



***Achieving Equity, Coverage, and
Impact through a Care Group
Network***

**Project Location: Mozambique, Sofala Province, in the districts of
Beira, Dondo, Nhamatanda, Gorongosa, Caia, Chemba, and Maringue
October 1, 2005 – September 30, 2010
Cooperative Agreement No. GHS-A-00-05-0014-00**



**FY09 Annual Report
4th project year**

Submitted by:

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ACRONYMS AND ABBREVIATIONS

AFASS	Acceptable, Feasible, Affordable, Sustainable, Safe
AISPO	Italian Association for Solidarity Among People
ANC	Antenatal Care
ARI	Acute Respiratory Infection
BCC	Behavior change communication
BF	Breastfeeding
BMI	Body mass index
CED	Chronic energy deficiency (BMI<18.5)
CG	Care Group
CI	Confidence Interval
CQI	Continuous quality improvement
CS	Child Survival
CSHGP	Child Survival and Health Grants Program
CSNPC	Child Survival and Nutrition Program Coordinator (the HQ backstop)
CSP	Child Survival Program / Project
CSP Manager	Child Survival Program Manager (Mozambique)
CSTS	Child Survival Technical Support program
CORE	Child Survival Collaborations and Resources Group (an umbrella group of PVOs involved in child survival projects)
CUAMM	Doctors with Africa (Italian NGO)
DAP	Development Activity Proposal
DHP	Director of Health Programs
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DPT	Diphtheria Pertusis Tetanus vaccine
EPI	Expanded Program of Immunization
FAM	Food Aid Management
FFP	Food for Peace
FH	Food for the Hungry International
FH/M	Food for the Hungry Mozambique
GM/P	Growth Monitoring/Promotion
HAI	Health Alliance International
HFA	Health Facility Assessment
HH	Household
HH/C IMCI	Household and Community Integrated Management of Childhood Illness
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HNP Manager	Health and Nutrition Program Manager (Mozambique)
HPSO	Health Program Support Official (formerly “District Coordinator”)
HQ	Headquarters
IMCI	Integrated Management of Childhood Illness
IMR	Infant mortality rate
IR	Intermediate Results
JHU	Johns Hopkins University
KPC	Knowledge, Practice, and Coverage
LBW	Low Birth Weight
LM	Leader Mother

LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and Evaluation
MEWG	CORE's Monitoring & Evaluation Working Group
MCH	Maternal and Child Health
MOH	Ministry of Health
MOU	Memorandum of Understanding
NCR	Nutritional Rehabilitation Center
NGO	Non-governmental organization
NO	National Organization
NR	Nutritional Rehabilitation
NRC	Nutritional Rehab Center
ORS	Oral Rehydration Serum
ORT	Oral Rehydration Therapy
PD	Positive Deviant
PVO	Private and Voluntary Organization
PWCSA	Provincial Women's Committee for Social Action and Coordination (Direcção Provincial da Mulher e Coordenação da Acção Social)
QI	Quality Improvement
QIVC	Quality Improvement and Verification Checklist
RHF's	Recommended home fluids (for use during diarrhea)
RBM	Roll Back Malaria
SBCWG	CORE's Social and Behavior Change Working Group
SO	Strategic Objective
STI	Sexually transmitted infection
TBA	Traditional Birth Attendant
TIPs	Trials of Improved Practices
TOST	Training of Survey Trainers
TOT	Trainer of Trainers
U5MR	Under five mortality rate
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
VCT	Voluntary Counseling and Testing
WAZ	Weight for Age Z-score
WDC	Washington, DC
WFP	World Food Program
WHO	World Health Organization
WR	World Relief
WRA	Women of reproductive age
WV	World Vision

A. MAIN ACCOMPLISHMENTS

To improve the health and nutritional status of children in Sofala, Food for the Hungry (FH) is currently implementing a five-year (October 1, 2005- September 31, 2010) \$3.5 million¹, Expanded Impact Child Survival Project utilizing the Care Group (CG) model.

Estimated Infant and Child Lives Saved

An analysis of program results to date using the Bellagio Lives Saved calculator showed that 6,316 lives have been saved to date by this project and the total estimated reduction in U5MR is 32% (so far). Given the costs of the project at midterm (\$1,924,722, USAID+match) and the estimated lives saved, the **estimated cost per life saved is \$305**. This is 24% of the average cost per life saved in full-term CSHGP (\$1,293)².

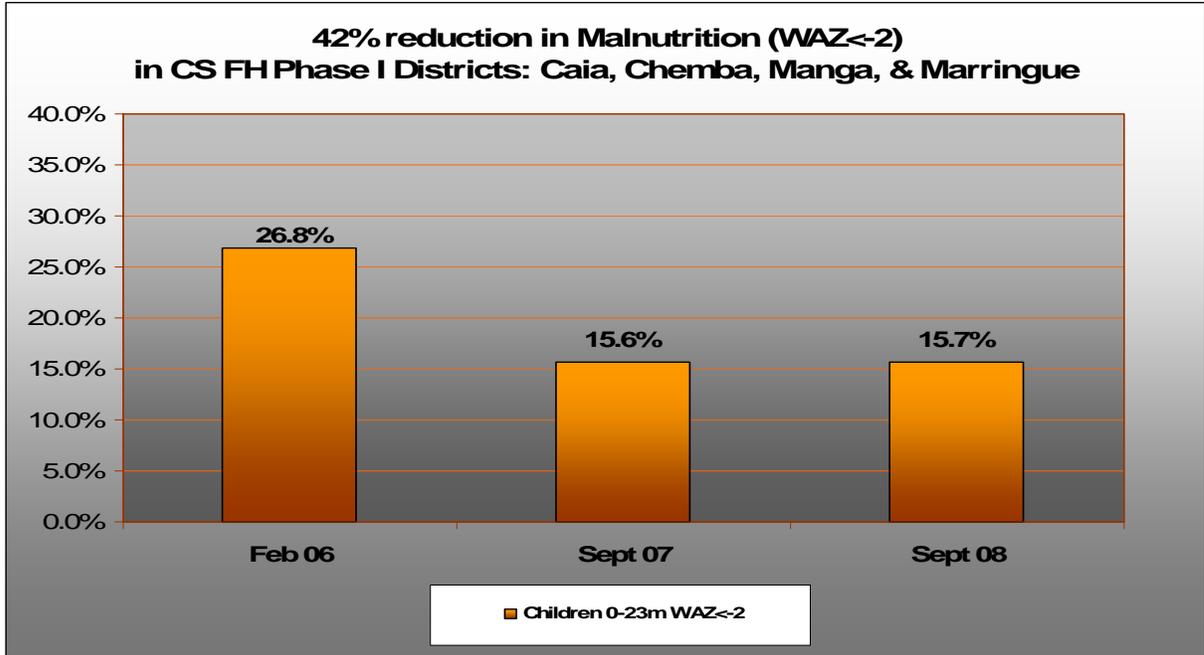
Lives Saved by Cause of Death			
Disease or Condition	Number lives saved for that cause IN LAST YEAR	Number of Lives Saved since Baseline	Percent of baseline deaths saved for that cause
Diarrhea	2,026	3,038	88%
Pneumonia	1,408	2,111	54%
Measles	3	5	19%
Malaria	595	892	15%
HIV/AIDS	0	0	0%
Neonatal	180	269	6%
	4,211	6,316	32%

Decrease in Malnutrition and Improvements in ENA and EHA

Underweight in CS Phase I districts (Caia, Chemba, Manga [Beira] and Maringue districts) has declined by 42% from 26.7% at baseline to 15.6% during the last monitoring. This change is statistically significant. FH entered an additional four districts this past year as part of Phase II. During the recent baseline for these Phase II districts, 29.4% of children 0-23m of age were found to be underweight (WAZ<-2).

¹ \$2,699,910 USAID funds and \$847,653 Match funds

² Based on an analysis by Jim Ricca at MCHP on 23 CSHGP programs presented to the USAID Global Bureau staff on Jan 10 entitled, “2008 CSHGP MNCH projects consistently demonstrate high impact at low cost with community-focused approaches”. The average estimated lives saved for all 59 projects ending between 2004 and 2007 is 713, about 11% of the estimated lives saved in this project at midterm.



Behaviors in the Phase I districts regarding Essential Nutrition Actions and caring for sick children behaviors have seen dramatic increases. For example:

Indicator	Baseline Feb 06	Midterm Sep 08	% Change since baseline
Percentage of infants aged 0-5 months who were fed breast milk only in the last 24 hours (EBF)	17%	77%	353% increase
Percentage of children 9-23m who receive food other than breast milk at least three times per day	33%	58%	76% increase
Percentage of children 6-23m who have consumed at least one vitamin A rich food in the previous day	29%	81%	179% increase
% of mothers of children 6-23 months who know at least 3 danger signs of childhood illness	29%	93%	221% increase

Care Group Community-based Social Marketing and Behavior Change in Phase I and II Districts

Until 2009, the CS project has been operating in the Phase I Districts of Chemba, Marringue, Caia, and Beira (Manga area). In 2009, the CS project began to implement activities in Phase II districts of Dondo, Nhamatanda, and Gorongosa. As requested by the Ministry of Health, the CS project sought out the most distant communities in these three districts, where the population lacked information and consistent contact with health facilities and formed Care Group in these villages. They continued moving in toward the center of the district forming Care Groups as staffing ratios (and beneficiary targets) allowed.

In the new, Phase II districts, 3 Officials, 36 Promoters, and 25,799 Lead and Beneficiary Mothers were trained in Module 1: How to Work in the Community and Module 2&3:

Water, Sanitation, and Diarrhea. A KPC baseline survey was conducted. FH assisted the MOH to conduct a vitamin A and deworming campaign, and Phase II Officials and Promoters were trained in Verbal Autopsy, Vitamin A supplementation, and deworming. A mini-KPC was done in September of 2009 to measure the impact of Module 2&3 in Phase II districts.

In Phase I districts 3 Officials, 25 Promoters, and 20,000 Lead and Beneficiary Mothers were trained in Module 8 (Malaria) and in Culinary Demonstrations (see section E for a description of this activity that replaces PD/Hearth). Regular deworming and vitamin A supplementation continued at the household level, although – due to the fact that mother’s are increasingly taking their children to the health post or participating in vaccination campaigns – only a small proportion require household-level vitamin A distribution and deworming.

Zinc Operational Research

In 2007, the Mozambique MOH approached USAID requesting assistance with operational research to evaluate the practicality and sustainability of community strategies to access and utilize zinc in the treatment of diarrhea for children under five years of age. In 2009, sixty illness narratives were done with the parents of children who had diarrhea within the last two weeks and 140 semi-structured interviews were done with parents, CHW and facility based health workers. The National Institute of Statistics has been delayed in producing a report on the findings of this study, but will finalize the report in the 2010. One-hundred and eight ACSs (C-IMCI trained Lead Mothers), 13 FH officials, and 14 MOH Nurses were trained in the treatment of diarrhea with Zinc + ORS. Zinc and ORS supplementation has begun in Caia and the Manga area of Beira District and to date 1,184 children <5 years of age with diarrhea have been treated. BCC materials have been collected from the MOH and FH is submitting a draft of their revised material to the MOH in October of 2010. See Annex 9 to view the draft being reviewed by the MOH. A Zinc Barrier Analysis³ questionnaire has been submitted to the MOH for approval and in 2010 a BA study will be conducted.

C-IMCI

Prior to 2009, one hundred and sixty LMs had been trained by MOH certified C-IMCI trainers using a modified version of the Facility-based IMCI curriculum. Supervision and follow-up of C-IMCI Lead Mother providers made it clear that the C-IMCI training needed to be simplified, and participatory lesson plans using the principles of adult education needed to be elaborated. **In 2009, FH produced a simplified C-IMCI curriculum specially designed for training non-literate CHW to use the C-IMCI algorithms produced by the MOH.** (See Annex 10 for an English copy of this curriculum and Annex 11 for the Portuguese C-IMCI cards the MOH produced.) All thirty-one Phase I promoters, three MOH Nurses, and three FH officials were trained in the simplified C-IMCI curriculum. They in turn trained 4,130 Lead Mothers and gave each LM a laminated C-IMCI counseling card. Lead Mothers, in turn, are training Beneficiary Mothers in their Care Groups. In 2010, one Lead Mother from each group of

³ See <http://barrieranalysis.fhi.net>.

Phase I Leader Mothers will be selected to be trained and certified by the MOH in C-IMCI.

At the start of 2009, Phase I C-IMCI trained Leader Mother's received an IMCI refresher training. They will receive a second refresher training in 2010, using the simplified C-IMCI training curriculum.

Advocacy for National Scale-up of the Care Group Model

The Mozambique MOH has had plans since 2001 to revitalize the CHW role in order to extend the current coverage of health care provided to the Mozambican population (from ~40%) and because of the important role that these community workers play in relation to health promotion, disease prevention, and community-level case management. In order to achieve these goals, USAID provided financial support to the MOH and consultants gathered evidence and reviewed reports and literature in order to provide a revitalization policy and curriculum. FH Mozambique was given the opportunity to present to the consultants and other stakeholders present on the effectiveness of Care Groups in reducing malnutrition, improving ENAs and essential hygiene actions, and increasing the utilization of facility-based services. The CS Manger, Ms. Hernandez, discussed at length with the consultants the methodology, feasibility, impact, and cost of implementing the Care Group strategy in Mozambique. (This information was also presented to USAID and other stakeholders in Maputo following the MTE.)

The Draft Operational Plan and Curriculum were released in March 2009 and includes a statement that recognizes the usefulness of Care Groups in reducing morbidity and mortality:

the Care Group, made up of volunteers (usually mothers) who gives advice to 10 households in basic subjects (nursing, nutrition of mothers and children, pregnancy, STIs, HIV, diarrhea, signs of distress) has proved to have a notable impact on morbidity and mortality⁴

However, this report specifies that this is a function beyond the scope of the redefined CHW role, at least in Phase I of the plan. Please refer to section H for additional information on Care Group advocacy efforts.

Another success is that – in the revitalized role of the CHW – CHWs will be able to provide health facility referrals for complicated cases, malaria testing, malaria treatment, ORS, and antibiotics for uncomplicated ARIs. Although C-IMCI trained CHWs have been able to refer children to the health facility and provide ORS, they have not been authorized before this point to provide malaria testing, treatment, or antibiotics for pneumonia. Once this policy is passed, it will increase the effectiveness of C-IMCI providers in reducing the morbidity and mortality due to malaria and pneumonia.

⁴ Mocambique: Plano Operacional para re-implementação do Programa dos APes, Final Draft. March 22, 2009, page 18. Translation provided by Google translate and Carolyn Wetzel.

B. ACTIVITY STATUS

Objective / Activity	Status of Activities / Comments
<p>Improve Child Nutritional Status</p> <ul style="list-style-type: none"> • BCC and nutrition promotion via CGs • Home visits every two weeks • Technical training of partner staff in nutrition • Community IMCI training of LMs and Facilitators • PD/Hearth nutritional rehabilitation • Barrier Analysis to improve nutritional messages • Promotion of the production of Vit A rich foods • Vit A supplementation of children > 6m • Deworming of children >12m • Malnutrition Screening as part of Hearth 	<p>Phase I complete</p> <ul style="list-style-type: none"> - Module 1-7 completed • Additional module on Malaria being taught currently. • Home visits and BCC ongoing. 90% of beneficiary HH receive visits form ML every two weeks (mini-KPC 9/08). • BA, PD, partner training and 4 mini-KPCs completed. • PD/Hearth malnutrition screening and community-based rehabilitation ongoing. • Promotion of Vit A rich foods ongoing • Community-based Vitamin A supplementation and deworming conducted with MOH for the 1st 2.5 years, now done by the MOH with limited FH support. <p>Phase II on target</p> <ul style="list-style-type: none"> - 3 of 7 module trainings complete • Home visits and BCC ongoing. 77% of beneficiary HH receive visits form ML every two weeks (mini-KPC 9/09) • 1st mini-KPC completed – data being analyzed • PD/Hearth to be taught Feb. 2010 • Promotion of Vit A rich foods ongoing • Community-based Vitamin A supplementation and deworming being done by MOH
<p>Assure Appropriate Diarrheal Case Management</p> <ul style="list-style-type: none"> • BCC on diarrhea management including ORT in CGs • Technical training of partner staff in diarrhea and C-IMCI training • ORS stocks provided to LM's • Demonstration of preparation and use of ORS through Care Groups and home visits. <p>Zinc OR</p> <ul style="list-style-type: none"> • Illness Narratives and Semi-structured interviews • Design and dissemination of BCC materials • Barrier Analysis • KPC 	<p>Phase I complete</p> <ul style="list-style-type: none"> • Diarrhea and hygiene materials development complete. BCC underway in CGs. • Community-based ORS distribution underway. 77% of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF) (mini-KPC 9/08) • MOH and available partners trained in C-IMCI <p>Zinc OR not yet on target</p> <ul style="list-style-type: none"> • 60 illness narratives were done with the parents of children who had diarrhea within the last two weeks • 140 semi-structured interviews were done with parents, CHW and facility based health workers. • 108 ACS (C-IMCI trained Lead Mothers), 13 FH officials, and 14 MOH Nurses were trained in the treatment of diarrhea with Zinc + ORS. • 1,184 children <5 years of age in Caia and Manga with diarrhea have been treated with Zinc and ORS. • BA and the KPC have been re-scheduled for 2010. <p>Phase II on target</p> <ul style="list-style-type: none"> • Diarrhea and hygiene materials development complete and training has occurred. BCC underway in CGs. • Community-based ORS distribution underway. Stocks adequate.

