16	Leonida Chepchirchir	District Health Information officer	MOH
17	Judith Chonga	CHW/TOT	Community (Chonyi)
18	Irene Mbodze	CHW/TOT	Community (Jaribuni)
19	Francis M Nyamwawi	Sub-loc VHC	Community (Bahari)
20	Ancillar Kazungu Shikari	CHW/TOT	Community (Vitengeni)

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21	Margaret Kahiga	M & E Coordinator	Plan
22	Peter Akim	Program Facilitator	Plan
23	Emmanuel Kabindo	Program Accountant	KIDCARE CSP
24	Osimbo Harriet	Resource Mobilization Coordinator	Plan
25	Irene Wali	Program Facilitator	Plan
26	Wyclife Odanga	Micro-Finance Advisor	Plan
27	Martin Hinga	Water and Sanitation Advisor	Plan
28	Hudson Kadagi	Senior Program Accountant	Plan
29	Buluma Bwire	GVB Documentation Coordinator	Plan
30	Zainabu Mwanjirani	Program Secretary	MOH
31	Edward Mumbo	District Public Health Nurse	MOH
32	Beatrice Barasa	Community Based Facilitator	KIDCARE CSP
33	David Katana	Community Based Facilitator	KIDCARE CSP
34	Alex Ramia Chakacha	Community Based Facilitator	KIDCARE CSP
35	Wilfred Ileri	Community Based Facilitator	KIDCARE CSP
36	Carolyn N. Wangire	Community Based Facilitator	KIDCARE CSP
37	Emmanuel Baya	Community Based Facilitator	KIDCARE CSP
38	Peter Ndungu	M & E Facilitator	KIDCARE CSP
39	Stella Oduori	Program Officer (Training)	KIDCARE CSP
40	Mumba Kashuru	Driver	KIDCARE CSP
41	Fredrick Dambala	Driver	KIDCARE CSP
42	Ruth Momanyi	Project Coordinator	KIDCARE CSP
43	Peter Njuguna	ICT Coordinator	Plan
44	Paul Mwandikwa	Program Facilitator	Plan
45	Dr Benjamin Tsofa	KEMRI	KEMRI
46	Jerusha Mjomba	Program Officer	Social Services
47	S. Mogendi	District Education Officer	Education (GOK)
48	<b>Jean Capps</b>	<b>Team Leader</b>	<b>Consultant</b>

**Participants of Feedback Meeting Plan Kenya Country Office**

	<b>Names</b>	<b>Position</b>
1	Samuel Musyoki	Strategic Program Support Manager
2	Margaret Kwame	Learning Advisor
3	Anne Wakanyi	Grants Manager

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4	Benson King'oo	Corporate Program Monitoring & Evaluation Manager
5	Irene Mbote	Human Resource Manager
6	Josephine Githinji	Administrative Manager
7	Michael Warui	ICT Manager
8	Laban Tsuma	US Program backstop
9	Dr David Owuor	Lead Health Advisor
10	Ruth Momanyi	KIDCARE CSP coordinator
11	Jean Capps	Consultant – final evaluation

### **Participants at USAID Mission – Nairobi, Kenya**

1. Dr Sheila Macharia – CTO –Family Health Team Leader, Office of Population and Health USAID Kenya.
2. Emily Iruguthu – Project Development Assistant, Office of Population and Health USAID Kenya.
3. Laban Tsuma – US Program backstop
4. Anne Wakanyi - Grants Manager, Plan Kenya
5. Samuel Musyoki -Strategic Program Support Manager, Plan Kenya
6. Dr David Owuor - Lead Health Advisor, Plan Kenya
7. Ruth Momanyi - KIDCARE CSP coordinator, Plan Kenya-Kilifi
8. Jean Capps – Consultant

## **Annex 9: Final Evaluation Methodology**

The purposes of the final evaluation were:

- To determine the extent to which the project accomplished the results that were outlined in the Detailed Implementation Plan (DIP) and to present the evidence of these accomplishments.
- To provide a record of how these results were obtained, so that USAID can share these results with others outside of the CSHGP program--including the U.S. Congress--and so that in-country partners and the PVO grantee understand what should be done if they want to reproduce these results.
- To demonstrate how this project contributes to global learning about community based health programming.

A participatory evaluation methodology was used and included:

- Joint evaluation planning with Plan HQ, Plan Kenya national and regional offices, and KID CARE management staff
- Document review
- Population-based LQAS survey and report
- Consensus consultations between PLAN and KID CARE partners with recommendations
- Stakeholder meetings
- Key information interviews
- Data analysis with tool development for qualitative follow up
- Triangulation of findings from multiple information sources
- Comparisons with available national and regional data
- HMIS review
- Staff interviews
- Financial overview
- Stakeholder debrief in Kilifi District with schedule for action plan
- USAID and Plan Kenya national office debriefs
- Draft Final Report submitted for feedback and recommendations by Plan
- Final report to Plan for submission to USAID.

## **Annex 10: Special Reports- Care group Documentation**

### Plan Kenya's Experience with the Care-Group Approach: Sharing lessons for roll out of the Community Strategy

#### **Introduction to the KIDCARE project**

The Plan Kenya sponsored Child Survival Project is located in the Coast Province of Kenya that borders the Indian Ocean to the east and Tanzania to the south. The target area is in four divisions of Kilifi District, one of seven districts that make up Coast Province. This project draws a lot of learning from the Plan Kwale CSP (implemented between 1999 and 2003) and has been surnamed KIDCARE (for Kilifi District Coastal Area Replication and Evolution). USAID CHSGP funded KIDCARE Project to the tune of US\$1.5M with Plan USNO providing 30% (additional) match to these funds. The project will target 46,354 children less than 5 years of age and 64,381 women of reproductive age in the 357 villages of Bahari, Chonyi, Ganze and Vitengeni divisions.