<p>Increase the proportion of mothers of young children who have access to an IMCI-Trained Provider within one hour of their Home</p> <ul style="list-style-type: none"> • Development of simplified C-IMCI education modules for use by CGs <ul style="list-style-type: none"> • Train Phase I and II Promoters in the simplified C-IMCI curriculum. • Promoters train ML who train MB 	<p>Phase I complete</p> <ul style="list-style-type: none"> • Training in C-IMCI complete for LMs, staff and MOH staff. No NGO partners trained. • C-IMCI curriculum complete and available for repetition. • C-IMCI materials for community use in place and training guide developed to improve retention and use of pictorial algorithms. • Promoters trained in the simplified C-IMCI and training ML who are training beneficiary mothers <p>Phase II on target</p> <ul style="list-style-type: none"> • Promoters trained in the simplified C-IMCI and training ML who are training beneficiary mothers
<p>Assure the sustainability, quality & expansion of the CG model in Mozambique</p> <ul style="list-style-type: none"> • Operations Research on the reasons for CG effectiveness • Presentations of FH model with MOH leaders in two adjacent provinces • Advocate for CG model in international, national, and provincial meetings 	<p>Phase I & II on target</p> <ul style="list-style-type: none"> • Care Group OR developed and activities being carried out • Presentation to DPS during regular meetings. USAID interested and aware, with successful presentation to MOH shortly after the MTE. • USAID funding OR in zinc-supplementation using CG model • Cabo Delgado Province MOH approved CG model use there (using Title II funds).

C. CONTEXTUAL FACTORS THAT HAVE IMPEDED PROGRESS

Occasionally, chronic illness and deaths among staff have limited the projects ability to meet targets or carry out activities with complete coverage. (For example, one promoter unfortunately died soon after being appointed to his position, and this delayed health promotion in the Care Groups that were to be reached by that promoter.) Political events, such as visits from the president and the 2009 elections have resulted in unplanned holidays and delays in negotiations with the government, especially related to the Zinc OR. The low level of education of both Promoter and Mother Leaders has required some extended and refresher trainings to assure that messages have been understood.

D. TECHNICAL ASSISTANCE REQUIRED

CS HQ: Technical assistance has been provided by FHUS to the CS Mozambique staff in training, answering questions, and reviewing survey and result reports in the following activities: Mini-KPC Methodology and Analysis, Verbal Autopsies & Mortality Tracking, Monthly reporting, Budget Management, and the development of the C-IMCI curriculum, Care Group OR, and follow-up with the Zinc OR. An outside consultant, Judiann McNulty, produced the simplified C-IMCI training curriculum (see Annex 10).

MOH: The Mozambique MOH trained FH staff in the treatment and management of diarrhea with ORS and Zinc. INS carried out illness narratives and semi-structured interviews in Zinc OR communities.

CUAMM: CUAMM has Nutritionists and Pediatric doctors that are specialists in nutritional rehabilitation, especially in the clinical setting, and have provided advice and support to FH field staff in this area.

E. SUBSTANTIAL CHANGES SINCE DIP or MTE

Hearth: Originally, the project planned to carry out Hearth nutritional rehabilitation and Phase I staff members were trained in the Hearth methodology in 2008. Due to the distance between malnourished children identified in communities, the large reduction in malnutrition since baseline (42%), and the fact that the Ministry of Health had begun providing Plumpy'nut and an Enriched Soy product, the CS staff decided to modify Hearth and started doing "Culinary Demonstrations." In the Culinary Demonstration activity, Mother Leaders evaluate the nutritional status of children from 6-23m of age using MUAC tapes. Malnourished children identified by MUAC are sent to the CS Promoter to be weighed and then referred to the Health Post if they have a WAZ score below negative one. After treatment and provision of RUFT foods, children are followed up by Leader Mothers. CS Promoters demonstrate to the parents of malnourished children how to prepare enriched porridge using local ingredients and using the enriched soy flour. LM's assure that the family uses the RUFT as directed and that the child's weight returns to normal.

Ceiling Increase for Zinc OR: The \$200,000 ceiling increase for the Zinc OR was approved in 2009.

Request for a no-cost extension: A four month no cost extension was requested in August of 2009. FH was informed that this request would be considered in Spring of 2010.

F. SUSTAINABILITY

Community Leaders: The CS project has been working with Community Development Committees (CDC) since the project started with the objective of: (1) the community taking ownership for the CS project and goals, (2) the community leaders mobilizing residents to adopt behaviors promoted by the CS project, and (3) community leaders recognizing and supporting Mother's Leaders as community volunteers who are working for the benefit of the community. This effort was supported by a parallel Food Security Program that operated in CS areas until April of 2007 that trained CDC members. In 2009 the CS Management team held district level meetings with leaders from each of the CS communities to present project results. In these meetings, it was noted that Community Leaders had exchanged the idea that community problems needed to be solved by people external to their community and come to understand that community development, including the area of health, depends primarily on community members and behaviors. One measure of program sustainability – Care Group volunteer (Mother Leader) visits to their beneficiary mothers – has remained high throughout the project (please see graph in Annex 1). See Section H for more about program sustainability.

G. SPECIFIC INFORMATION (N/A)

H. ACCOMPLISHMENTS IN THE CONTEXT OF THE OVERALL STRATEGY FOR CONTRIBUTING TO SCALE

Scaling up the Care Group Strategy: While it can be considered a success that the March 2009 CHW Operational Plan (Final Draft) recognizes the effectiveness of Care Groups in reducing mortality and morbidity, it is a concern that the “revitalized” role of the CHW will not allow Mozambique to reach their MDG by 2010, nor does it recommend CHW participation in the Care Group model despite its remarkable success in lowering mortality at low cost. The Operational Plan specifies that CHWs (known as APE in Portuguese) will receive a subsidy and serve 100 to 400 households, providing C-IMCI consults, home visits, community preventative health education (three group meetings per month), assist with mobile clinics and report to health facilities.

The subsidized CHW could work much like the Promoter works in the Care Group method, training groups of Mother Leaders, who in turn train Mother Beneficiaries. In this way, the household level behaviors that have recently been highlighted in the Lancet (and that are referred to in the Operational Plan) which significantly reduce morbidity and mortality could be disseminated amongst all 400 households that the CHW reaches. Instead, the CHW Operational Policy specifies that CHW will provide direct community education to their 100 to 400 households and specifies in detail what the educational content will include in the “Curriculum APEs Draft” document. However, neither the Policy or Curriculum explain how the CHW will communicate these messages and to not promote a cascade training approach (e.g., Care Groups). A PowerPoint presentation given by the Mozambique MOH specifies that – after each block teaching session – the CHW will give three lessons using posters provided, but it does not indicate the expected attendance or how people will be encouraged to attend the meetings. In reality, it is likely that the curative aspect of the CHW’s work will take precedent over the daunting task of trying to gather community members to hear a lesson they know the CHW is paid to give.

In addition to not having the high-levels of individual, face-to-face contact time with a high proportion of mothers that is achieved by the Care Group model, by not using Care Group volunteers, the system will also lose the benefit of having neighbors promoting behaviors with neighbors through home visits, one of the suspected reasons for success of the Care Group model.

Another concern is regarding the cost of the plan being proposed. Each CHW will work with 134 children 0-23m.⁵ Total direct beneficiaries would be about 584⁶ per CHW. Given that there will be 2,340 CHWs, a total of 1,366,560 beneficiaries are estimated to be reached with this new plan. Given the \$20,155,781⁷ annual budget for this plan, the cost per beneficiary per year would be around **\$14.75. This is more than triple the FH/Mozambique CS Care Group project’s cost-per-beneficiary** (@ \$4.30 including

⁵ ~400 HH x 5 people/HH = 2,000 people/CHW x 0.168 (portion of pop that’s children under five) = 336 preschool children, or 134 children 0-23m (336/5*2).

⁶ 248 mothers + 336 preschoolers = 584

⁷ Average yearly cost of the plan over six years.

USAID and matching field and US HQ funds⁸) and **we expect achievements in reducing the U5MR to be less than the 32% estimated for this project (YTD) given that less focus will be on preventive behavior change.** FH will continue to try to influence national policy on this.

Care Group Criteria and Website: Since 1995, FH, WR, and at least 15 others PVOs in more than 14 countries have adopted the Care Group model. Many of these organizations first heard about Care Groups during presentations by FH or WR. (FH has also been expanding the use of the model through its privately-funded child development program.) However, the degree to which organizations adhere to the original and most effective components of the model varies greatly. While there has been increased attention to the model and its effectiveness in lowering child deaths (e.g. mentioned in the UNICEF's 2008 State of the World's Children report), there is a danger that the wide variations in what is called a "Care Group" by various agencies will lead to misunderstandings about the model and the use of less effective strategies that do not fit within the model. These variations, in turn, could lead to fewer opportunities to advocate for the Care Group model and its role in child survival, since the term "Care Groups" could come to mean many different things to different people and could develop a very mixed track record. In an effort to clearly define the elements essential to a project being able to use the "Care Group" label, experts from Food for the Hungry and World Relief who had experience implementing Care Group programs met together in August of 2009 to define what they considered required elements and suggested elements. Edits to this list were then made by the two founders of the model, Dr. Pieter Ernst and Dr. Muriel Elmer. The "Care Group" criteria has been circulated to members of the CORE Group through the Social and Behavior Change working group website and a copy has been sent to Jeri Dible, in USAID Mozambique to share with the consultants responsible for creating the CHW strategy for Mozambique. (The Care Group Criteria can be found in Annex 8.) FH recently purchased a web domain (www.CareGroupInfo.org) so that people around the world can access information on Care Groups. The site is presently under construction as a joint project by FH and WR.

Use of Care Groups or CS Curriculum by other NGOs working in Mozambique: Other NGO's working in Mozambique have requested information and training regarding the Care Group strategy (CUAMM, CCS, Clinton Foundation, and Comussanas). Due to pre-existing project plans, finances, and differing objectives, none of these organizations have implemented the Care Group model. Many have received digital copies of the CS Educational Modules and are using or plan to use the material. See also Section J for more information on how the capacity of local partners to effectively address local health needs has been increased.

Research on the Care Group model: FH is currently involved in research on the Care Group model in two sites. FH is testing the Care Group model in terms of reduction of diarrheal prevalence in children 6-47m of age in Bolivia. There are four research arms in this study (to be completed in August 2010): (1) Care Groups only; (2) Sawyer PointOne

⁸ \$3,347,734 / 5 years / 155,667 beneficiaries = \$4.30/beneficiary/year. \$3.21 when only using USAID funds.

Water Filter only; (3) Care Groups + water filter; and (4) controls. FH is also involved in measurement of the Care Group model as part of a Title II PM2A project in Burundi, in partnership with CRS and IMC. Lastly, FH staff members are working with other authors to publish the results of our earlier Title II Care Group project in Mozambique.

I. MANAGEMENT SYSTEMS

Human Resources: As mentioned in Section C staff morbidity and mortality has caused delays and decreased project coverage at times. Another factor has been that Mozambique labor law entitles women to ninety days of paid maternity leave. In Phase II districts, the project was intentional about prioritizing female candidates. Now, 29% of Phase II promoters and 27% of total CS staff are females. But this has also meant that in Phase I communities the project has been affected to a greater extent by extended promoter absences due to maternity leave. In order to help rectify this, a “floating” Official (supervisor of promoters) and floating Promoter were hired at the start of 2009, but they both quickly became fixed staff due to staff deaths and resignations. The replacement of floating Officials and Promoters is a continuous need and management burden.

Finances: The FH Mozambique financial department uses the “SUN” system to enter expenses and provide monthly reports to program managers. The SUN system allows FH to track funds received from donors separately. On the 20th of every month, a draft report is prepared for program managers to review and verify. Based on comments received from program departments, a final report for the previous months spending is produced on the 25th of the following month. These reports are submitted to FH headquarters in Phoenix and used to compile quarterly USAID financial reports. Headquarters expenses are tracked using the Forecaster system and closely monitored by the CSNPC.

Management: Carolyn Wetzel, MPH/TM is FH’s Child Survival and Nutrition Programs Coordinator, and serves as the primary technical and administrative backstopping to the field staff. She is supported by Tom Davis, MPH, FH’s Director of Health Programs (DHP). Emma Hernandez Avilan, BSN is FH/Mozambique’s full time Child Survival Program Manager and is responsible for managing the CS team in Mozambique. Ms. Cecilia Lopez is the CS M&E Coordinator, Mr. Luciano Menete is the CS Coordinator and Trainer, and Mr. Jose Manuel is the Zinc OR Coordinator.

J. LOCAL PARTNER ORGANIZATION COLLABORATION AND CAPACITY BUILDING

Mozambique Ministry of Health (MISAU) and Ministry of Women and Social Action (PWCSA): A representative from the government is attending district level monthly CS meetings. In these meetings FH Officials meet with all the CS Promoters working in their district and provide refresher training, coordinate project activities, and submit monthly reports. The attendance of government staff allows for the easy flow of information between the Ministries, FH, and the community. On a quarterly basis the CS Project Manager attends a MOH led meeting and is given the opportunity to share CS activities and results.

C-IMCI: The FH CS project has been instrumental in building the capacity of the MOH in the areas of IMCI training and implementation. Prior to development of the simplified C-IMCI Training Curriculum (see Annex 10) C-IMCI government certified trainer had to independently adapt the facility-based IMCI Manual to train community health workers. This meant that often training objectives were beyond the educational level of community volunteers, material was complicated and not adapted to non-literate learners, and the training format (ten, six hour days) was not adapted to the needs and experience of community volunteers. The simplified, C-IMCI Training Curriculum has been shared with MOH staff and will hopefully influence the final CHW training manual produced.

CS BCC Materials: The CS project has developed high quality, color flipcharts with corresponding training manuals to use in communicating BCC messages. Frequently organizations in Mozambique and outside of Mozambique are requesting that Food for the Hungry share the BCC materials with them. The Clinton Foundation received digital copies of the CS BCC materials and is using them to do education in Health Posts in Beira, Quelimane, Inhambane, and Maputo. CSS, an Italian NGO, has been using the FH BCC materials to promote behavior change among children in schools in Beira, Nhamatanda, Gorongosa, Maringue, Quelimane, and Maptuo.

CUAMM and MISAU: CUAMM implements a health facility based nutritional rehabilitation program in Beira. Both FH and CUAMM work in close cooperation to assure malnourished children are identified and referred to the health facility and complete the nutritional rehabilitation program. CUAMM provides the facility based services and FH provides the community based services and tracking and follow-up through the Care Group network.

MISAU, CUAMM and FH also produced a recipe book for use in FH led Culinary Demonstrations (an activity that has replaced Hearth in Phase I districts). Culinary Demonstrations are a MISAU province wide program that is designed to occur in health facilities. Unfortunately, the health facilities are not equipped with recipe books and often lack the food needed for a demonstration. MISAU health posts have borrowed the FH recipe book and FH has assisted the MOH by designing additional recipes that use the soy and corn based products MISAU provides to families who meet vulnerability criteria.

K. MISSION COLLABORATION

The CS Project is collaborating with the USAID mission in the Zinc OR and collaborated with the USAID mission/MOH consultants who created the revitalized CHW Operational Plan during the 2009 Program Year. CS staff members have contacted USAID Mozambique Mission staff approximately every three months to share information or discuss project issues, such as the results of the Midterm Evaluation, to share the Care Group Criteria, or request consultant recommendations. The CS staff members have also communicated approximately every three month with USAID DC staff to update them on project process (for example related to the Zinc OR) and to finalize the ceiling increase.

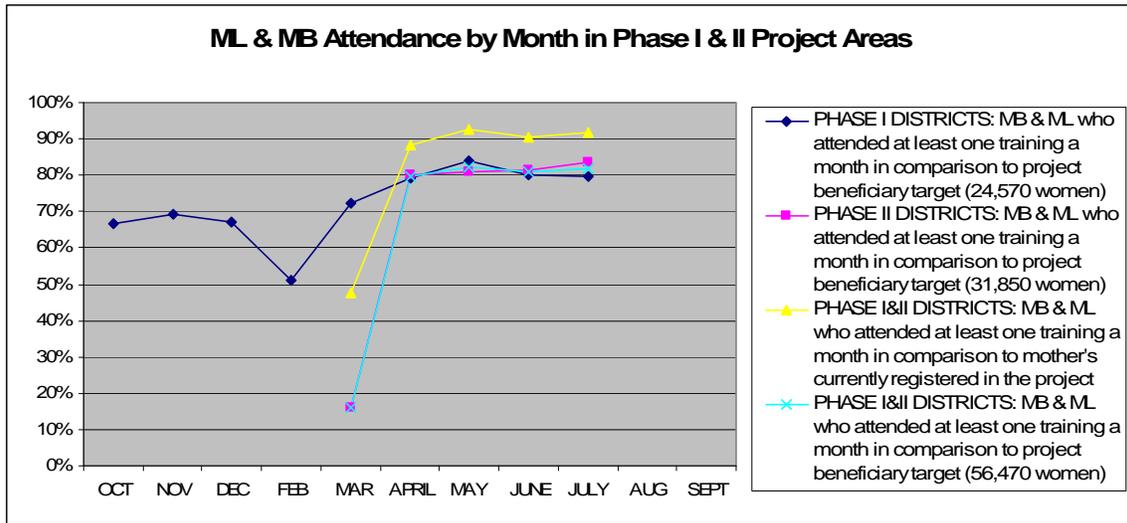
The Mission used project results and lessons learned by providing FH the opportunity to share with the CHW Revitalization Consultants and using Care Groups to improve access

to ORS + Zinc treatment was mentioned as an example of an innovative idea by the Director of the CSHGP during a CORE Spring meeting breakout session.