The goal of the KIDCARE project was to reduce in a sustainable way the morbidity and mortality of children and women of reproductive age in Kilifi. The project sought to achieve 3 results:

1. Improved household behaviors and management of childhood illness through IMCI,
2. Increased access to quality maternal and child health services (including services to OVCs), and
3. Improved capacity of local partners, systems and structures that allow for sustained CS activities.

KIDCARE Project implemented two complementary strategies to achieve its objectives namely:

Development of a community based health system with strong links to MoH service providers; and Design and implementation of the IMCI approach at the facility and community levels which employs the MOST approach to IMCI training and PD/Hearth for community based nutritional rehabilitation. An essential emphasis was on community participation in health decision making and financing. The project prioritized six interventions within the IMCI model: malaria control (LOE - 25%), prevention of malnutrition (LOE - 20%), improved immunization coverage (LOE - 15%), pneumonia case management (LOE - 15%), control of diarrhea (LOE - 15%), and HIV/AIDS prevention (LOE - 10%).

Project activities were designed to empower communities to improve their own health through: 1) community managed decisions to determine health needs and actions; and 2) community managed cost recovery systems to support MoH activities at the community level. The intention of the project was to improve health outreach at the village level, effective health decision-making at the household level and personal behavior change at the individual level. It was therefore necessary for the project to adopt a community mobilization and organization strategy that would ensure project incidence was felt at each and every household in the target community notwithstanding the budget and staffing limitations.

#### **A care-group: What is it?**

The World Relief "Guide to mobilizing community-based volunteer health educators" describes a care-group as a group of 10 to 15 volunteer community-based health educators who regularly meet together with project staff for training, supervision and support and who amplify training by passing on the health lessons to individual households outside these meetings. Care groups nurture strong relationships between project staff, volunteers, and mothers in the community that promote effective training and behavior change within



care-groups, between volunteers and mothers, and finally in the community at large. Each volunteer is supported by networks of relationships that teach, support, encourage and motivate. Care groups motivate the volunteers to provide peer support, develop strong commitment to health activities and find creative solutions to challenges. The large numbers of committed volunteers in care groups create a critical mass that fuels sustainable change in the communities' health practices. The approach is reported in the literature to have been pioneered by World Relief International in Mozambique between 1995 and 1999 but has since been applied in Malawi, Zambia, Rwanda Cambodia, and in this instance Kenya. In the care group model, no volunteer stands alone.

In the KIDCARE project, the care-group approach was arrived at independently during the visioning workshop with community members. The workshop described the health situation of children below 2 years and women of reproductive age, and agreed on a shared vision of a community where *no child would die* due to childhood illnesses or malnutrition, and *no woman would die* in the course of her pregnancy or childbirth. It was realized that for this to happen then each and every household in the community needed to prioritize MCH and get all information and assistance necessary to protect the health of mothers and children. The challenge was to come up with a community organization model that would facilitate participation and accountability of each household in all actions towards the realization of the project vision within the constraints of project staffing and budget. It was at this point that a suggestion was mooted for the project to adopt a ten-cell (Miji kumi) model akin to one that had been used for political mobilization in the period before Kenya re-adopted multiparty democracy. Only much later was it realized that in the Miji kumi model the project had unwittingly adopted the care-group model with all its core elements of multiplication of volunteer effort, peer support and community mobilization for health action.

### **Rationale of the care-group approach**

The care-group model amplifies the effort of a relatively small number of paid staff to reach large swathes of the target community. For instance the KIDCARE project had only 8 frontline staff that was expected to reach to all the 357 villages' population of 257000 persons. This was made possible because each CBF got in touch with up to 80 CHWs every two weeks – and each of those CHWs passed on the health messages to at least 10 homestead health point persons every two weeks. The homestead health point persons ensured that the health messages reached each household in their area. Each CHW also ensured they visited and taught health lessons to each and every eligible mother within the ten homesteads under her/his care. When they started working, each CHW-TOTs met with 10-15 CHWs once every month. The CHW-TOTs also held quarterly review meetings with the MoH staff and project frontline staff that also served to inform the focus activity areas for the subsequent quarter.

The care-group approach focuses the efforts of a large number of community volunteers on key health activities and therefore encourages peer support and a sense of collective responsibility for the health of the community. The large number of health volunteers (health point persons, CHWs) in the community the intensive peer support to each volunteer as they implement project activities also facilitates participation of even illiterate volunteers thereby improving volunteer solidarity. This solidarity and shared sense of community service sustain the spirit of volunteerism and reduces volunteer burn-out. As this large number of volunteers adopt the desirable (healthy) behavior change and promote it in the community they create a momentum of change. The volunteers are also greatly motivated as they review achievements through the community-based health management information data that they also collect and collate. Gradually the community grows to value the contribution of the volunteers to improvement of their health – and this encourages volunteers to continue activities and so promotes sustainability of outcomes.

### **Justification for using the care-group approach in this project**

Several factors in the project area supported use of the care group approach for implementation. First, though the project covered a vast area of the population settlement pattern was defined in village zones of clustered homesteads and interspersed farmlands zones where the villagers practiced subsistence farming. Each homestead consisted of 4-8 households of closely related family members and had a recognizable head. Thus a health point person in the homestead would easily cover all the households. For most of the project area, there were between 8-10 homesteads per square kilometer making it relatively convenient to be covered by the CHW. Where the settlements were sparser as in the drier parts of the district, the CHWs could only cover 3-6 homesteads. Three out of the four divisions were rural and thus had very stable population settlements. The fourth division was urban and peri-urban settlements with high population flux that made establishment of the care groups a big challenge – especially in the purely urban zones.