L. OTHER RELEVANT ASPECTS (N/A)

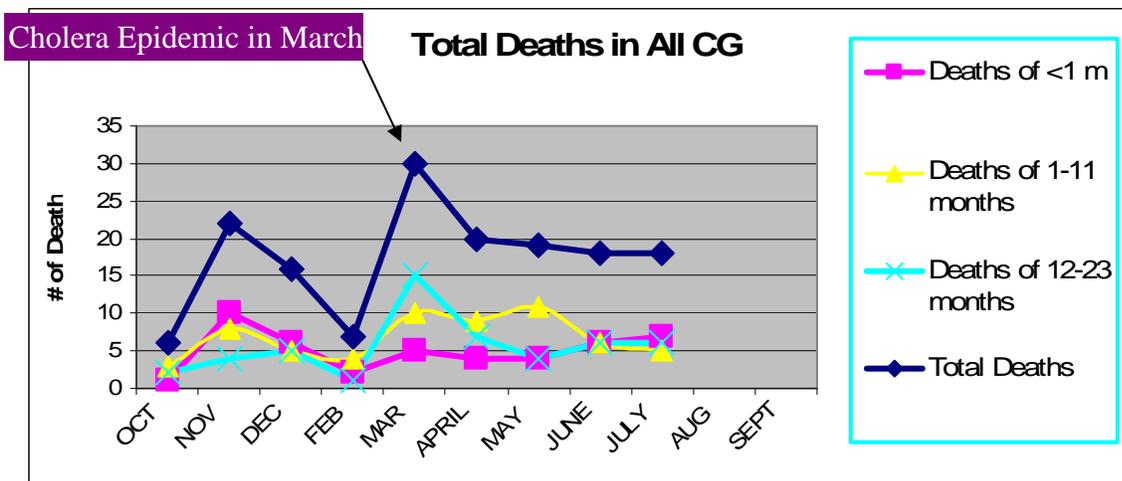
Annex 1: M&E Table

A. Graph 1: Mother Leader and Beneficiary Attendance



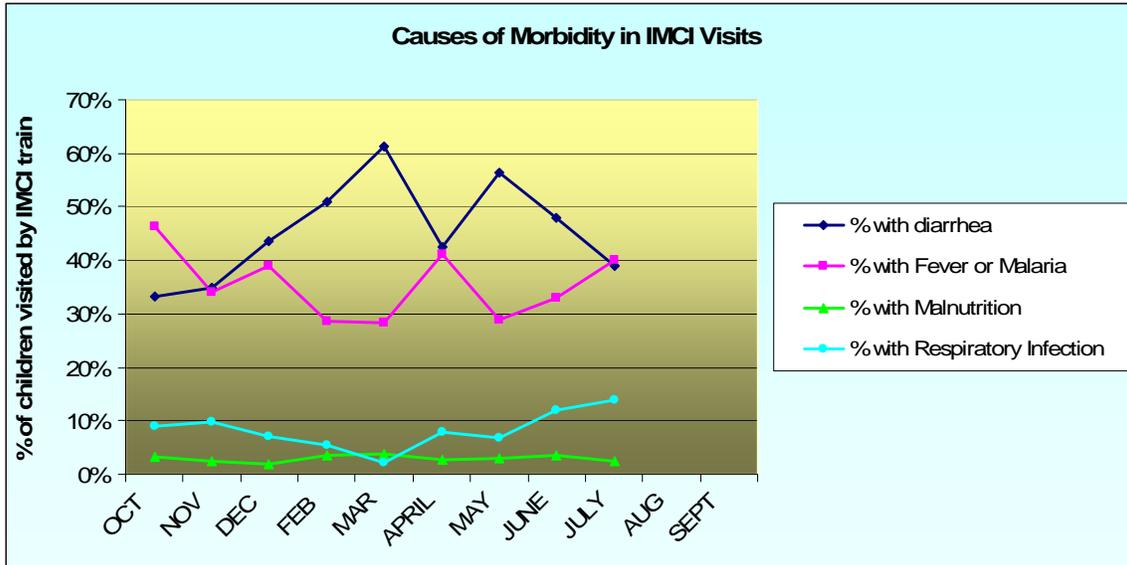
Care Group attendance is high in both Phase I&II districts. Since April 2009 CG attendance has been above 80% when compared with beneficiary targets and above 90% when compared with women registered in the project. The CS project needs to register an additional 2,009 women to complete program targets. The delay in registration is due to personnel problems in Nhamatanda and Gorongosa. In Nhamatanda, a promoter died shortly after being employed by FH and another promoter is not performing up to standard. The CS program is taking the necessary action (according to the Mozambique labor law) to remove him from his position.

B. Graph 2: Mortality Tracking



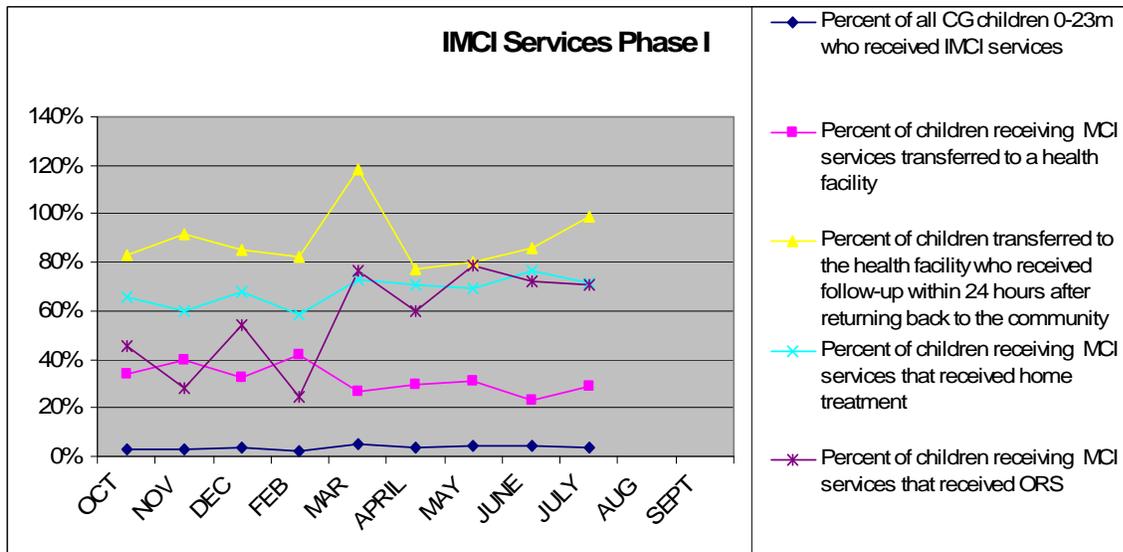
We know Care Group monitoring data does capture all deaths in the Phase I project areas, but it does indicate when significant fluctuations in the number of children dying occur, as can be seen in March when the Cholera Epidemic occurred.

Graph 3: IMCI visits reveal principle causes of Morbidity in Children <2 years of age.



IMCI trained Leader Mother’s classify the child’s illness in one of the 4 categories listed above or as “other”. Although illness classification is limited by the Leader Mother’s skills, morbidity tracking has enabled the CS program to target Malaria as a significant problem in our project area. By tracking morbidity through IMCI visits we have also discovered that malaria is not just a seasonal problem, but that children suffer from fever throughout the year. An additional module on Malaria was added to program BCC materials because of morbidity findings and to educate mothers on malaria prevention, transmission, and treatment.

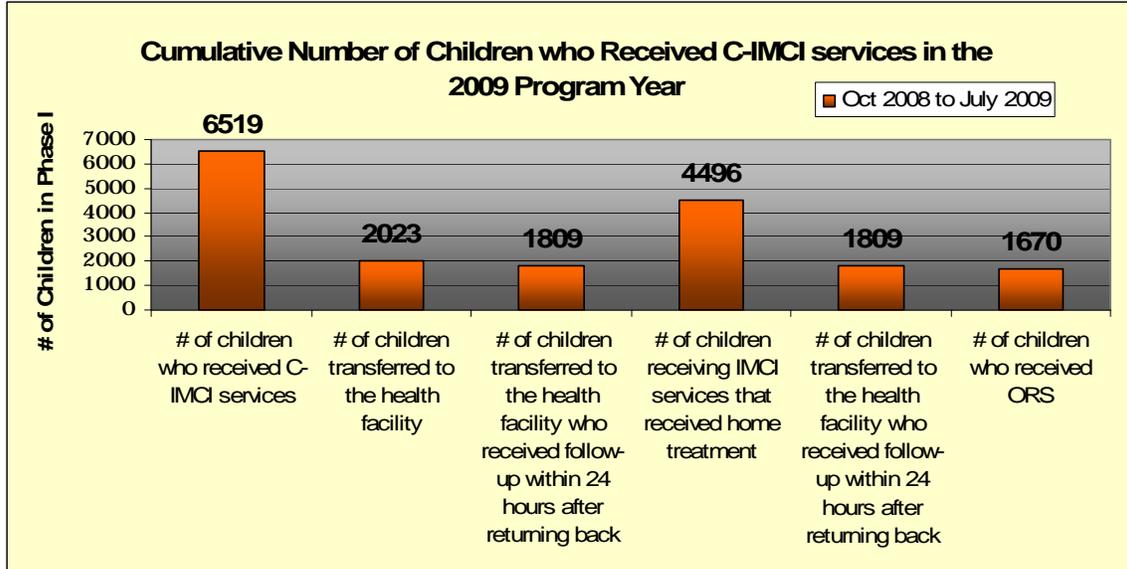
Graph 4: IMCI Services in Phase I Communities



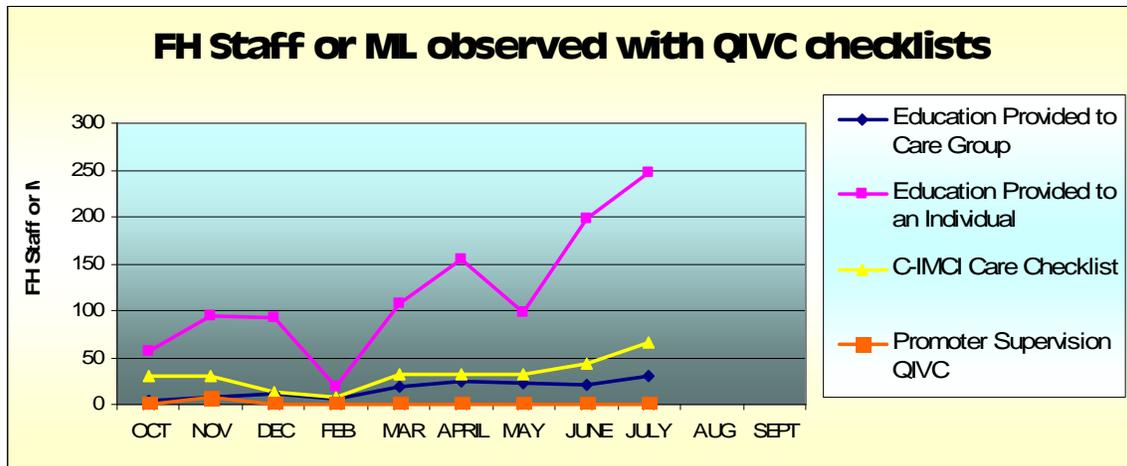
Less than 5% of all children registered in the program need or seek out C-IMCI services. Of those who sought C-IMCI services 29% were transferred to a health facility. Eight percent of children who went to the health facility for treatment were followed up by a C-

IMCI volunteer within 24 hours after returning from the community. Approximately 61% of children receiving C-IMCI services received home treatment and 51% received ORS in Phase I Districts.

Graph 5: Cumulative number of Children who Received C-IMCI services.

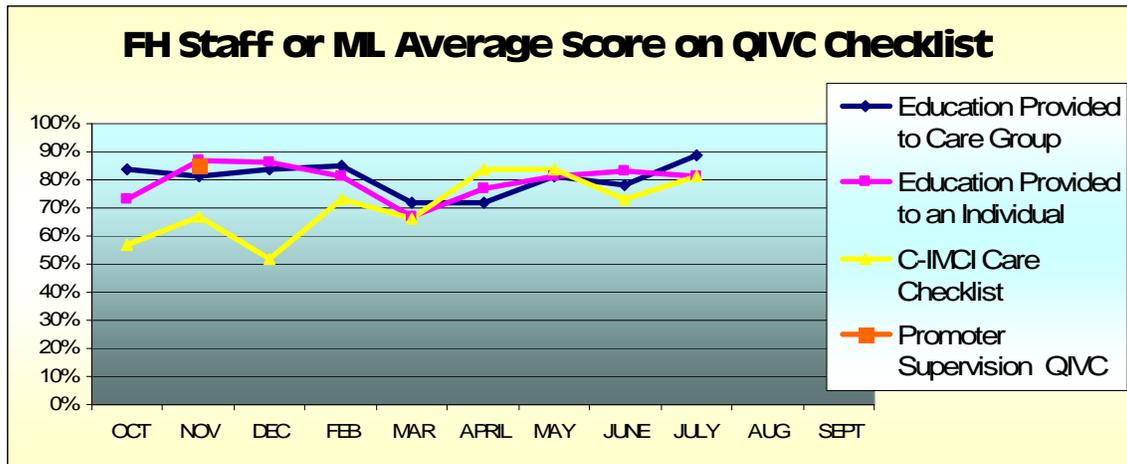


Graph 6: QIVC Checklists



QIVC Checklists are used to assure the quality of frequently done activities. Supervision of Individual Teaching (when ML visits their MB in homes and share the BCC messages with them individually) has been steadily increasing since Feb. when all staff annual leave and none occurred.

Graph 7: QIVC Scores



FH staff and ML routinely score 70% or higher on Education QIVC's. The C-IMCI Care Checklist revealed volunteer C-IMCI providers were not consistently providing the quality of care desired. A fresher training was done with these volunteers and scores have improved to 80% by July of 2009. This is evidence that we are now reaching two of our project objectives: To increase to 80% the proportion of LMs trained in IMCI who can properly use the IMCI protocols for children 2-59m of age; and to increase to 80% the proportion of LMs who are able to do high-quality health promotion.

Table 1: Trainings Held in Program Year 2009 and Pre & Posttest Scores

Participants at Trainings Phases	OCT		NOV		DEC		FEB		March		April		MAY		JUNE	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
Monthly Report and Training	27		27		28		75		71		43				10	
Vitamin A and Mebendazol Distribution	33															
Module 1: Reaching the community				44												
Pretest FH Staff				47%												
Posttest FH Staff				89%												
Baseline KPC Survey Training							68									
Hearth Refresher Training										20						
Presentation and Discussion about Mini-KPC results from Module 6&7									33							
Treatment of Diarrhea with ORS + Zinc (Manga)									18							
Pretest FH Staff									34%							
Posttest FH Staff									82%							
Verbal Autopsy Training for New Districts												40				
Pretest FH Staff												54%				
Posttest FH Staff												75%				
MOH Technicians in Beira and FH Staff: ORS + Zinc to treat diarrhea												33				
Pretest FH Staff												34%				
Posttest FH Staff												82%				
MOH Technicians in Caia and FH Staff: ORS + Zinc to treat diarrhea												13				

Annex 2: Workplan

Activities in ALL Districts

 Phase II Activities

 Phase I Activities

2010 CS WORKPLAN		O	N	D	J	F	M	A	M	J	J	A	S	
Administrative /Advocacy	Staff Collective Leave (Jan. '2010)													
	Monthly Program Report for FH US and MOH													
	Trimestral Report USAID & MOH													
	Tracking Phase I and II Mortality Tracking													
	CS Manager to Maputo for Advocacy on Care Groups (as needed, 4 trips per year planned)													
	Advocacy Regarding Care Groups with MOH													
KPC	Mini-KPC Phase I districts after Malaria Module													
	Mini-KPC Phase II districts after Module 2&3													
Module Training Phase II	Training of Phase II District Coordinators and Promoters in Care Group Module #4&5: Breasfeeding /Intro to Complementary Foods													
	Training of Phase II ML and MB in Care Group Module # 4&5													
	Refine & Print Module 6&7 Material for Phase II Districts													
	Training of Phase II District Coordinators and Promoters in Care Group Module #6&7 Micronutrients/nutrition & Care for Pregant women													
	Training of Phase II ML and MB in Care Group Module 6&7													
	Care Group Graduation													

Zinc OR	Gathering Existing Teaching Material on ORS+ Zinc	■																	
	Finalize Draft Zinc Educational Materials	■																	
	Zinc education by ACS and provision of treatment	■	■	■															
	Barrier Analysis Survey	■																	
	Field meetings with Officials/Promoters/ACS to evaluate Zinc material		■																
	Refine Material after feedback from Field		■																
	Test 2nd draft of material with 14 focus groups		■																
	Final Zinc Ed. Material and Share with MOH			■															
	Printe Final Zinc Ed. Material					■													
	Train Officials, MOH nurses, and ACS in use of Zinc Educational Material					■	■												
	Zinc KPC Survey Training for HPSO and FH facilitators						■												
	Conduct Zinc KPC survey and analyze the results						■												
	OMS MOH INS FH Discuss Results of Zinc KPC							■											
	Prepare Final Report								■										
Supervision	District Meetings 1X month all Districts	■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Monthy visit to districs	■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Supervision by HPSOs using QIVC	■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Supervision by promotors using QIVC	■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Annual meeting with Community Development Committee						■												

Annex 3: N/A

Annex 4: Papers and Presentations

1. Presentation by Tom Davis on “**Behavior Change Strategies for the Postnatal Period: What works**” at the Newborn Care Data Analysis and Program Review Workshop to Guide Program Scale Up (April 30 – May 1, 2009, hosted by JHU and Boston University)
2. Panel Presentation by Tom Davis, presented by Carolyn Wetzel at the Global Health Council (Nov 2009), titled: Community Discovery of Determinants of Exclusive Breastfeeding (Mozambique). Presentation given to ~100 GHC attendees. The presentation explained how the CS project used BA to increase EBF and reduce malnutrition.
3. Plenary Presentation by Carolyn Wetzel at the CORE Spring Meeting (April 2009), titled: Role of Formative Research in the Promotion of Exclusive Breastfeeding. The presentation was given to ~150 NGO, Consultants, and USG employees and accomplished the objectives of:
 - Explain the three types of formative research used to develop program messages and guide beneficiary targeting (Barrier Analysis, Local Determinants of Malnutrition Study, and Focus Groups)
 - Explain how messages were incorporated into the behavior change methodology
4. Presentation to USAID Maputo consultants present in Mozambique to elaborate the new C-IMCI/CHW strategy (Feb 2009) by Emma Hernandez, titled: Achieving Equity, Coverage, and Impact through a Care Group Network Sofala Province, Mozambique. The presentation was given to ~50 representative of NGOs, the United Nations, Government of Mozambique and the Government of the US.
5. District level Community Leader Meetings were held by 2 teams of CS Staff (Team 1: Emma Hernandez & Cecilia Lopez, Team 2: Luciano Menete and Jose Manuel) in each CS district from July 15-17, 2009. Approximately 300 people attended the 7 meetings. CS Program objectives, indicators, and achieved results were shared.
6. Presentation by Emma Hernandez during a MOH biannual meeting to representatives of the MOH, NGO’s, and the United Nations working in the health arena about the mortality tracking methods and results in the CS project. August 2009.
7. Presentation by Tom Davis and Carolyn Wetzel to ~ 18 USAID DRC Mission Representatives and MOH representatives (Jan 2009) about the effectiveness of Care Groups in reducing malnutrition.
8. Presentation by Carolyn Wetzel to the Health Ministry Team of Food for the Hungry (November 2008) titled: Mini-KPC Methodology. This presentation was given to ~6 of Food for the Hungry’s Health Program Managers via Elluminate.
9. Presentation on FH/Mozambique Handwashing with Soap results to the Public Private Partnership for Handwashing (December 2008 at AED HQ)
10. Online presentation to the CORE Community on FH/Mozambique’s Care Group model and handwashing with soap results on Jan 13, 2008 (in collaboration with WR)

11. Presentation on FH's results in hand washing with soap ("Why #2 is #1") at the CORE Group Spring Meeting.
12. How You Can Be a Healthcare Hero presentation at FH's Summit Conference in Phoenix Arizona: Discussion of how church mission groups can do health promotion on child survival behaviors.