Secondly, in most of the project area the traditional practice is that men may move to urban areas to seek employment while women are left in the villages to care for the family. Many of the homesteads therefore had mainly women, youth and elderly men. Furthermore, women are regarded as the usual caretakers of children and of fellow women during pregnancy. Thus the project approach to engage mainly women as volunteers was readily received by the community.

Thirdly, the facility-based health service coverage of the project area was mainly by the ministry of health while community-based activities had few players the major ones of whom were also funded by USAID. All the actors were alive to the poor health indicators in the district and were committed to improving the health of especially the hard to reach populations. Thus it was convenient for the project to form partnerships that optimized the use of skills resident in each of the partners and avoided duplicity in the capacity building and use of volunteers.

The partnership approach also enabled the project to implement more interventions with relatively few staff. At the beginning of the project, almost all of the government health facilities in Kilifi District were understaffed due to natural attrition and budget constraints. MoH guidelines require two Nurses and one Public Health Technician (PHT) at each dispensary in order to provide preventive, curative and health promotion services. Three dispensaries in the project area, Ganze, Chasimba and Vitengeni, had the required two nurses, but needed additional staff to serve the needs of populations in the area adequately. In most of the dispensaries in the project area a single nurse provided all the health services. Staff morale was low due to heavy workload and this had impacted negatively on the health worker-client interaction. The care-group approach was thus mooted as a strategy to expand the reach of preventive services to the population through the use of community volunteers to avoid further straining the professional health workers.

### **Establishment of the care-groups**

KID-CARE worked with the community and project partners to build care groups, identify CHWs and CHW-TOTs and strengthen VHCs and DHCs. Establishment of the care-group approach was a lengthy and challenging process. It was a collaborative process led by a team consisting of staff from the Ministry of Health, the KIDCARE project, and the provincial administration as well as community leaders. The process was facilitated by the fact that community representatives participated in the project visioning workshop and in the preparation of the detailed implementation plan.

The point of entry was the district officer who got a brief from the project and MoH staff on the project's objectives and the need to organize the community into care groups to facilitate implementation of the project. The DO cascaded this information to the chiefs and assistant chiefs in the respective divisions. The assistant chiefs called barazas where project staff would then meet the community and explain about the project and the need for care-groups to be formed. Following these barazas, village elders then organized meetings at the village level where each homestead (Mji) in that village was requested to enlist their participation in the project by nominating a health contact – preferably a female usual resident of the homestead that is able to read and write in Kiswahili and willing to work as a volunteer.

The project staff then had meetings with the nominated health point persons to discuss their expected roles and to facilitate election of the team leaders that would be trained as CHWs. This process was rolled out village by village until the whole project area was covered. There were times when the process was slowed down due to the community activities such as planting, weeding etc. For instance, Muryachakwe, which is within the project area, suffered a bad drought with people depending on relief food that diverted volunteers' interest for the CS program in this area and posed a challenge as they committed most of their time to accessing the food handouts. There were also challenges in establishing care groups in the urban division (Bahari) where the community is more unstable and loosely connected as compared to the rural divisions. Overall, mobilization of the community and setting up of the care-groups took about eighteen months, with Bahari division being the last to be covered.

### **Capacity building**

Once the care groups were established the volunteers and institutions created required capacity building to enable them deliver their mandates and contribute to achievement of the project objectives. The staff that required training included the project staff, the community health workers, and the professional health workers based in the primary health facilities that serve the target community. The VHC, DHC, and DHMT were also targeted for capacity building. Capacity building of the care-groups had to be phased so that the volunteers and institutions did not wait for too long before beginning the activities.

### ***Community Health Workers***

CHWs are key players who work on a part-time basis with homestead health point persons to directly mobilize community involvement and participation in improving their health. They provide information and strengthen community health knowledge through dialogue so as to influence key family practices for health. Their training is therefore intended to be problem-based and life-long through formal, informal and non-formal approaches to learning. The training is meant to enable the CHW to be a model of recommended health practices and to mobilize and organize the community for health action; promote good health practices through community health education; recognize common ailment and take appropriate action including referral to health facilities; facilitate community dialogue for health status improvement; carry out home visits to promote healthy behavior and action at the household level; and maintain the village health registers and other records of key community health events.

The first 30 CHWs underwent a 5-day (phase 1) training to orientate them on health and disease prevention in the first quarter of 2005. The training was done in a school within the community and was facilitated by the Ministry of Health staff using their approved curriculum for CHWs. Phase 1 training focused mainly on primary health care and development concepts and thus the topics covered included:

1. Concept of health and development
2. Community organization, mobilization and participation
3. Group dynamics and Leadership

4. Adult learning and Communication (dialogue)
5. Evidence-based dialogue for action for change at household and community levels
6. Personal and environmental hygiene and related health problems

Most of the CHWs were of primary level education and were able to read and write in at least Kiswahili – the local common language. There were very few CHW that had completed secondary school level. Thus the facilitators employed adult learning methods that used more of role plays and group activities to accommodate participants of low literacy. The peer support that existed among the participants also made it easier for those of low literacy to undergo the training.

Following this initial training, the CHWs were then attached to health facilities for practical experience to build their interest and motivation for community health work. Here they stayed for a period of one to two weeks during which they worked with the facility nurse doing patient registration, weighing of babies, observing administration of childhood vaccines etc. After the attachment, the CHWs attended the phase two training again facilitated by the MoH staff. This (phase two) training took a period of 5 days and the curriculum covered topics such as:

1. Community integrated management of childhood illnesses (c-IMCI) especially the 20 key family practices
2. Health throughout pregnancy and childbearing (reading and applying the ANC card to household dialogue)
3. Common health conditions (malaria, pneumonia, diarrhea, malnutrition, worms, conjunctivitis, skin infections, wounds, scabies, STIs/STDs, HIV/AIDS) and the CHWs' role in dealing with them
4. Immunization (reading and applying the child health card to household dialogue)
5. Breastfeeding, Growth monitoring, and malnutrition
6. Monitoring and evaluation: the village register/map, record keeping and use of data

The CHWs were also orientated on their roles in the community including their relationships with the VHCs and the referral linkages with the facilities. They were trained on the CBHMIS and orientated on the simple data collection tool. The phase one and phase two trainings each cost an average of Ks. 50,000. Later on, CHWs in areas of high malnutrition were also trained on PD-Hearth so that they could lead community-based rehabilitation of the malnourished children.