Annex 5: Innovation

Contribution to Scale/Scaling Up and Promising Practice: Convincing the MOH with MOH Data of the usefulness of Care Groups or "Block Leaders"

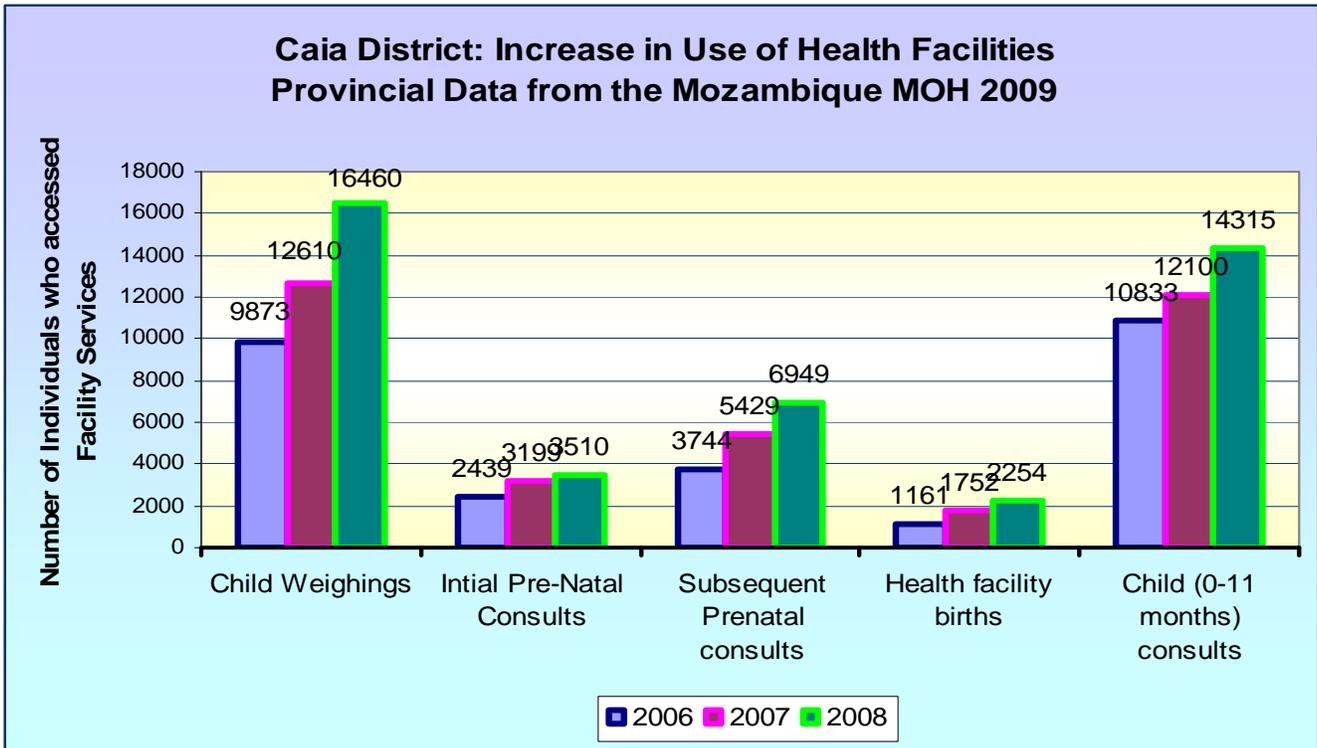
The Problem: The CS midterm consultant, Don Whitson, articulated in his report the problem that the project was experiencing: despite having impressive results (est. 32% reduction in U5MR and \$305/life saved, 42% reduction in underweight), FH has been unable to draw adequate attention of the Mozambican MOH. He explained that while reductions in malnutrition, improvements in household behaviors, and estimated lives saved were impressive to the international community, the Mozambique MOH was measuring their performance on a different set of indicators. He concluded that if the CS project wanted to win the support and gain the attention of the MOH they needed to show improvements in the indicators the MOH was using to show their success.

Projects Input: The CS consultant visited the MOH and requested to see the district data in the Sofala districts. He compared MOH data in CS districts with MOH data in non-CS districts and found that all CS districts showed improvements in health facility utilization where non-CS districts either declined or remained stagnant for many MOH indicators. The CS project has continued to request district level data from the MOH to document improvements in MOH indicators and present this data back to the MOH when invited to speak at provincial or national events.

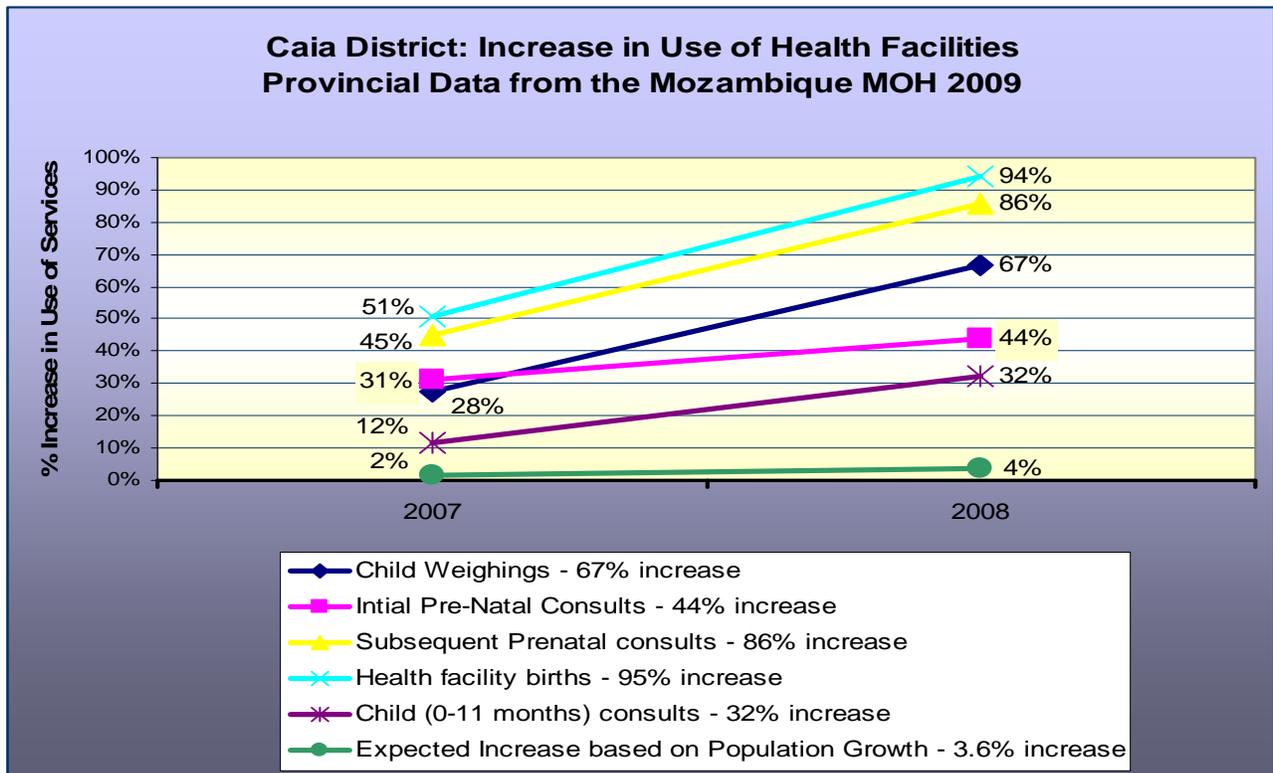
Magnitude of the intervention: The MOH released a national policy for working with Community Health Workers (referred to as APE's in Portuguese) in June of 2009 that mentions the effectiveness of Care Groups in reducing child morbidity and mortality. This strategy will have national level impact. FH will continue to advocate for a robust scale up of Care Groups in Mozambique.

Quantifiable Results: The first two graphs demonstrate the changes in health utilization in the district of Caia where Care Groups are being used. (FH is only working in 50% of Caia communities.) Graphs 3-6 compare data for Phase I project districts with data for non-CS districts in the Sofala province.

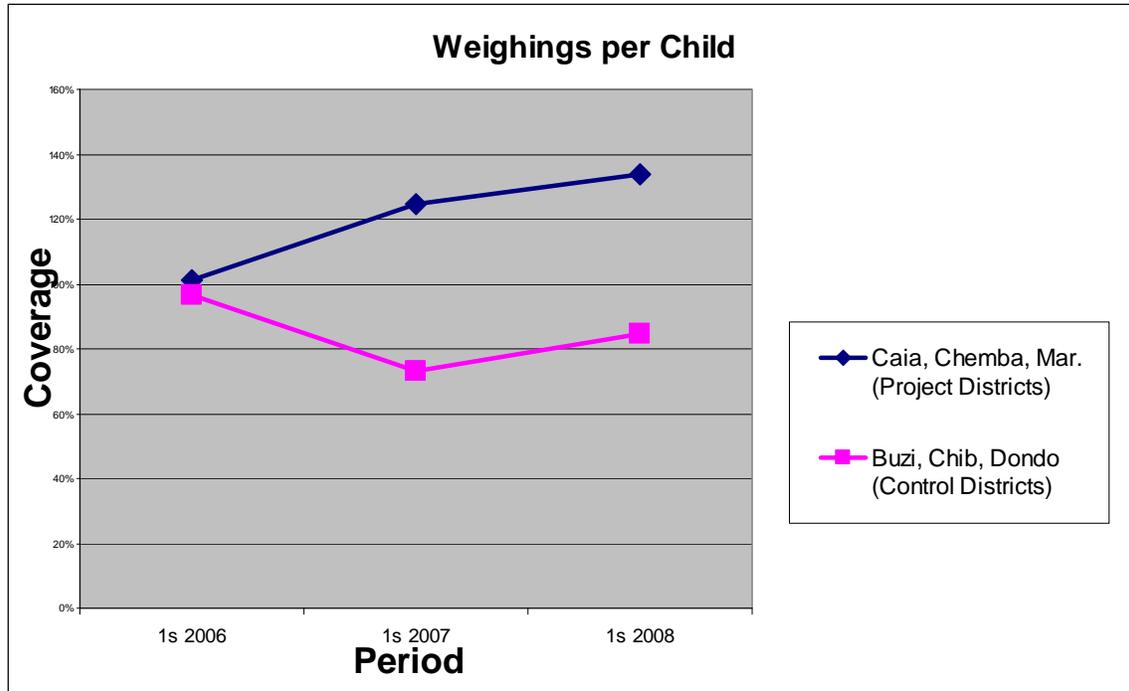
GRAPH 1



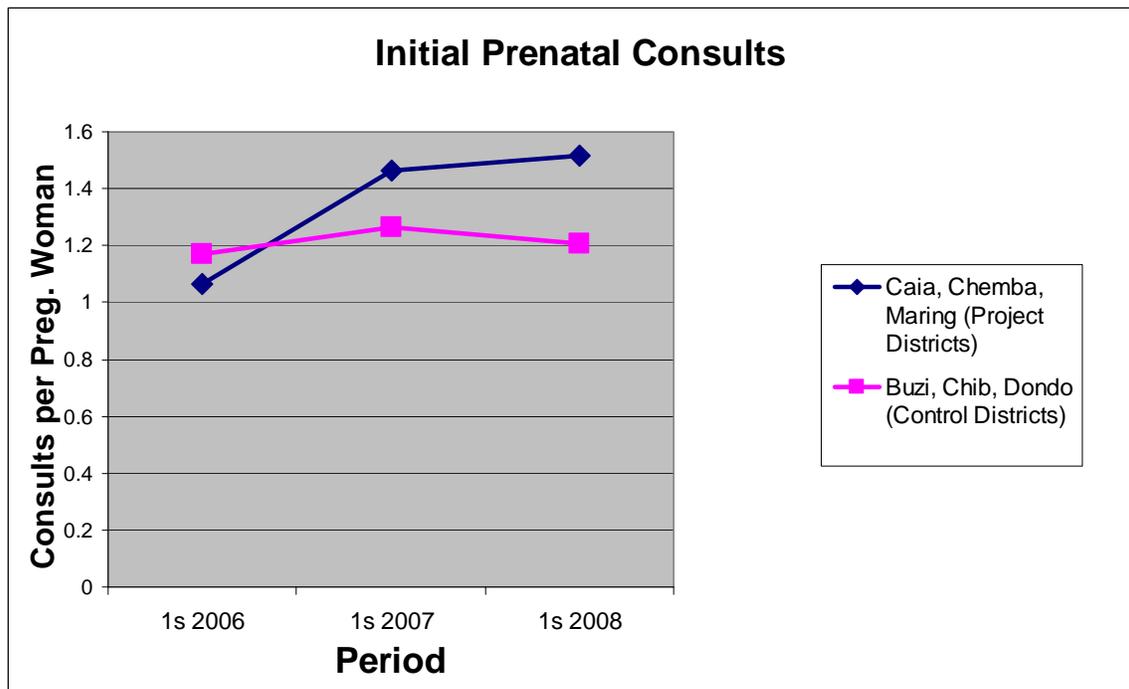
GRAPH 2



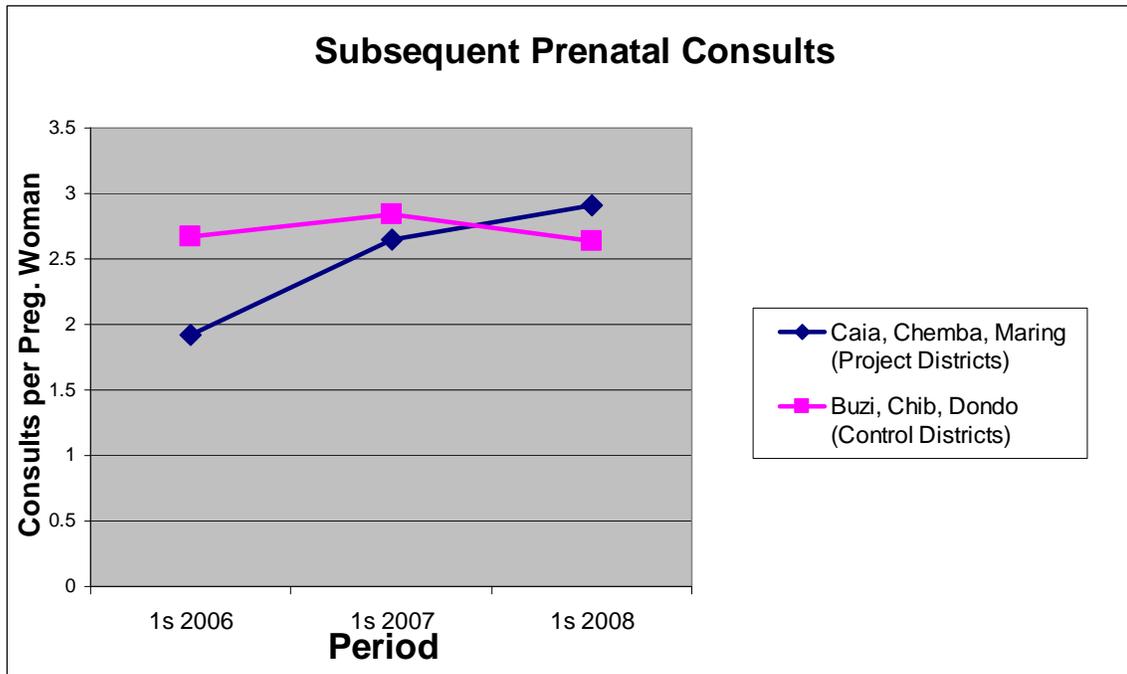
GRAPH 3



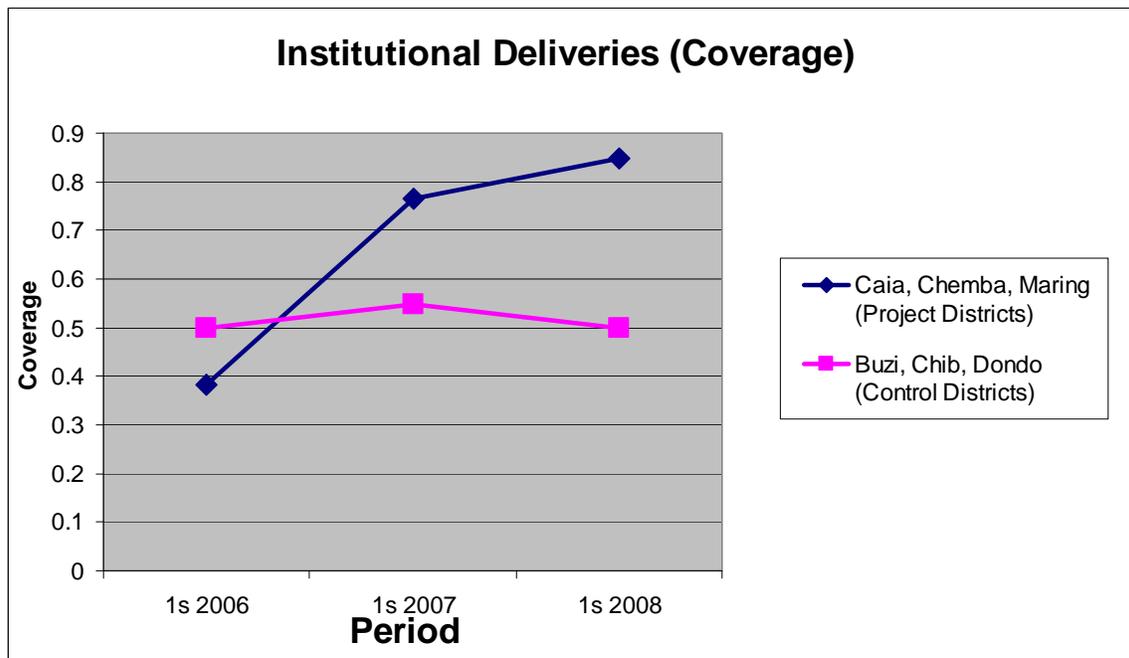
GRAPH 4



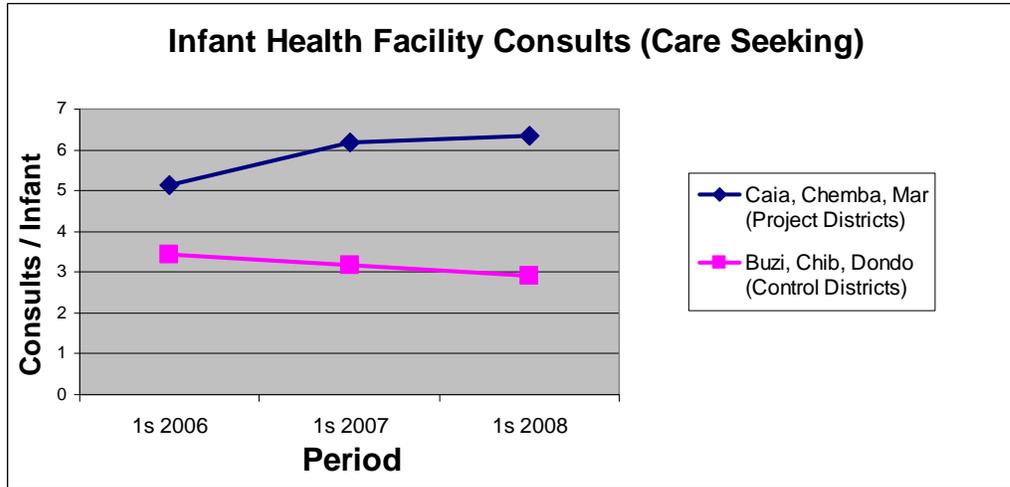
GRAPH 5



GRAPH 6



GRAPH 7



ANNEX 5: Results Highlight

Innovative Idea: Culinary Demonstrations using Recipes designed using formative research, region specific foods and photographs.

The Problem: Mother's in the Sofala province, although encouraged to wean their children with a diversified diet for the last three years in Phase I districts, have long been accustomed to feeding their children porridge made of a starch (corn, sorghum, or cassava) with salt. The Hearth community based rehabilitation program was designed to rehabilitate moderately malnourished children and help mother's learn proper child feeding skills, but due to the distance between malnourished children identified in communities, the reduction in malnutrition since baseline (42%) and the fact that the Ministry of Health had begun providing Plumpy'nut and an enriched soy product for malnourished children the CS staff found community participation in Hearth was not sufficient to continue with the program as originally designed. At the same time the MOH began implementing a program called "Culinary Demonstrations", but lacked recipes to promote, leaving the "how to" of the demonstration to health facility nurses to determine.

Projects Input: The MOH asked CUAMM, an Italian NGO working in the same geographic areas as FH, and FH to assist them in developing and testing a manual titled, "For the Good Nutrition of the Child and Family." The manual explains the four food groups recognized by the Mozambique MOH: Base, Growth, Protecting, and Energy Foods and uses pictures to demonstrate ten different ways these foods can be combined to create tasty and nutritious porridges for children < 5 years of age.

Magnitude of the intervention: Health Centers in the thirteen districts in Sofala: Cidade da Beira, Buzi, Caia, Chemba, Cheringoma, Chibabava, Dondo, Gorongosa, Machanga, Maringue, Marromeu, Muanzae, and Nhamatanda have received this manual in May 2009 and have been using it to run their culinary demonstrations with the mothers of malnourished children. In 2008, 8,615 children < 5 years of age were identified as having poor growth and their mother's participated in culinary demonstrations, but it is not clear which recipes were demonstrated since the manual was not yet available. In addition, FH promoters have copies of this manual and do educational follow-up with mothers of malnourished children who have received treatment from the MOH or who selected community based nutritional rehabilitation. FH promoters have also used the manual in Care Group education. Although funds have not allowed for each ML to receive a manual, all Phase I Mother Leaders have received nutritional education and recipe ideas though the teaching and ML have in turn educated MB. A total of 22,771 ML and Mother Beneficiaries in Phase I communities have received this education.

Quantifiable Results: The manual has been in use for approximately six months now, so data regarding improved recovery rates of malnourished children or a decrease in children from the same family who return to US for malnutrition is not yet available.

Annex 6: Phase II Baseline Survey Results

Questionnaire

The same questionnaire used in the 2007 Phase I Districts CS baseline was used. This questionnaire was developed in the following manner: Generic KPC 2000+ and RapidCATCH questionnaires developed by CSTS were used as a starting point in the KPC questionnaire development for this survey. The project proposal and indicators were used to modify this basic format. The modules that were included in the original questionnaire design were:

- The informed consent and cover page;
- child spacing table (from the RapidCATCH);
- questions on water and sanitation;
- questions on maternal and newborn care (from RapidCATCH);
- questions on breastfeeding and infant/child nutrition;
- questions on diarrhea management including ORS preparation;
- questions on immunizations;
- questions on childhood illness;
- other RapidCATCH questions on use of mosquito nets and knowledge of AIDS prevention;
- questions on growth monitoring; and
- a section on anthropometry.

A 15-page draft questionnaire was sent to the project staff on 2/10/2006, 10 days prior to beginning of the KPC field training (which began 20 February), for their review, edits, and pretesting. Additional documents were sent to the staff prior to the survey including KPC teaching modules on logistics, choosing and training interviewers and supervisors, sample size selection, and other topics.

Changes to the KPC questionnaire were suggested by field staff members and were incorporated in the final questionnaire. The questionnaire was then divided into a 0-11m and a 12-23m questionnaire, and the questionnaire was translated into Portuguese by FH staff in Mozambique. The questionnaire was translated with help from HAI partner staff and FH staff who spoke both English and Portuguese. The translated questionnaire was reviewed by two people who were not involved in the translation (but had the English copy) and changes were made. Skips were also reviewed by project staff and some corrections were made. Following the pretest, several modifications were made including:

- Coding categories for questions about foods (e.g., adding “maheu” a sugar solution beverage) and where people sought advice or treatment for sick children were adapted to the local situation;
- Fixing several skips in the questionnaire which were numbered incorrectly;
- Inclusion in the survey the mothers of a *randomly-selected* child 0-23 months of age in each household rather than biasing the sample towards the *youngest* child in each household.

Changes in the respondent selection instructions, consent form, and other parts of the questionnaire were made to reflect these changes.

The questionnaire was pretested on 21-22 February 2006. The questionnaire was pretested during the last day of interviewer training. Interviewers and Supervisors went to a community that was not selected for interviews, and each interviewer interviewed several mothers. Difficulties in responding to questions were discussed with mothers and needed modifications were noted.

The final questionnaire was in Portuguese, but interviewers asked the questions to the respondent based on the language in which the respondent was most comfortable (usually Sena). It was decided not to translate the written question into Sena or other languages because of the difficulty in finding someone to translate from English to Sena, and the time required to do two translations (English to Portuguese and Portuguese to Sena) properly.

Sampling Frame and Survey Details

Given that FH was interested in having management data for each supervision area (district), we decided to use LQAS. Nhamatanda district was divided into two supervision areas so data for communities that had benefitted from the previous DAP program could be compared with data from communities where the DAP program had not operated. In order to get a reasonable denominator for questions asked of a sub-sample of respondents (e.g., mothers of children with diarrhea, mothers of children < 6m), we used parallel sampling: one questionnaire for children 0-11m of age and a separate one for children 12-23m of age.

In LQAS, a minimum of 5 SA's with lots of 19 each is needed to get the 96 surveys necessary to calculate average coverage across a program area (with 10% precision). Considering that 10% of surveys collected cannot be used due to collection or data entry errors, we determined that we needed a minimum of 105 ($96 \times 10\% = 9.6 + 96 = 105.6$ rounded to 106) interviews to be done for each of our sub-samples (mothers of children 0-11m and mothers of children 12-23m). Interviews per supervision area (or district) were weighted based on the population that would be reached by the CS program in each district. For example in Dondo, 51 of 169 CG were formed, this accounted for 30% of the program population, so $105 \times 30\% = 32$ interviews to be done in Dondo. Thirty-two is higher than the minimum lot number for LQAS (19).

How interviews were weighted for program population			
Supervision Area	Care Groups	% of Program Population	Interviews per Supervision Area
Dondo	51	30%	32
Nhamatanda	60	35%	38
Gorongosa	58	34%	36
TOTAL	169	100%	106

A total of 212 mothers were interviewed and 636 children were weighed.

Supervision Area	CG	KPC sample of mothers of children 0-11m			KPC sample of mothers of children 12-23m		
		Supervision Area	interviews per sup area	Total # interviews	supervision areas	interviews per sup area	Total # interviews
Dondo	51	1	32	32	1	32	32
Nhamatanda non-DAP CG	37	1	19	19	1	19	19
Nham DAP CG	23	1	19	19	1	19	19
Gorongosa CG (ALL)	58	1	36	36	1	36	36
Total	169	4	106	106	4	106	106

Supervision Area	Anthropometry				
	0-11m index cases	0-11m parallel sample	12-23m index case	12-23m parallel sample	Total children
Dondo	32	64	32	64	192
Nhamatanda non-DAP CG	19	38	19	38	114
Nham DAP CG	19	38	19	38	114
Gorongosa CG (ALL)	36	72	36	72	216
Total	106	212	106	212	636

Computerization and analysis of data

Data entry was done using Epi Info statistical software version 6.04d and Pocket PC Creations 5. Data analysis was done using EpiInfo 6.04d. Anthropometric data was analyzed using EpiNut 6.04d. Anthropometric data was cleaned in the following manner: The age of the index child was calculated. Then the age difference between the stated age and calculated age (from DOB) was determined. If the difference was more or less than 2 months, we removed the respondent from the anthropometry dataset. For the other children weighed, we calculated ages, and if any ages were negative, we removed those from the dataset as well.

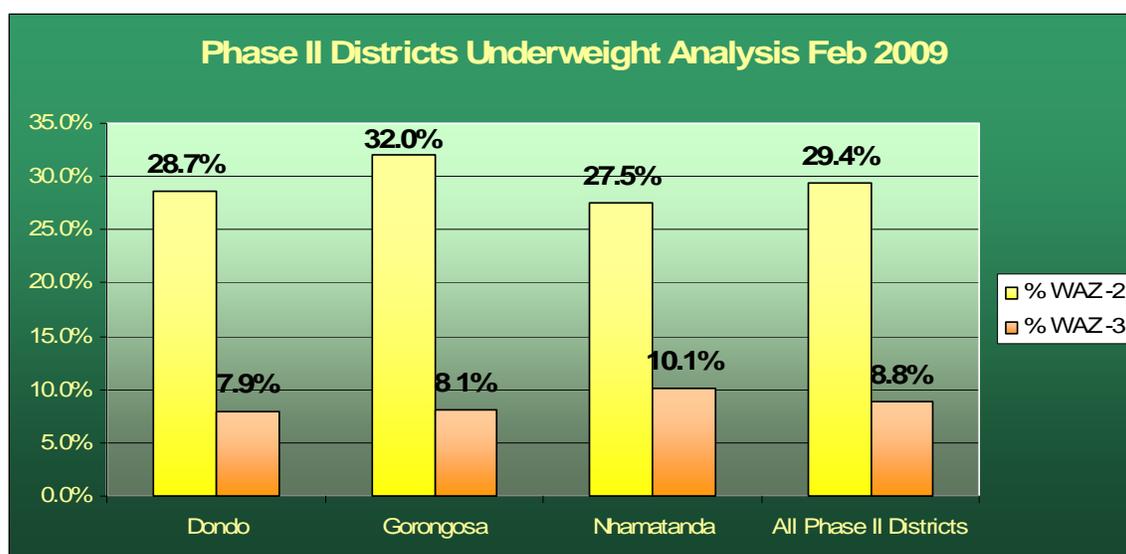
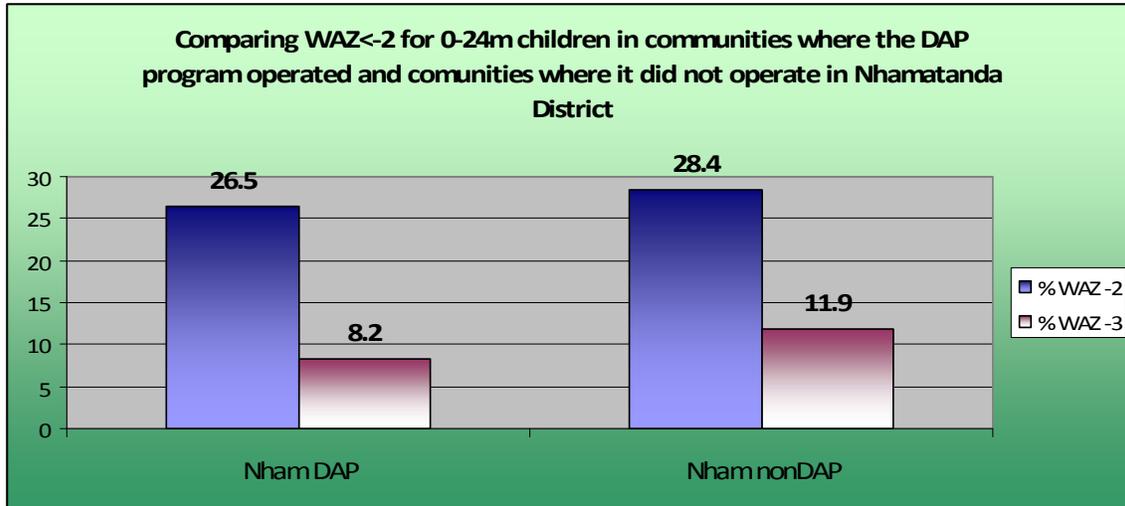


Table: Underweight for children 0-24m of age in CS Phase II Districts

	% WAZ -2	Num	Den	CI	% WAZ -3	Num	Den	CI
Dondo	28.7	51	178	22.1- 35.9	7.9	14	178	4.4- 12.8
Gorongosa	32	63	197	25.5-39	8.1	16	197	4.7- 12.9
Nhamatanda DAP	26.5	26	98	18.1- 36.4	8.2	8	98	3.6- 15.5
Nhamatanda nonDAP	28.4	31	109	20.2- 37.9	11.9	13	109	6.5- 19.5
Nhamatanda (Combined)	27.5	57	207	24.4- 33.6	10.1	21	207	6.0- 14.2
All	29.4	171	582	25.7- 33.3	8.8	51	582	6.7- 11.4



A USAID funded Food Security Program operated in Nhamatanda from Sept 2002 to April 2008. This program used a similar Care Group strategy as the current CS project and according to the Final Evaluation done in 2006, decreased the percentage of children 6-24m of age with moderate/severe wasting by 67% (in all program communities, 25% of those being in Nhamatanda). A comparison was made of the malnutrition rates in CS communities where the Food Security (DAP) program had run and communities where the DAP program never formed Care Groups or did BCC. Non-DAP communities had moderate malnutrition rates 7% higher than DAP communities (28.4/26.5 – 1) and severe malnutrition rates 45% higher than DAP communities (11.9/8.2 – 1) 22 months after the DAP program had stopped operating. The small sample size did not allow us to show a statistically-significant difference.