### ***Community Health Worker TOTs***

As described earlier, the care-group model adopted by the project required a cadre of volunteers, the CHW-TOTs, whose capacity would be built further to enable them play the role of CHW team leaders that can work as a group to organize and facilitate formal or informal training of CHW on their own or with the MoH trainers. The other roles expected of CHW-TOTs by the project include leading community mobilization and awareness sessions and collating health data records from CHWs under their jurisdiction; assisting MoH community workers in identifying new or replacement volunteers to be trained as CHWs; supporting CHWs in recognition and taking action on community health problems; and functioning as a co-facilitator with MoH and project staff in continuing training and mentoring of CHWs and care-groups.

Identification of CHW-TOTs was done in 2006, after about 500 CHWs had completed their training cycle and practiced in the community for about six months. The health facility in-charges, the Public health officers and the project frontline staff selected emergent natural CHWs team leaders who had shown exemplary performance and had a minimum of O-level education to be trained as CHW-TOTs. In all 114 CHW-TOTs have been selected during the life of the project and underwent a 5-day training that further

strengthened their skills in facilitation and leadership and deepened their knowledge in c-IMCI. This training was conducted by the MoH facilitators and frontline project staff and topics covered such as:

1. The function of the CHW-TOT as a facilitator
2. Community IMCI (c-IMCI)
3. Community entry process
4. Group dynamics
5. Communication strategy with emphasis on interactive dialogue using Adult Learning methodologies
6. Technical updates on the key family practices (reproductive health, HIV/AIDS, safe motherhood, integrated management of childhood illness - IMCI, malaria, and nutrition).
7. Health issue prioritization: How to assess, classify and identify appropriate action (including referral systems)
8. Community-based information systems (CBHMIS) for data collection processing and use in enabling evidence-based health decisions, monitoring, and evaluation.

The 114 CHW-TOTs trained by the project now remain as a core group of trainers and facilitators in the community.

### ***Professional Health Workers***

The project facilitated training of the nurses based at the primary health facilities on facility-IMCI to equip them with skills in providing curative care to the sick children they attend to, and preventive services to both infants and women of reproductive age attending their clinics. The training was done by certified IMCI trainers using the MoH approved 11-day IMCI curriculum. Training sessions were organized for groups consisting of eight professional health workers, and were conducted in institutions close to major health facilities (e.g. the district hospital) to facilitate clinical attachment. The IMCI trainings cost an average of Ksh. 65,000 per health worker trained. Post-training follow-ups were conducted within three months of the training. The project also organized update courses for professional workers on EPI that covered vaccine management, cold chain maintenance, injection safety, missed opportunities, defaulter tracing and disease surveillance. Other trainings the health workers received included PITC and the LQAS (see appendix)

Apart from the facility nurses, the project also trained the Public Health Officers on c-IMCI to enable them provide support to the CHWs implementing interventions in the community and strengthen supervisory and mentoring linkages between the volunteers and professional health workers. In fact the PHO training on c-IMCI preceded training of the CHW-TOTs.

### ***Village Health Committees***

The Village Health Committees were the first to be formed during the establishment of the care group structures in the community. The project team and the MoH staff liaised with the assistant chief of the target area who then called a Baraza (administrative community meeting) where they were informed about the project proposals for using the care group approach to ensure health interventions reach each and every homestead in the community and that the community actively participates in the management of health services provided at their health facility. Each village was then asked to meet and elect a VHC committee and its officials that include a chairman, secretary, and treasurer and its representative to the DHC. Once the VHCs were formed they underwent a five-day training that focused on primary health care and their roles as overseers of the health volunteers working in their respective villages. The training covered topics in safe motherhood, child immunization, growth monitoring, childhood illnesses and collection and use of health information. Other topics included conflict resolution and planning & management of outreach

activities. The trainings were done in the community schools or churches and cost about Ksh.50,000 for a session that grouped 4 VHCs.

#### ***Dispensary/ Health Centre Health Committees***

The DHC consist of 9 -15 representatives from VHCs in the dispensary's catchment and the professional health worker in-charge of the respective facility. Two officials, the chairman and treasurer are elected from amongst the VHC representatives, while the facility in-charge is the secretary. The role of the DHC is to facilitate community participation in the management of the health services offered by the facility. The dispensary health committees received a six-day training that covers governance, financial management and use of health information for planning and implementation. Two or three DHCs are grouped together for such training session which are held at a centrally located institution and cost an average of Ksh.830,000. The trainings are conducted by the Aga Khan Health Services (Kenya -CHD) and the district Facilities' health nurse. Follow-ups visits to support the trained DHCs are conducted within three months after training and every six months thereafter.

#### ***District Health Management Team***

The District Health Management team (consisting of the district medical officer of health, the district public health nurse, the district public health officer, District records officer, and the district administrative secretary, and the district health education officer) were orientated on governance, financial management and HMIS in a 3-day workshop facilitated by the AKHS (Kenya-CHD) to establish consensus on the training need and curriculum for building DHC capacities in these areas, as well as designing tools for monitoring and supportive supervision of the DHCs. Subsequently the DHMT has received token support to strengthen their leadership and oversight of interventions such as the community-led total sanitation, the 5-TT maternal immunization schedule etc.