Indicator Tables

FH/Mozambique Child Survival Project, Phase II, February 2009. Combined baseline data for new Phase II areas: Nhamatanda, Gorongosa, and Dondo

#	Indicator	Numerator	Denominator	Percentage	CI
1	% of children 0-23 months who are underweight (WAZ<-2.0)	171	582	29%	26.4-34.5
	% of children 0-23 months who are severely underweight (WAZ<-3.0)	51	582	9%	6.4-11.5
2	Percentage of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF)	54	86	63%	51.7-73

3	Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the illness	28	204	14%	9.3-19.2
5	Percentage of mothers of children 0-23m who can correctly prepare ORS	93	209	45%	37.6-51.5
6	Percentage of children aged 0-23 months who were weighed in the last four months (card-confirmed)	119	183	65%	57.6-71.9
7	Percentage of children 12-23 months who received deworming medication in the last six months	35	98	36%	26.3-46
8	Percentage of children 12-23 months of age who have received one Vitamin A capsule in the past six months	85	104	82%	72.9-88.6
9	Percentage of children 6-23m who have consumed at least one Vitamin A rich food in the previous day	65	157	41%	33.6-49.5
10	Percentage of children 6-23 months of age with oil added to their weaning food	86	151	57%	48.7-65
11	Percentage of children 9-23m who receive food other than liquids at least three times per day	60	130	46%	37.4-55.1
12	Percentage of infants aged 0-5 months who were fed breastmilk only in the last 24 hours	33	53	62%	47.9-75.2
13	Percentage of mothers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment	172	211	82%	75.6-86.5
14	Percentage of mothers of children age 0-23 months who know at least <u>three</u> signs of childhood illness that indicate the need for	126	211	60%	52.8-66.4

	treatment				
15	Percentage of children age 0–23 months whose births were attended by skilled health personnel	120	207	58%	50.9-64.8
16	Percentage of mothers with children age 0–23 months who received at least two TT injections before the birth of their youngest child	110	207	53%	46.1-60.1
17	Percentage of children age 6–9 months who received breastmilk and complementary foods during the last 24 hours	35	38	92%	78.6-98.3
18	Percentage of children age 12–23 months who are fully vaccinated (against the 5 vaccine-preventable diseases) before the first birthday	93	104	89%	81.9-94.6
19	Percentage of children age 12–23 months who received a measles vaccine	70	101	69%	59.3-78.1
20	Percentage of children age 0–23 months who slept under an insecticide-treated net (in malaria risk areas) the previous night	33	211	16%	11-21.3
21	Percentage of mothers with children age 0–23 months who cite at least two known ways of reducing the risk of HIV infection	92	207	44%	37.6-51.5
22	Percentage of mothers with children age 0–23 months who report that they wash their hands with soap/ash before [4 times]	27	211	13%	8.6-18.1
23	Percentage of sick children age 0–23 months who received increased fluids and continued feeding during an illness in the past two weeks	15	211	7%	4-11.5
24	Percentage of children age 0–23 months who were born at	58	93	62%	51.7-72.2

least 24 months after the previous surviving child				
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The table below compares the “starting point” for project work in Phase II districts compared to the starting point for Phase I districts. In Phase II districts, eleven indicators were better than Phase I levels at baseline. Seven indicators were the same at baseline in Phase I districts as in Phase II. Phase II districts were starting at a lower point for only four of the twenty-two indicators measured at both Phase I and II.

LQAS allowed us to determine if the coverage of respondents in Nhamatanda DAP vs. Nhamatanda non-DAP communities was below average. For four indicators, coverage in DAP communities was below average, and in four non-DAP communities, the coverage was below average. For all other indicators the coverage was above average.

<i>FH Mozambique CS Project</i>		<i>Mar-06</i>	<i>Feb-09</i>			
		<i>Phase I</i>	<i>Phase II</i>			
#	Indicator	Percentage	Percentage	Phase II Districts at baseline (2009) Compared to Phase I Districts at baseline (2006)	NON DAP	DAP
1	% of children 0-23 months who are underweight (WAZ<-3.0)	26%	30%	worse		
	% of children 0-23 months who are underweight (WAZ<-2.0)	NM	9%			
2	Percentage of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF)	71%	63%	worse	below average coverage	
3	Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the illness	31%	33%	same	below average coverage	below average coverage
5	Percentage of mothers of children 0-23m who can correctly prepare ORS	44%	45%	same		

6	Percentage of children aged 0-23 months who were weighed in the last four months (card-confirmed)	70%	65%	worse	
7	Percentage of children 12-23 months who received deworming medication in the last six months	24%	36%	better	below average coverage
8	Percentage of children 12-23 months of age who have received one Vitamin A capsule in the past six months	82%	82%	same	
9	Percentage of children 6-23m who have consumed at least one Vitamin A rich food in the previous day	29%	41%	better	below average coverage
10	Percentage of children 6-23 months of age with oil added to their weaning food	35%	57%	better	
11	Percentage of children 9-23m who receive food other than liquids at least three times per day	33%	46%	better	
12	Percentage of infants aged 0-5 months who were fed breastmilk only in the last 24 hours	17%	62%	better	below average coverage
13	Percentage of mothers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment	75%	82%	better	
14	Percentage of mothers of children age 0-23 months who know at least <u>three</u> signs of childhood illness that indicate the need for treatment	29%	60%	better	
15	Percentage of children age 0-23 months whose births were attended by skilled health personnel	52%	58%	same	

16	Percentage of mothers with children age 0–23 months who received at least two TT injections before the birth of their youngest child	47%	53%	same		
17	Percentage of children age 6–9 months who received breastmilk and complementary foods during the last 24 hours	80%	92%	better	below average coverage	below average coverage
18	Percentage of children age 12–23 months who are fully vaccinated (against the 5 vaccine-preventable diseases) before the first birthday	80%	89%	better		
19	Percentage of children age 12–23 months who received a measles vaccine	75%	69%	worse		
20	Percentage of children age 0–23 months who slept under an insecticide-treated net (in malaria risk areas) the previous night	35%	16%	worse		
21	Percentage of mothers with children age 0–23 months who cite at least two known ways of reducing the risk of HIV infection	35%	44%	better		
22	Percentage of mothers with children age 0–23 months who report that they wash their hands with soap/ash before [4 times]	1%	13%	better		
23	Percentage of sick children age 0–23 months who received increased fluids and continued feeding during an illness in the past two weeks	8%	7%	same		
24	Percentage of children age 0–23 months who were born at least 24 months after the previous surviving child	59%	62%	same		
TOTAL BELOW AVERAGE COVERAGE					4	4

ANNEX 7: For the Good Nutrition of the Child and Family (Portuguese) see the PDF file. The file is too large to include in the report file.

ANNEX 8: Care Group Criteria

Establishing Care Group Criteria

Rationale for this Document:

World Relief (WR) staff developed the Care Group model in Mozambique in 1995. Food for the Hungry (FH) adopted the model in Mozambique in 1997 after discussions with WR project staff. A Care Group is a group of 10-15 volunteer, community-based health educators who regularly meet together with project staff for training and supervision. They are different from typical mother's groups in that each volunteer is responsible for regularly visiting 10-15 of her neighbors, sharing what she has learned and facilitating behavior change at the household level. Care Groups create a multiplying effect to equitably reach every beneficiary household with interpersonal behavior change communication. They also provide the structure for a community health information system that reports on new pregnancies, births and deaths detected during home visits

Since 1995, WR, FH, and more than 12 others PVOs in more than 14 countries have "adopted the model," but the degree to which organizations adhere to the original components of the model varies greatly. While there has been increased attention to the model and its effectiveness in lowering child deaths (e.g, mentioned in the UNICEF's 2008 State of the World's Children report), there is a danger that the wide variations in what is called a "Care Group" by various agencies will lead to misunderstandings about the model and the use of less effective strategies that do not fit within the model. These variations, in turn, could lead to fewer opportunities to advocate for the Care Group model and its role in child survival since the term "Care Groups" may come to mean many different things to different people, and will probably develop a very mixed track record.

There are already situations in which individuals and organizations are defining Care Groups as "any group where you are teaching mothers" or "any group where you are teaching people to teach other people." Given the excellent and low-cost results seen in the USAID Child Survival and Health Grants Program and Title II food security projects in terms of decreased child mortality and morbidity using Care Groups, we feel that it is important to define official criteria for the Care Group model.

During meetings between World Relief and Food for the Hungry staff members on April 23, 2009, the Care Group criteria in the table below were agreed upon as a draft list. The list is divided into those that we feel should be required to be present when using the term, "Care Group," and other criteria that we feel have been helpful when included in the model, but that should not be considered required. Edits to this list were then made by the two founders of the model, Dr. Pieter Ernst and Dr. Muriel Elmer.

Of course there is no way to enforce the use of these criteria – people will use the term how they wish – but by having two organizations that are recognized as having a history of using and promoting Care Groups extensively (one organization being the original developer), defining formal criteria should provide a stronger basis for recognition of the model and lead to better adherence to the most effective components of the model. We also hope that by informing donors and others about these criteria, they will use the criteria to decide to what degree a proposed implementation strategy is really based on the Care Group model. We would like to request that the **CORE Social & Behavioral Change Working Group** (SBCWG) help with the dissemination of this document. We expect that dissemination by the SBCWG will further legitimize the list, and will lead to better compliance with the recommended criteria. The table below gives the required and suggested criteria along with a rationale for each.

Criteria for Care Groups	Rationale
Required:	
<p>1. The model is based on peer-to-peer health promotion (Mother-to-mother for MCH and nutrition behaviors.) CG Volunteers should be chosen by the mothers within the group of households that they will serve or by the leadership in the village.</p>	<p>Care Groups are not the same as Mothers Clubs where mothers are simply educated in a group. An essential element is having women serve as role models (early adopters) and to promote adoption of new practices by their neighbors. There is evidence that “block leaders” (like CG volunteers) can be more effective⁹ in promoting adoption of behaviors among their neighbors than others who do not know them as well. CG Volunteers should be mothers of young children or other respected women from the community. We believe that CG volunteers who are chosen by their neighbors (or by a consensus of the full complement of [formal and informal] community leaders) will be the most dedicated to their jobs, effective in their communication, trusted by the people they serve, and most willing to serve others with little compensation.</p>
<p>2. The workload of CG volunteers is limited: No more than 15 HH per CG volunteer.</p>	<p>Having one volunteer trained to serve 30 or more households is more in line with the traditional CHW approach, and more regular and sustained financial incentives are required for that model to be effective. In the CG model, the number of households per CG volunteer is kept low so that it fits better with the volunteer’s available time and allows for fewer financial incentives to be used. In addition, there is evidence that the ideal size for one’s “sympathy group” – the group of people to whom you devote the most time – is 10-15 people.¹⁰</p>
<p>3. The Care Group size is limited to 16 members and the project attains at least 70% monthly attendance. Coverage is monitored.</p>	<p>To allow for participatory learning, the number of CG volunteers in the CG should be between 6 and 16 members. As with focus groups, with fewer than six members, dialogue is often not as rich and with more than 16, there is often not enough time for everyone to contribute and participate as fully. A low attendance rate at Care Group meetings is often an indication that something is wrong somewhere, either with the teaching methodology or the promoter attitude, and helps the organization to identify problems early in the project. Attendance should be monitored.</p>
<p>4. CG volunteer contact with her assigned beneficiary mothers is monitored and should be at a minimum once a month, preferably twice monthly.</p>	<p>In order to establish trust and regular rapport with the mothers with which the CG volunteer works, we feel it is necessary to have at least monthly contact with them. We also believe that overall contact time between the CG volunteer and the mother (and other family members) correlates with behavior change. We recommend twice a month since the original CG model was based on this meeting frequency (after experimentation to see which meeting frequency aided the most in retention of material).</p>
<p>5. The plan is to reach 100% of households in the targeted group on at least a monthly basis, and the project attains at least 80% monthly coverage of households within the target group. Coverage is monitored.</p>	<p>In order to create a supportive social environment for behavior change, it is important that many mothers adopt the new practices being promoted. Behavior change is much more likely to happen when there is regular, direct contact with <u>all</u> mothers of young children (rather than reaching only a small proportion of mothers), and probably more likely when there is contact with all households in a community (but this approach will probably be more costly).</p>

⁹ Burn, S.M. (1991). Social psychology and the stimulation of recycling behaviors: The block leader approach. *Journal of Applied Social Psychology*, 21, 611-629.

¹⁰ See Gladwell, M. (2002). *The Tipping Point*, Little, Brown, & Co publishers, pp. 175-181.

Criteria for Care Groups	Rationale
Required:	
<p>6. Care Group Volunteers (e.g., “Leader Mothers,” “Mother Leaders”) collect vital events data on pregnancies, births, and death.</p>	<p>Regular collection of vital events data helps CG volunteers to discover pregnancies and births in a timely way, and to be attentive to deaths happening in their community (and the causes of those deaths). Reporting on vital health events should be done during Care Group meetings, so that the data can be recorded by the CG leader (usually using in a register maintained by her) and discussed by the CG members. The point of discussion should be for CG members to draw connections between their work and the health events in the community (e.g. what can we do to prevent this kind of death in the future?). This should be done on at least a monthly basis, so that the information is not forgotten by volunteers over longer periods of time.</p>
<p>7. The majority of what is promoted through the Care Groups is directed towards reduction of mortality and malnutrition (e.g., Essential Nutrition Actions, Essential Hygiene Actions).</p>	<p>This requirement was included mainly for advocacy purposes. We want to establish that the Care Group approach can lead to large reductions in child and maternal mortality, morbidity, and malnutrition so that it is adopted in more and more settings to achieve the health MDGs. While the cascading or multiplier approach used in Care Groups may be suitable for other purposes (e.g., agriculture education), we suggest that a different term be used for those models (e.g., “Cascade Groups based on the Care Group model”).</p>
<p>8. The Care Group volunteers use some sort of visual teaching tool (e.g., flipcharts) to do health promotion at the household level.</p>	<p>We believe the provision of visual teaching tools to CG volunteers helps to guide the health promotion that they do, gives them more credibility in the households and communities that they serve, and helps to keep them “on message” during health promotion. The visual nature of the teaching tool also helps mothers to receive the message by both hearing it and seeing it.</p>
<p>9. Participatory methods of BCC are used in the Care Group with the CG Volunteers, and by the volunteers when doing health promotion at the household or small-group level.</p>	<p>Principles of adult education should be used in Care Groups and by CG volunteers since they have been proven to be more effective than lecture and more formal methods when teaching adults.</p>
<p>10. The Care Group instructional time (when a Promoter teaches CG Volunteers) is no more than two hours per meeting.</p>	<p>CG members are volunteers, and as such, their time needs to be respected. We have found that limiting the CG meeting time to 1-2 hours helps improve attendance and limits their requests for financial compensation for their time. (This instruction should include interactive and participatory methods.)</p>
<p>11. Supervision of Promoters and at least one of the Care Group Volunteers (e.g., data collection, observation of skills) occurs at least monthly.</p>	<p>For Promoters (who teach CG Volunteers) and CG volunteers to be effective, we believe that regular, supportive supervision and feedback is necessary on a regular basis (monthly or more). For supervision of Care Group volunteers, the usual pattern is for the Promoter to supervise through direct observation at least one volunteer following the CG meeting.</p>
Suggested:	
<p>1. Formative research should be conducted,</p>	<p>A review of the most effective projects in terms of behavior change for both exclusive breastfeeding and hand washing with soap (by the</p>

Criteria for Care Groups	Rationale
especially on key behaviors promoted.	CORE Group Social & Behavioral Change Working Group) found that they included formative research (e.g., Barrier Analysis, Doer/NonDoer Analysis) on the behaviors. We believe that more systematic use of formative research on behaviors will lead to the best adoption rates. Formative research also helps assure that the behaviors promoted by project staff are more feasible by community members.
2. The Promoter:Care Group ratio should be no more than 1:9.	For Promoters to know and have the trust of those with which they work, it is best to limit the number of volunteers with which they work to about 150, or nine groups (assuming a CG size of between 6 and 16 members). Some social science research confirms that our maximum “social channel capacity” – the maximum number of people with whom we can have a genuinely social relationship – is about 150 people (and 9 groups x 16 people/group = 144).
3. Measurement of many of the results-level indicators should be conducted annually at a minimum.	We have found that regular measurement of at least some key results-level indicators on an annual (or better) basis is helpful in knowing what is changing and what is not in time to do something about it.
4. Care Group Volunteers should only be assigned to visiting households that can be reached during regular daily activities.	It’s preferable that the Leader Mother not have to walk more than about 30 minutes to get to the furthest house that she visits so that regular visitation is not hindered. (In many CG projects, the travel time is less than this.) This also makes it more likely that she will have a prior relationship with the people that she is serving.
5. Social/educational differences between the Promoter and CG Volunteer should not be too extreme (e.g., having bachelor-degree level staff working with CG volunteers).	We believe that keeping the educational difference between the Promoter and CG volunteers to a modicum is useful in that it makes it more likely that the Promoters will use language/concepts that the CG Volunteers can understand. It also helps to keep costs of the model low.

World Relief:

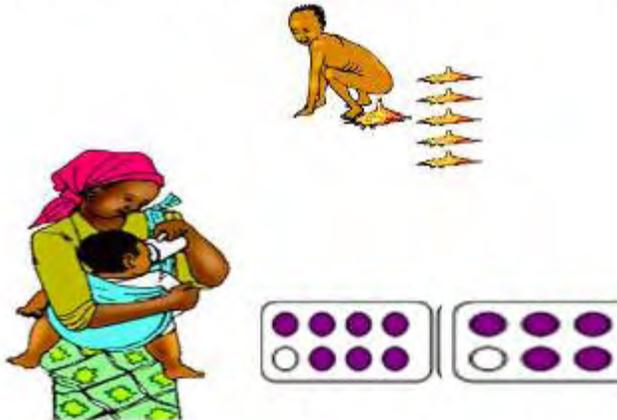
Sarah Borger, MPH
 Alyssa Davis, MPH
 Muriel Elmer, PhD
 Pieter Ernst, MD
 Rachel Hower, MPH
 Melanie Morrow, MPH

Food for the Hungry:

Tom Davis, MPH
 Carolyn Wetzal, MPH

ANNEX 9: Draft Zinc Educational Materials

Tratamento da diarreia com ZINCO e SRO



Quantidade de Zinco a ser administrada Crianças

Menores de 6 meses	Maiores de 6 meses
1cp de 10 mg durante 14 dias	1cp de 20 mg durante 14 dias



Continue amamentar. Se a criança já tem mais de 6 meses oferecer SRO e comidas ricas em nutrientes

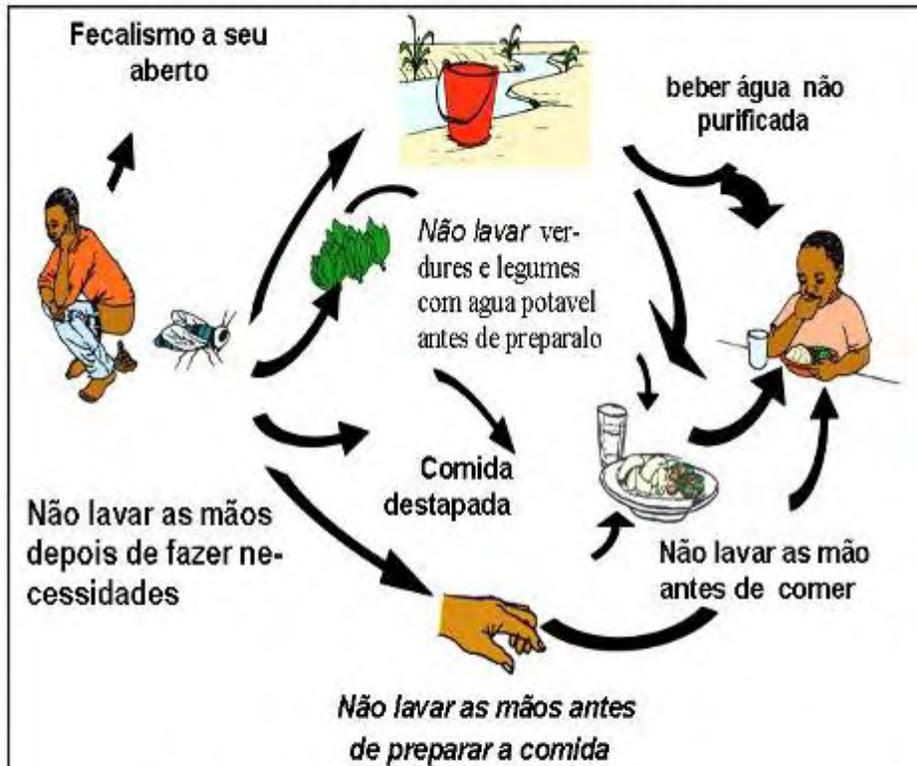
MANEIRAS SIMPLES E SEGURAS DE PURIFICAR ÁGUA

 <p>Ferver mínimo durante 1 minuto</p>	 <p>Purificar com Certeza ou javel</p>
 <p>1 Colher de Sopa de Cloro Granulado</p>	 <p>Para 1 litro</p>
 <p>1 Colherinha de cha ou 1 tampa de refresco de solucao mae</p>	 <p>20 litros</p>
 <p>10 Colherinhas de cha ou 10 tampas de refresco</p>	 <p>Para 1 barril ou 200</p>

Como preparar SRO (Sal de rehidratacao oral)

 <p>A mãe lava as mãos</p>	 <p>Medir um litro de água usando 3 garrafas de refresco</p>
 <p>Ferve um litro de água</p>	 <p>Adiciona um pacote de SORO</p>
 <p>Encorajar o bebe a beber a mistura frequentemente</p>	 <p>Não guardar a mistura por mais de 24 horas</p>

COMO SE APANHA DIARREIA



Complicações da diarreia

Perda de líquidos



Perda de Nutrientes



Desidratação

- Fontanela deprimida
- Criança chora sem lágrimas.
- Boca seca e muita sede
- Urina pouco ou não urina
- Prega cutânea

Diarreia

com sangue ou mais de 14 dias

Annex 10:



Training Manual:

“C-IMCI Agente Comunitario de Saude”
AIDI-C
**ATENCAO INTEGRADA DAS DOENCAS DA
INFANCIA A NIVEL COMUNITARIO**



Based on the IMCI Guidelines of the Ministry of
Health/Mozambique July, 2009

Prepared by Marydean Purves and Judiann McNulty, consultants

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This material was created with funds from USAID grant: GHS-A-00-05-0014-00, titled: Achieving Equity, Coverage, and Impact through a Care Group Network. The project operated in the Sofala Province, Mozambique from October 1, 2005 to September 30, 2010. The material was edited and reviewed by Emma Hernandez and Carolyn Wetzel.

Summary Overview

1. Background

In Mozambique, families often have to travel very far to reach a health post or hospital. Families worry when their children are sick or when women have difficulty during pregnancy or childbirth, but do not want to make an unnecessary trip to the health post. Delays in deciding to seek medical care can sometimes result in the death of the mother or child. Food for the Hungry wants to train health promoters and mother leaders to recognize signs that indicate a child or women is seriously ill and should be taken to the health post or hospital. The people who are trained will be able to tell families how to care for some health problems at home or to refer serious conditions to the health post.

2. Purpose of this Training

The purpose of this training is to help promoters and mother leaders learn to use the AIDI-C Guide of the Ministry of Health to determine when there is serious illness and to make referrals using the MOH referral form. Those trained will also gain a basic understanding of the main health problems that affect women, newborns, and children.

3. Basic Concepts

- This training is designed using Adult Learning Principles, which take into consideration the life skills and previous experience that adults bring to a new learning opportunity.
- Since it is essential that participants master the interpretation of symbols on the MoH AIDI-C Guide, all the visual aides for the training come from the Guide.

4. Expected Outcomes

- Trainees will be able to identify the symbols on the AIDI-C Guide and relate them to health problems of women and children in their communities.
- Trainees will be able to recognize signs for diagnosing relevant health conditions among clients.
- Trainees will understand the process for making referrals.
- Trainees will be able to explain causes of the common illnesses and home treatment.
- Trainees will acquire and demonstrate client-friendly counseling skills, including the ability to propose solutions to obstacles for seeking referral care.

5. Training Methodologies

- Lecture/Presentation
- Discussion
- Case Studies
- Question/Answer
- Games
- Demonstration/"Teach Back"
- Small Group
- Brainstorming
- Listing/Ranking
- Role Play

6. Materials

- Poster-size Agenda for wall mount
- Flip chart, markers, masking tape
- Enlarged pictures from AIDI-C Guide (see Annex)
- 20 blank cards – 8 x 5, 8 x 11
- 'Paper dolls' cut from folded paper
- Set of illustrations as divided in MoH Aide Memoire (annex)
- Symbols that appear on the MoH referral form each on individual sheets

- Sample referral forms (enough for 2 each participant)
- Poster-size Referral Form for wall mount
- Sample MoH growth charts one for each participant (annex)
- Poster-size Growth Chart for wall mount
- Tennis ball or other soft fist-size ball for tossing
- 5-10 small clear plastic bags (if unavailable, substitute small clear cups or glasses)
- Sample ORS packets
- Utensils for mixing ORS– one set (spoon, liter measure) for every 2 participants

7. Venue and Logistics Considerations

- The maximum number of participants for one training event is 15 persons.
- Childcare considerations
- Large room with space for small group work and moving around
- Access to water and hygienic toilet facilities.
- Wall space for posting agendas, pictures.

Adult Learning Principles in Brief

- *Needs assessment:* learners participate to determine what they need to learn.
- *Secure learning environment:* learners are not afraid to ask questions, express themselves, or make a ‘wrong answer’.
- *Respectful relationships:* between teacher and learner and among learners.
- *Sequence of content and reinforcement* of take-away messages.
- *Practice:* action with reflection or learning by doing.
- *Respect for learners as decision makers.*
- *Immediacy* of the learning, meaning it is applicable to the learner’s reality.
- *Clear roles and role development.*
- *Teamwork* and use of small groups.
- *Engagement* of the learners in what they are learning. Trainers must constantly draw the participants into the experience.
- *Accountability:* learners know why they are learning, and what it is used for.

Performance-based Objectives

Performance-based objectives emphasize *categories* of learning that allow for better assessment of the uptake of new information and practices. The categories include:

Knowledge – intellectual acquisition of new facts, figures, concepts, procedures.

Understanding – intuitive acceptance of information, attitude shift.

Skills – demonstrated ability to practice through repetition.

An effective training program will have a good balance between knowledge, understanding and skills objectives. By then end of the training, the participants will be able to:

Type of objective	Achievement
Knowledge	Cite the illnesses that are most common among children.
Knowledge	Recognize the four most critical danger signs for children.
Knowledge	Recognize the danger signs and risks for pregnant women.
Knowledge	Recognize the danger signs and risks for newborns.
Knowledge	Recognize the danger signs and risks for respiratory problems in children.
Knowledge	Recognize the danger signs and risks for diarrhea & dehydration.
Knowledge	Recognize the danger signs and risks for fever in children
Knowledge	Recognize the danger signs and risks for anemia in children.
Knowledge	Recognize the danger signs and risks for ear aches in children.
Understanding	Interpret accurately the meaning of the symbols of the MoH guidelines/algorithm.

Understanding	Interpret accurately the meaning of the referral form.
Understanding	Identify the barriers to seeking health care and propose options to overcome the barriers.
Skills	Demonstrate accurate movement through the MoH algorithm.
Skills	Demonstrate accurate use of the MoH referral form.
Skills	Demonstrate proper diagnosis of danger signs and symptoms of childhood illness.
Skills	Demonstrate appropriate treatment options for childhood illnesses.

Definition of Terms

All persons involved in the training should operate with the same understanding of some terminology. This includes Training Supervisor, Health Promoters, and Mother Leaders (CHWs).

The trainers should agree on terminology in advance for the following:

Term in English	Portuguese	Local name (if any)
AIDI Guide (Folhas 1-4)		
Referral Form		
Child Health card		
Maternal health card		

Description of Methodologies

1. Lecture/Presentation

The trainer (or guest presenter) is in a dominant position in the training room, delivering new information. The trainer may use visuals or handouts. The trainer should speak clearly and loud enough for all to hear. The trainer should adapt his language level to match the needs of the participants.

2. Discussion

The trainer acts as facilitator, to bring out the key elements of the topic under consideration. The trainer should encourage open ended questions such as **why, why not, how, what**. Press for opinions, attitudes, value judgments. The facilitator encourages all participants to engage, and moderates contributions. The facilitator makes concluding summaries from the discussion.

3. Case Studies

A case study is a real-life event that relates to the topic being examined. The elements of a good case study have detail that includes: who, what, how, time frame, materials used, special circumstances, etc. The case study can be evaluated to learn what was done right, what was done 'wrong', and how things might have been done in a different way.

4. Question/Answer

The trainer calls for questions, and provides answers. If the trainer does not know the answer, s/he can promise to locate the information for a later date. The trainer should press for more questions, and confirm that the answer is satisfactory.

5. Games

The use of games in training must have a clear purpose and an obvious link to the performance objectives. Some games are energizers that can be used to rejuvenate the participants who may be tired or disinterested. The rules of the game must be explained clearly and comprehension confirmed prior to beginning the game. Any materials to be used in the game must be easy to manipulate. Games that feature teams in competition should provide some symbolic incentive, such as candy, a badge, a trinket, etc. Games featured in this training program include Telephone Game, Ball Toss, Agree/Disagree, Team 'Face-off', and the Missing Piece Puzzle.

6. Demonstration/"Teach Back"

In a training environment, demonstration of a skill must have specific indicators for satisfactory performance of the skill. The trainer/s demonstrates and identifies the sequence of steps. The trainer confirms that the participant has or has not successfully performed the demonstration. Repetition should be built in to the timeline so that each participant has more than one opportunity to practice.

“Teach Back” is when the participant shows another participant or group how to perform the skill, in an instructional manner – which is more than just demonstration. The participant doing the ‘teach back’ is responsible to state whether the other person has successfully performed the action.

7. Small Group Work

Trainer divides the large group into at least 3 smaller groups. Most groups elect a spokesperson who will later present their work. Tasks for small groups must be clearly sequenced and timed. Often small groups are given some materials to work with – paper, markers, etc.

8. Brainstorming

Brainstorming is the generation of ideas, solutions, etc. in rapid succession, without qualification or judgment. Brainstorming generally is used to solve problems, not to identify problems. The trainer usually records the ideas on a flip chart for later use. All ideas are welcome, to be evaluated and detailed at a later time.

9. Listing/Ranking

The trainer solicits a ‘list’ of problems, conditions, facts that relate to a topic (ex: “danger signs”). The information provided by participants is usually short, telegraphic in style.

Ranking is placing the items from the list in order of priority. The definition of ‘priority’ can mean different things – severity of a disease, value or importance, ease in application. The trainer must help participants to agree as a group on the ranking order.

10. Role Play

Role plays are dramatizations. They can be a dramatization of an incident, a situation, a disease, a behavior, etc. The goal of the role play should be clearly explained (either in writing or verbally), and each person’s required actions described carefully. The emphasis is on how the actors respond. A role play should always have a feedback moment to highlight the ‘correct’ behavior.

Pre and Post Test

The same procedure and questions will be used for the pre-test and for the post-test. The test will be individual, with oral responses to the questions. The trainer and helpers should give the pre-test to the CHWs before the training days, perhaps, by visiting them at home.

Pre-test/Post-test for C-IMCI Training for CHWs

For the test, you will need the enlarged pictures of symptoms from the AIDI-C Guide.

1. Choose one enlarged picture of a symptom (danger sign) for each of the following:
 - a. Mulher grávida
 - b. Pos Parto,
 - c. Recém Nascido,
 - and d. one from each of the first five rows of the Criança de 2 meses a 5 anos.

You will have eight enlarged pictures.

2. Call each participant to a quiet place where the others are not listening. Show him/her the pictures one by one and ask:

What does the picture mean? What recommendation will you, as CHW, give the mother?

3. Then ask, "Why are most referrals urgent? (Answer: The person is gravely ill and may die soon.)

4. If a child has diarrhea for 3 days, but no danger signs, what advice do you give the mother? (Answer: Keep the child hydrated with any liquid, preferably made from purified water. ORS is best. The child should take at least one liter of liquid per day.)

- Show the person the MoH referral form. Ask the participant to explain the process for referral.

Note: When repeating this for the post-test, you can use any pictures, not necessarily the very same ones.



“C-IMCI Agente Comunitario de Saude”: TRAINING AGENDA

Hours	Duration	Session	Theme	Methodology	Materials
DAY ONE: Standard materials – flip charts, markers, tape					
8:00 – 9:00	60 min	1	Welcome, review agenda, Adult Learning Principles, Training objectives	Lecture/Presentation Question/Answer	Agenda in Poster Size
9:00 – 9:30	30 min	2	Real Life Case Studies	Case Studies; Game of Ranking	Enlarged photos from AIDI-C Guide
9:30 – 10:15	45 min	3	Terminology	Telephone game, Listing, Teach Back	
10:15-10:30	15 min		<i>Break</i>		
10:30-12:30	1 hour	4	Managing Danger Signs and Risks in Pregnancy & Delivery	Lecture/Presentation Q/A, Discussion Case Studies, Teach Back	Enlarged photos from AIDI-C Guide Case Studies Role play scripts
12:30 – 1:30	1 hour		<i>Lunch</i>		
1:30 – 3:00	90 min	5	Danger Signs in Newborns	Presentation, Q/A Discussion Demonstration Teach Back	Poster-size Referral form, Referral symbol cards Multiple copies for each participant.
3:00			<i>End of Day One</i>		
DAY TWO: Standard materials – flip charts, markers, tape					
8:00 – 8:30	30 min		Review maternal and newborn danger signs	Ball toss Q/A, Teach Back	ball
8:30 – 9:30 9:30 – 10:15	1 hour	6	Overview of child illness	Lecture/Presentation Q/A, Discussion Case studies Role Play Teach Back	Enlarged photos from AIDI-C Guide
9:30 – 10:30	1 hour	7	Signs of Critical Childhood Illness	Q/A, lecture, case studies	Enlarged photos from AIDI-C Guide
10:30-10:45	15 min		<i>Break</i>		
10:45-12:15	1 hour	8	Using the MOH Referral Form	Lecture/Presentation, Q/A, Discussion, Teach Back	Flip chart of MOH Referral Form
12:30 – 1:30	1 hour		<i>Lunch</i>		
1:30 – 3:00	90 min	9	Respiratory Problems: Basics and recognizing danger signs	Q/A, Discussion Lecture/Presentation Practice, Teach Back	Enlarged photos from AIDI-C Guide
<i>End of Day 2</i>					

DAY THREE					
Hours	Duration	Session	Theme	Methodology	Materials
8:00 – 8:30	30 min		Review of Session 6,7,8,9		
8:30 – 9:30	1 hour	9	Making the Most of Home Visits	Small Group Work, Role Plays, Q/A	"Talk to Me" Cards
9:30 – 10:30	1 hour	10	Diarrhea & dehydration: Basics and recognizing danger signs	Q/A, Discussion Lecture/Presentation	Enlarged photos from AIDI-C Guide
10:30-10:45	15 min		<i>Break</i>		
10:45 -11:45	45 min	11	ORS practice	Demonstration Teach Back	ORS packets Mixing utensils
11:45-12:30	45 minutes	12	Fever: Basics and recognizing danger signs	Q/A, Discussion Lecture/Presentation	Enlarged photos from AIDI-C Guide
12:30 -1:30			<i>Lunch</i>		
1:30 – 2:30	1 hour	13	Ear Aches	Q/A, Discussion Lecture/Presentation	Enlarged photos from AIDI-C Guide
2:00 – 3:00	1 hour	14	Recognizing Anemia	Q/A, Demonstration	Enlarged photos from AIDI-C Guide
3:00			<i>End of Day 3</i>		

DAY FOUR					
Hours	Duration	Session	Theme	Methodology	Materials
8:00 – 8:30	30 min	15	Review diarrhea, ORS, fever and ear aches	Game: See, Hear, Do	Game Cards
8:30 – 9:30	1 hour	16	Malnutrition: Basics and recognizing different types and feeding problems	Q/A, Discussion Lecture/Presentation	Enlarged photos from AIDI-C Guide and from Annex
9:30 – 10:15	45 min	17	Review all signs of Childhood illness	Team Quiz	Paper Dolls
10:15-10:30	15 min		<i>Break</i>		
10:30-12:30	2 hours	18	Using the MoH Guide: practice signs and referrals	Game – Scramble Role plays	Copies of AIDI-C Guide for all
12:30 – 1:30	1 hour		<i>Lunch</i>		
1:30 – 3:00	90 minutes	19	-Barriers to Seeking referral care -Helping families find solutions to barriers	Q/A Discussion, Group work,	
3:00			<i>End of Day 4</i>		

DAY FIVE					
Hours	Duration	Session	Theme	Methodology	Materials
8:00 – 9:30	30 min	20	Review of Barriers/Solutions, danger signs, and Referral Form	Discussion, game, Teach Back	Enlarged pictures from AIDI-C Guide
9:30 – 10:30	1 hour	21	Infant nutrition: Breastfeeding	Q/A, discussion, demonstration	Enlarged pictures from AIDI-C Guide
10:15 –10:30	15 min		Break		
10:30 – 12:30	2 hours	22	Infant nutrition: Complementary feeding	Demonstrations, role plays, discussion	Folha 4, spoons, bowls, food
12:30 – 1:30	1 hour		<i>Lunch</i>		
1:30 2:30	1 hour		Post-test	Individual interview	
2:30- 3:00	30 min		Presentation of Certificates		Certificates

DAY ONE

Session 1: Welcome, review agenda, Adult Learning Principles, training objectives.