### **The care-groups' systems and processes**

#### ***Technical Quality Assurance***

The project set up a systematic approach to assure the quality of the technical information and interventions in the community. The DHMT took leadership for clinical supervision of trained staff at all levels. A joint supervisory team (MOST team) made up of select DHMT/Partners and some MoH facility staff (for peer review) was responsible for monitoring and evaluation of quality of care provided at the health facilities. This mobile ongoing sustainable training (MOST) team were to submit quarterly reports to the DHMT and KIDCARE project. The DHMT also assured that the training curricula for professional health workers, community health volunteers and community institutions emphasized service quality.

Public health officers and/or public health technicians at the divisional and supervision area level were tasked with assuring the (health) technical wholesomeness of the activities undertaken by CHWs, CHW-TOTs, and other volunteers in the community. The project was tasked with monitoring program output, outcome and impact measures.

#### ***Referral system***

The project set up a referral system linking the community to the formal health care system. The community health workers would refer any pregnant women to attend the health facilities for antenatal care, and to use it during delivery. Initially, the CHW would accompany the mother to the health facility. Later the project

developed a referral sheet that would be filled and given to the mother to present at the health facility upon which she would receive preferential attention. The CHWs also referred underweight children identified during community growth monitoring session to active PD-Hearth sites within the community. Mothers with sick children would also be referred to the health facilities. Referral from the health facilities improved markedly during the life of the project. The district hospital acquired an ambulance which was available to respond to calls from the dispensaries. Improvements in the state of secondary roads and the widespread use of mobile phones also facilitated smooth transfers when needed.

### ***CBHMIS: Capture and Management of Health Data***

The project developed a CBHMIS to help track all households in a community using regular visits by trained workers (care group members). The CBHMIS was based on the initial census of children below five years and WRA done during the baseline and was linked to the formal HMIS through the local health facilities. Care group members maintained household registers that they updated quarterly and collected household level data on selected indicators (including births and deaths) on a monthly basis.

The households' register maintained by each homestead health point person had key information on all children below five years and pregnant women including data on immunization status of children, ITN coverage, number of pregnant women, births and deaths for children under five. This was updated quarterly and the information shared with the CHW heading the care group. The CHWs collated this information to update the community-based register for their entire 10-Miji catchment area quarterly. In turn, the CHWs shared the information in their CBRs with their CHW-TOT who used it to update the village-level CBR which was useful for decision making during VHC meetings.

The care group members collected data on a monthly basis using a simple data collection form. The data collected using this tool included Births, Deaths, Immunization record, Weight Record and ITN use. This data was discussed during their meetings then consolidated and forwarded to the respective CHW-TOTs who then forwarded the same to the respective VHCs.

Analysis of the household level health data took place when care group members held their meetings. The care group would use the information to identify household that had adopted recommended healthy practices and those non-compliant ones. Thus they would be able to plan the focus areas in terms of intervention and the households to give special attention. At the village level, consolidated information from all care groups within the village was used during Village Health Committee meetings to make decisions on key activities that would increase compliance of community members to healthy behaviors and to plan outreach to problematic areas within the village. In some instances, the VHC took immediate actions such as visiting heads of homesteads with non-compliant households to dialogue with the heads of the homesteads.

VHC meetings were held before the DHC meeting so as to allow village representatives to participate in the DHC meeting. The respective VHC representatives forwarded the data collected and discussed at the village level to the DHC. Here the data was consolidated and discussed to inform decisions as to areas needing outreach services, and to allocate resources for community level health activities. The data was then summarized and displayed on the dispensary chalkboard together with other service data, and also submitted to the district health management team (DHMT) where it was used for health planning at the district level.

### ***Project monitoring system***

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The project used serial Lots Quality Assurance Sample surveys to monitor community level indicators of progress towards achievement of its targets and to focus its interventions. The project area was zoned into 11 Supervision areas based on the catchment of the eleven health facilities. The LQAS method apart from giving coverage for the whole project area could help identify which interventions were not progressing well towards the targets and also which Supervision areas were lagging behind in target achievement. The facility level progress was monitored through health facility assessments and supportive supervisory visit reports submitted quarterly by the MOST teams. Each project partner also submitted quarterly reports of their activities. All these reports were discussed during quarterly coordination meetings and biannual stakeholders meetings, and used by Kilifi District stakeholders to plan actions to improve health conditions in the District. District level decisions were important in that they increasingly impacted or depended on the care groups for mobilization and other activities.

### *Coordination meetings: Managing the partnership*

The project held quarterly coordination meetings where project partners shared reports on their respective activities and mapped activities for the following quarter. These meetings served to harmonize project implementation activities and thereby reduce strain and conflict of interest that care groups would otherwise encounter.

### **Project outcomes**

The project had adopted a “quick wins” strategy in which outreach services were organized to hard to reach areas to improve coverage of e.g. primary childhood immunizations, Vitamin A, Malaria prophylaxis in pregnancy, and Tetanus immunization for pregnant women. Thus these indicators had already shown marked improvement by midterm. Results from the end-term evaluation of the project indicate there were significant improvement in health practices and gains in improving the health indicators. The end term evaluation included an LQAS survey to collect quantitative data at the community level, a health facility assessment to collect health facility level data and qualitative interviews (FGDs with community groups and Key-informant interviews with key partners in the project) to triangulate and obtain explanations of the quantitative data. All data collected showed that the project met or exceeded its targets on most of the indicators. A summary of some of the indicators are shown below:

### *Health Practices at the community level*

Indicators	Baseline coverage	EOP coverage %	EOP target %
Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	26.6% (n = 391)	14.4% (n = 418)	21.6%
Percentage of children age 0-23 months whose births were attended by skilled health personnel	12.9% (n = 209)	35.4% (n = 209)	
Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	24.0% (n = 391)	66.7% (n = 135)	60%



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Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	21.1% (n = 90)	<b>54.9%</b> (n = 113)	31%
Percentage of infants age 6-9 months receiving breast milk and complementary foods	92.2% (n = 77)	<b>98.2%</b> (n = 57)	95%
Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday	62.2% (n = 209)	<b>76.5%</b> (n = 209)	74%
Percentage of children age 12-23 months who received a measles vaccine	64.1% (n = 209)	<b>85.2%</b> (n = 209)	80%
Percentage of children age 0-23 months who slept under an insecticide-treated bed-net the previous night (in malaria-risk areas only)	20.7% (n = 391)	<b>76.7%</b> (n = 202)	60%
Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment	74.2% (n = 209)	<b>86.1%</b> (n = 209)	
Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	41.4% (n = 391)	<b>66%</b> (n = 209)	70%
Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	4.3% (n = 391)	<b>15.3%</b> (n = 206)	14%

The project first focused on the indicators that were dependent on service delivery and not deeply tied to traditional beliefs and culture or religion and were seen also to be of immediate benefit by the community. These included primary childhood immunizations, Vit A, ITN usage by children and WRA, Tetanus vaccination and malaria prophylaxis in pregnancy, and point of use water treatment. Immunization is among the indicators that rapidly improved due to the quick wins strategy. At baseline the full immunization coverage was just 62%. By mid term, the coverage had reached 68% and by September 2008 the project had surpassed its target (72%) and coverage was 87%. Achievement on this indicator was helped by the government's focus on it during the Rapid Results Initiative that was implemented in 2006-2007. The care-groups were instrumental in mobilizing communities to use facility based services and to attend outreach services. At end term the coverage was 82%, but what was notable is that 75% coverage was achieved on schedule (i.e. by the time the child reached age 1 year). Two other indicators, Vit A for children over six months and ITN usage, were also helped by government efforts during the Rapid Results Initiative.

### ***Changes in culture or tradition based behaviors***

The project had set very conservative targets for some of the indicators such as management of diarrhea, prompt initiation of breastfeeding at delivery, exclusive breastfeeding for babies below the age of six months, and appropriate hand washing. This was because the baseline coverage for these indicators was very low and many were tied to strong beliefs and cultural practices. Childhood diarrhea was explained away as evidence of the parent's (mostly the mother's) infidelity; breastfeeding could not be initiated promptly because the breast first had to be cleansed; and babies were habitually given other foods from soon after birth. Poor hand-washing practice at baseline was driven by general poor sanitation and personal hygiene and low availability of water.

The project was therefore amazed at the end-term evaluation to find out that it had achieved and even exceeded its targets on some of these very “difficult” indicators. During qualitative interviews with various community groups the main benefits from the project were reduced deaths of children and mothers. “In the past we would be burying children or women almost every weekend”, said an elderly villager, “now you hardly hear of death in this area, except for the very old like me as expected.” They attributed these changes to the intensive health information, education and counseling provided by the CHWs and homestead health point persons. As a result of the IEC, more mothers were now attending antenatal care and delivering in health facilities. “We have seen for ourselves that those women delivering in health facilities rarely die during delivery. But if one just uses the TBA here, when problems like bleeding set in... it is just you and your God”, said a participant. More children were getting their immunizations due to increased utilization of the health facilities as well as the outreach services that brought services closer to the people. More mothers were also taking their sick children to health facilities rather than use traditional healers or buying medicines from shops. There was a general feeling in the community that services at their health facilities had improved and health workers were more receptive and responsive to their needs. The general perception was that professional health workers were coming to the community more frequently to support the CHWs and address issues such as disease outbreaks.

In one of the FGDs a mother who was exclusively breastfeeding her third born baby expressed her satisfaction with the practice – “it is just as we were advised by the CHWs”, she said, “the baby has remained healthy and is growing well!” The husband who also present declared that no other child of his will get anything apart from breast-milk for the first six months. In areas where PD-Hearth was implemented, the community appreciated the approach as effective in getting them to realize children could be well nourished by using locally available foods. The marked improvement in hand washing practice was driven by the general receptiveness to sanitation and personal hygiene following introduction of CLTS in the community. Community members felt they had to do all it takes to ensure they were not “eating shit” as they had realized during triggering. Indeed most of the homesteads in the community had built and were using pit latrines, and at least three villages in the project area had been declared open-defecation free.

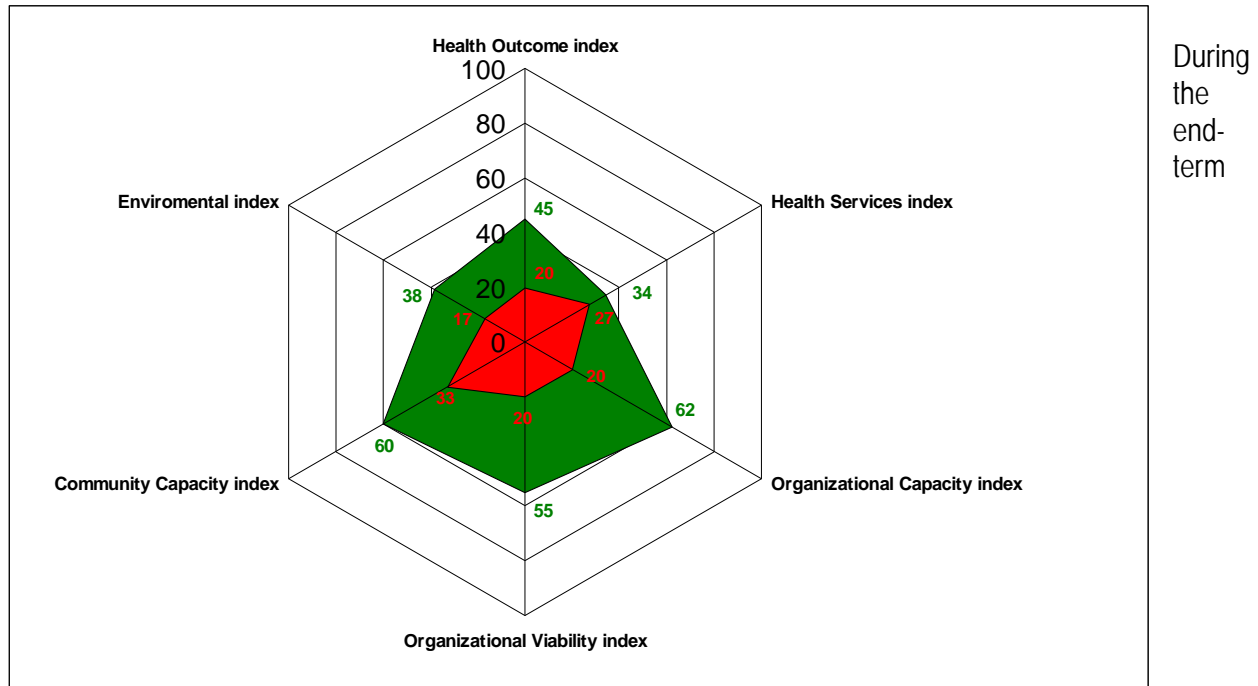
### **Nurturing sustainability of project outcomes**

Right from the outset, the project was alive to the need to ensure that the outcomes it aimed to achieve would be sustainable. This would be only possible if the implementers of project activities had adequate capacity/skill and commitment, and the geographical, social, economic and political environment was also supportive. Thus the project realized many of the factors that would impact on sustainability were way out of its control. The decision was therefore to focus on the factors that the project could contribute to, liaise with other actors that could influence the other factors and to keep monitoring the likelihood that project outcomes would be sustainable.

The project thus employed the Child Survival Sustainability Assessment framework to monitor the likelihood that its activities and outcomes in the district would be sustainable. Using this framework, Kilifi district was defined as the system to be monitored. The sustainability likelihood was then mapped depending on the strengths of the system (Kilifi district) on six components namely health services and outcomes; organizational viability and capacity; community capacity; and supportiveness of the general environment (district context) as related to implementation of health interventions to achieve the desired outcomes. The project focused on improving the community capacity to lead and participate in health interventions through the establishment and capacity building of care-groups, and village health committees. At the organizational level, the project contributed to strengthening of the DHMT and the DHCs both in building their capacities and strengthening the linkages between them. Thus the sustainability map drawn by a

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sustainability assessment team consisting of health stakeholders in Kilifi district at baseline (shaded red) and at end-term (shaded green) indicates greater improvement in the organizational capacity and viability indices and in the community capacity index than in the other indices.



evaluation, the project also conducted qualitative interviews with care-groups, village health committees, dispensary health committees, community health workers, and CHW-TOTs to get their perspectives on the likelihood for the project activities and thus health outcomes to be sustained and/or bettered after closure of the project.

Care group members expressed their commitment to the health work they are doing in the community due to the fact that they themselves benefited directly by practicing the desirable behaviors. They were also motivated to see the health of people in the community improve. They loved to be recognized as health workers in the community, though at times they felt like they were being considered like doctors. Asked what action they would take in the event some stop doing the volunteer work, they were confident that the CHW-TOT and the MOH staff would be able to train the replacements they would select. As care-groups, they had also come together and began engaging in income generating activities such as tree nurseries and small businesses and some were already operating village savings and loan schemes to improve their IGAs.

The VHCs committee members were also committed to their work. However some were still unclear on their oversight role and thought the CHWs were their seniors. "They are better trained in these (health) matters", said a VHC member, "ours is just to assist them do their work." They viewed the links with the DHCs and the assistant chiefs as very supportive of their work. Through their participation in the DHCs they had contributed to improvement of health services provided to their community. The DHC also provides them a vehicle to directly lobby the DHMT for staff and expansion of health facility services. Through the DHCs they are also able to link with decentralized funds and some had submitted proposals for funding. They believed the CHW-TOTs will be useful in training new VHC members following elections or drop-outs.

### **Best Practices and Lessons learned**

The care-group model as described here closely mirrors the Community strategy that is presently being rolled out by the government to bring the Kenya Essential Package of Health service to the community level. For that reason the project best practices and lessons will not only inform Plan's child survival projects but will also most likely inform improvement in the roll out of the community strategy. We will therefore try to retrofit the best practices and lessons on to the community strategy with due consideration of the differences between it and the care-group approach especially in terms of

- a. community organization and
- b. health data collection and decision-making
- c. ensuring stability and sustainability of community institutions and health gains

### ***Community Mobilization and Organization***

#### ***a) Establishing the structures and identifying volunteers***

Formation of the care-groups took very long and was quite challenging but, once established, it was much easier to roll out the project interventions. Even add-on interventions like the CLTS and PD-Hearth were quickly taken up and scaled-up in the project area. Project duration was long enough to allow capacity building of the volunteers and also time for updates just before the scale-down of activities as the project came to a close. It was only in the urban areas where the care-groups were set up later that it was not possible to give updates trainings.

### ***Systems and Processes: Data management and decision making***

The mandate provided to care groups over a specific number of households enables the systematic collection, organization and discussion of data at the care group level allowing both decision making and action. This builds capacity as small successes are achieved and celebrated leading to the desire to take on greater challenges within the community like open defecation.

### ***Ensuring sustainability (community structures and health outcomes)***

Through the activity of the VHCs and the CHW-TOTs, Care groups have become community structures that are linked to the catchment health facilities giving them the needed "connectedness" and making them a "extension" of the health system to the household level. This ensures sustainability.

**Annex 11: Updated Project Data Form**

## **Annex 12: Grantee's Plans to Address Final Evaluation Findings**

### KIDCARE Child Survival Project: Way forward workshop

On 15<sup>th</sup> September 2009, 30 people representing 8 organizations met to deliberate on KIDCARE and about the way forward. This meeting was called to discuss roles among the partners as the project closes.

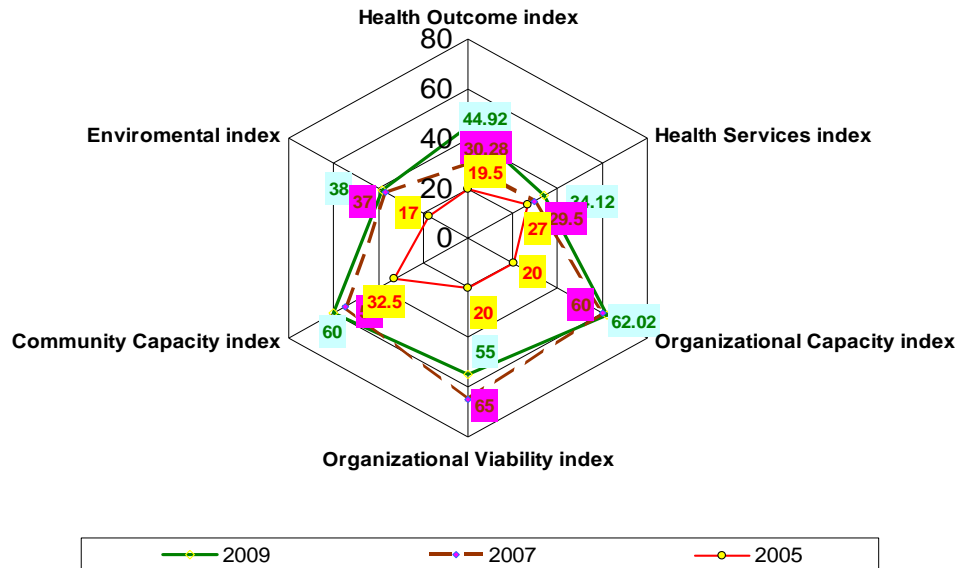
There was agreement that a lot had been learned from KIDCARE about how to program child health. Stakeholders were happy about the activation of “self-propagating” ideas e.g. CLTS and PD/Hearth that had been introduced by KIDCARE in the district.

Most of the discussions revolved around

- (a) The final sustainability assessment that had been conducted and what action stakeholders need to take across all the sustainability components moving forward.
- (b) The recommendations provided during the Final Evaluation were fully endorsed
  - a. Plan should take the lead on a collaboration to share the global lessons learned and develop the way forward for Care Group approach to health systems strengthening
  - b. Need to expand the KIDCARE model in the future to include Maternal and Newborn health including Family Planning
  - c. Diarrhea Prevention Strategies need to be expanded to Decrease Prevalence because Diarrhea is still a big problem
  - d. There is need for male-friendly HIV services and efforts need to be made in this direction
  - e. KIDCARE approach in the future could be linked with OVC services

### **Recommendations made in regard to the Sustainability Assessment findings**

## KIDCARE Sustainability (Trend) Mapping 2005-2009



### Health Services and outcome

- Mapping out all health workers trained in PITC and IMCI
- Orientation for new health workers and on-job –training for untrained health workers
- Lobby for transmission of IMCI and PITC to untrained staff
- Community dialogue, health action days, follow-ups
- Supportive supervision and giving updates
- Review quarterly meeting both at community and the health workers
- Since Kilifi is now becoming a practicum site, the KDHSF should lobby that whenever another district or region wants to be trained at Kilifi, they should arrange for two slots for Kilifi district health workers
- Endeavor to do a training approach that emphasizes on service delivery: training that is followed by supervision and on-job training
- C-IMCI to be enhanced
- Linkages of c-IMCI and IMCI to be strengthened

Caution though on extensively training health workers which does not necessarily translate to health outcomes. We could use supportive supervision

Danger of having so many trainings since we have many facilitators but they might not have enough time to carry out supportive supervision

### Organizational Capacity

- Follow-ups, mentorships and training of community structures for continuity
- Selection/election of community structures be done in phased out basis

- Community structures to give feedback to the general community
- Coordination and sharing among DHSF members
- Review and revise the current DHC/CHWs curriculum

### **Organizational viability**

- Recommend income generating activities among the groups in the community
- Linking the community structures to other ministries and organizations e.g. Ministry of Agriculture
- Encourage resource mobilization by developing proposals
- Establish a sub-committee within the DHSF that reviews proposals from DHCs/VHCs, advises, flags opportunities that arise and even markets the proposals
- DHMT to strengthen feedback mechanisms
- DHSF to see how it can integrate health with other activities
- Be aggressive to make the DDC prioritize health issues

### **Community Capacity**

- Including community members in stakeholders forum/ facility incharges meeting
- Strengthening follow ups and mentoring of DHCs, HCCs, CHC, CHWs
- Harmonize CORPS according to community strategy
- Enhance inter-sectoral collaboration / and CSOs
- Enhance feedback and sharing of information with the community
- Consolidation of resources for special activities e.g. HADs
- Joint proposal for common sourcing of resources, e.g. maternal and new born care
- Scaling school health program

### **Environmental**

- Inter-sectoral collaboration - e.g. through CUs, have Agriculture officers to talk to the community
- Participatory integrated development
- Promote more accountability by the stakeholders and the DDC
- Encourage the community to question some leadership
- Encourage knowledge seeking behavior in the community



**Participants**

	<b>Name</b>	<b>Organization</b>
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