Purpose: Set the context for the overall training; emphasize the importance of the role of CHWs as agents who 'bridge the gap' between health services and the community and that they have the potential to save the lives of their neighbors by applying what they will learn in this training.

Methodology

Lecture/Presentation

Q/A

Materials

flip chart paper, markers, tape

Poster size version of the Global Agenda

Activities and Procedures

1) Welcome of participants and review of agenda. (45 minutes)

- Trainer greets all of the participants. Participants greet each other.
- ICE BREAKER game of the trainer's choosing (15 minutes)
- Trainer reviews the logistics – room arrangements, toilet facilities, break and lunch locations, child care, etc.
- Call for questions & answers.
- Trainer displays the poster-size agenda taped to one wall.
- Trainer explains this agenda is the 'road map' for the work they will do the next five days. It may be adjusted if necessary. It is displayed for reference.
- Trainer goes over the agenda point by point. Identify the breaks and lunch hour. Identify the closing hour for every day as 3 pm.
- Call for questions & answers.
- Trainer explains that the methodologies the participants will practice and use in their own teaching events are designed for the adult learner, different from children learners.
- Trainer review the abbreviated Adult Learning Principles (ALP):

- *Needs assessment:* learners participate to determine what they need to learn.
- *Secure learning environment:* learners are not afraid to ask questions, express themselves, or make a 'wrong answer'.
- *Respectful relationships:* between teacher and learner and among learners.
- *Sequence of content and reinforcement* of take-away messages.
- *Practice:* action with reflection or learning by doing.
- *Respect for learners as decision makers.*
- *Immediacy* of the learning, meaning it is applicable to the learner's reality.
- *Clear roles and role development:* what does the learner do in the new learning environment?
- *Teamwork* and use of small groups.
- *Engagement* of the learners in what they are learning. Trainers must constantly draw the participants into the experience.
- *Accountability:* learners know why they are learning, and what it is used for.

- Call for questions & answers.

2) Training Objectives explained.

- Trainer repeats that the ALP allows the participants to know in advance what they may expect to achieve by the end of the training.
- Trainer explains the Knowledge, Understanding and Skills they will acquire.

Type of objective	Achievement
Knowledge	Cite and prioritize the reasons why children are ill and die
Knowledge	Recognize the four most critical danger signs for children.
Knowledge	Recognize the danger signs and risks for pregnant women.
Knowledge	Recognize the danger signs and risks for newborns.
Knowledge	Recognize the danger signs and risks for priority illnesses in children.
Understanding	Interpret accurately the meaning of the symbols of the MoH guidelines/algorithm.
Understanding	Interpret accurately the meaning of the referral form.
Understanding	Identify the barriers to seeking health care and propose options to overcome the barriers.
Skills	Demonstrate accurate movement through the MoH algorithm.
Skills	Demonstrate accurate use of the MoH referral form.
Skills	Demonstrate proper diagnosis of danger signs and symptoms of childhood illness.
Skills	Demonstrate appropriate treatment options for childhood illnesses.

Session 2: Real life case studies of mother and child health problems experienced by the participants. (30 minutes).

- Trainer asks one participant to identify a recent situation she personally lived through that involved a childhood illness. This can involve herself, a family member, or a neighbor.
- Trainer uses flip chart to structure the input: Who? What? When? Where? How? Why? It is important to push for detail.
- Trainer asks what role did the woman play – she was the first line caregiver? Just an observer? She provided assistance? Probe for more detail. What did she use to help in the situation? Materials? Skills? Knowledge? Communication? How did the situation end?
- Trainer highlights (circle in GREEN) those elements that reflect the **woman's ability to respond** whether a skill, some extra knowledge she had, her communication network, etc.
- Trainer highlights (circle in RED) those elements that were out of the knowledge and skill range of the woman, indicating the need for referral systems.
- If time allows, repeat. Ask another participant to share her experience.
- Trainer summarizes by pointing out that the participants have some knowledge and skills to help families, but sometimes they must refer to the health facility where health workers have more skills to help those who are very ill.
- Trainer holds up the AIDI-C Guide and the MOH Referral forms and explains that by the end of the training the participants will understand how they can use both in order to help families with illness, possibly even saving lives of children, newborns and mothers.

Session 3: Consistency in Terminology (45 minutes).

Purpose: Emphasize the importance of consistency and clarity in the use of terms and description of symptoms.

Methodology
Telephone Game
Listing
Teach Back

Materials:

Flip chart paper, markers, tape
 Written message for Telephone Game
 Master list of terms and symptoms (annex)

Activities and Procedures

1) Telephone Game to demonstrate importance of clarity in communication with each other (10 minutes).

- Trainer explains that the group will now play a quick game.
- Invite participants to sit or stand side by side, close enough to be able to whisper in each other's ear.
- The trainer explains that s/he will verbally give a message to the first person in the line, who will then communicate it by whispering into the ear of the next person, and so on to the end of the line. The receiver of the message **CANNOT** ask for the message to be repeated. The last person will repeat out loud the message that she has received.
- Trainer confirms that everyone understands the procedure.
- Trainer may invent a message, or use the one below. It is important that the message have some complexity to it, to allow for some interpretation.

Good examples:
 "Justina will arrive on the train from Malema, at 6 pm on Tuesday, but Joaquim will not be with her."

 "Miriam left the key for the house front door under the big rock at the back of the porch".

Not so good:
 "The sun is shining today."
 "I want to eat some bananas."

- Trainer initiates the game; and the message is whispered from person to person, quietly so no one else can hear what is being said.
- The last person repeats out loud the message she has received.
- The trainer then announces the original message.
- Everyone takes note of the difference between the final information – the words, the sequence, the final meaning – and the original information.
- The trainer asks the participants how the changes in the information would have affected the outcome of the situation.

2) Listing of terms, agreement on definition of terms (20 minutes).

- The trainer explains how important it is that **EVERYONE** works with the same definitions of terms.
- Trainer asks participants to speak out the names they know and use to refer to childhood illnesses.
- As participants speak out, trainer writes down the terms on the flip chart as shown to the right.
- **When working with pre-literate participants, the trainer will repeat out loud the terms, and ask another participant to repeat out loud the same term. Repetition aids in retention.**
- Trainer then reviews the list with participants, comparing terms, cross-referencing where there are similarities, consolidating long versions into concise words. The trainer will explain the definition for each term.
- **TRAINER SHOULD HAVE AT HAND THE MASTER LIST, FOR PURPOSES OF COMPARISON AND DEFINITION.**

Master List of Terms

Term	Definition	Local name (if any)
Diarrhea	Define-se diarreia como sendo a evacuação involuntária de fezes líquidas, sem sangue, pelo menos três vezes em 24 horas. Diarrhea is having 3 or more watery stools in 24 hours.	
Dehydration	Perda de uma grande quantidade de água e sais do corpo. The body loses a large quantity of water.	
Fever	História de febre (de acordo com a informação da mãe); Criança quente ao toque. The child is hot to the touch.	
Cough	Sudden expulsion of air from the lungs.	
Malaria	A malária é uma doença infecciosa aguda ou crônica transmitidos pela picada do mosquito Anopheles . Malaria is an infectious disease transmitted by bite of a female Anopheles mosquito who is carrying the malaria parasite.	Paludismo
Premature baby	An infant que nasce cedo, antes da 37ª semana de gravidez. An infant that is born before the 37 th week of pregnancy.	
Ear Ache	Pain in the ear.	
Head Ache	Pain inside the head that is not from an injury.	
Anemia	Low red cell count of the blood, weak blood.	
Malnutrition	Malnourished children are too thin or too short compared to other children their age due to lack of adequate, diverse food, poor breastfeeding, or because they have had severe illness.	

- Trainer and participants finalize the List of Terms. Consensus is not the ultimate goal – accuracy is more important. Participants who have different opinions must be brought to agreement.
- **Teach Back Summary (15 minutes).**
- Trainer calls for a volunteer participant to come to the front and review the List of Terms with the entire group. The volunteer can use Q/A, or call out and repetition. Repeat the exercise twice. Trainer corrects errors.
- Trainer calls for a 2nd volunteer participant to come to the front and review the Description of Symptoms with the entire group. The volunteer can use Q/A, or call out and repetition. Trainer correct errors.

Take-away learning: *Terminology used in the AIDI Guide.*

----- BREAK----- 15 MINUTES

Session 4: Managing danger signs and risks for Pregnant Women (2 hours).

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology:

Q/A, Discussion
 Lecture/Presentation
 Case Studies in small group

Materials:

Flip chart paper, markers, tape
 Large copies of Pictures No. 1 through 11 from Folha 1: 'Para Mulher Gravida e no pos parto'.
 (see annex for picture numbers).
 Case Studies (see below)



Activities and Procedures

1) Dangers in Pregnancy and delivery – Each time is different! (15 minutes).

- The trainer passes out AIDI Folhas and explains that the group will spend the next days going through each section starting now with Folha 1 'Para Mulher Gravida e no pos parto'.
- Trainer asks the women to explain the terms: pregnancy, delivery, post-partum (local words).
- Trainer asks the women how many pregnancies (successful and unsuccessful) among the participants. Add these numbers together and write this number large on the flip chart.
- Trainer asks "Were all the pregnancies and deliveries exactly the same?" Listen to answers and stories.
- Trainer draws out the differences and questions the participants "Is it necessary to be ready to respond differently from one pregnancy to another?" Answer: *Yes, each pregnancy and delivery is different and we cannot predict when there might be a problem or complication. We have to recognize these problems when they arise and take appropriate action to save the life of the mother or baby.*
- Conclude Q & A.

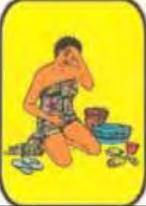
2) Dangers in Pregnancy and Delivery – the Facts! (45 minutes).

- Trainer shows the AIDI-C Guide and directs participants to look at Folha 1.
- Trainer reviews the standard facts on pregnancy.
- Trainer speaks clearly and simply.
- Trainer refers to the visuals that correspond with the Folha 1.
- Trainer constantly confirms understanding.
- Trainer displays each of the enlarged pictures No. 1 through 11 and asks the participants to explain what is happening in each picture. Trainer confirms responses adding information from the chart below.

Standard facts on Pregnancy and Delivery

1. Many, many women in Mozambique die during delivery or right after delivery.
2. All women are at risk, but those most at risk are:
 - young women under age 18
 - women over 35
 - women who have had many pregnancies
3. Malaria and anemia also put women at risk
4. Women and their families need to be prepared to go to the health facility in case there are complications.
5. Quickly making the decision to go to the health facility will save women or their baby from dying.
6. All women and their families should recognize the signs of complications and quickly seek medical care.

 <p>Perda de sangue ou outros líquidos através da vagina.</p>		<p>During pregnancy, loss of blood or other liquids is a sign of a serious problem, possibly resulting in miscarriage (aborto). The woman needs immediate medical care.</p> <p>During delivery, losing much blood is called hemorrhage and can quickly cause death of the woman. She must be rushed to hospital.</p>
 <p>Febre ou aquecimento do corpo.</p>		<p>Any fever during pregnancy is a danger sign. The woman may have malaria or may have an infection. She needs to see a medical person as soon as possible.</p>
 <p>Aumento do volume (inchaço) dos pés, mãos ou pálpebras (olhos) da vagina.</p>		<p>Some swelling of the feet or ankles is normal, but if there is also swelling of the hands and face, this is a sign of a problem (pre-eclampsia) and the woman must receive medical care. She should plan to deliver her baby at the health facility where health workers can watch her condition.</p>
 <p>Ataques, desmaios ou convulsões.</p>		<p>Attacks, fainting, or convulsions in a pregnant woman are signs of a serious problem with the pregnancy. This may be a condition called epilepsy, which will go away after the pregnancy, but could endanger the mother and baby during delivery. She should plan to deliver her baby at the health facility where health workers can watch her condition.</p>
 <p>Vômitos contínuos.</p>		<p>Most women experience some vomiting during the first months of pregnancy. If a woman is vomiting all food and liquid, this is not normal and she should see a health worker as soon as possible to avoid becoming weak and malnourished.</p>
 <p>Palidez ou cansaço.</p>		<p>Pallor of the palms or extreme tiredness are signs of anemia. Women who have anemia are at great risk during delivery if they experience blood loss. Children who are born to women with anemia may not be as intelligent as other children. Women with these symptoms should see a health worker to receive iron-folic acid tablets and should take one tablet every day (45 to 60 days.)</p>
 <p>G. Dor de cabeça forte</p>		<p>Severe headaches during pregnancy indicate that something is wrong. The woman needs to see a health worker to find the cause of the headaches and get treatment.</p>
 <p>Perda de sangue ou outros líquidos através da vagina.</p>		<p>After delivery (post-partum), loss of blood or other liquids from the vagina is a bad sign for the woman. She must be taken to the health facility as quickly as possible. If the liquids have a bad smell, this is a sign of a serious infection.</p>

 <p>Febre/Dor de cabeça forte</p>	<p>After delivery, a fever or severe headache are signs of a possible infection or other problem and the woman must seek medical care immediately.</p>
<p>Palidez ou cansaço.</p> 	<p>During the weeks after delivery, pallor of palms or extreme tiredness also indicate anemia. The woman needs to see a health worker to get iron-folic acid tablets and continue to take one every day until they are gone (45 to 60 days).</p>
 <p>Corrimento mau cheiroso</p>	<p>Bad smelling vaginal discharge is a sign of infection, which could lead to death. The woman needs to go to the health facility immediately and carefully follow the treatment she is given.</p>

3) Dangers in Pregnancy and Delivery – Case Studies (45 minutes including report out).

- Trainer explains that now the participants will use the new (or renewed) information to analyze some actual case studies of pregnant and delivering women.
- Trainer divides the participants into 3 groups of 5 each.
- Each group identifies a reader and a reporter.
- Trainer shares a different case study with each group.
- Trainer instructs assistants to read the case study to each group. Monitor the process.
- Participants use their visual aids to aid in their understanding of the case study.
- Trainer instructs groups to discuss the case; asking each other if they have ever seen in their own community such a case.
- Trainer instructs the small groups to use the information presented in the previous session to 'diagnose' the problem in the pregnancy.
- Trainer instructs the small groups to make a recommendation for 'treatment' (including referral), consulting the new information, the MoH visual aid, and their previous knowledge.
- Trainer invites reporter from each group to present the results of their discussion: the 'diagnosis', and the recommended 'treatment'.

Case Study 1: Ana is 30 years old and has five children. Now she is pregnant again, but this time she does not feel well. She is so tired she can hardly do her work in the field or take care of her children. She has a good appetite and sleeps all night, but she is always tired. Sometimes, she also has a headache.

Discussion: What is wrong with Ana? How can we tell if she may have anemia? (look for pallor on her palms, comparing them to a healthy woman's palms) What advice should we give Ana? (she must go to the health facility for diagnosis and take all the iron tablets she is given)

Case Study 2: This is a first pregnancy for Marta who is now six months pregnant. She is sixteen years old. She has just come to tell you she is losing some blood from her vagina, but just a little each day for the past two days.

Discussion: Why is Marta at high risk? What is happening to her? (possible miscarriage) What advice will you give her? (she must go immediately to the health facility and follow their advice) The CHW might offer to accompany her to provide support.

Case Study 3: Your brother Samuel says his wife, who is two months pregnant, is sometimes vomiting after she eats. It is worse in the morning. He asks for your advice.

Discussion: Is this a serious problem? No, this kind of vomiting is normal. How will we know if it becomes more serious? (continuous vomiting) What advice can we give Samuel to help his wife? (eating some dry food before she gets up in the morning will help prevent the vomiting)

Case Study 4: Maria delivered her baby five days ago. The baby is doing very well, but now Maria has a fever. She thinks she has more liquid coming from her vagina than she did after her other babies were born.

Discussion: What might be the problem? Should Maria be concerned or does she just have malaria? (she may have an infection in her uterus and should go to the health facility right away.)

- ***Dangers in Pregnancy and Delivery – Summary Q&A (15 minutes).***
- Trainer leads the participants in a short discussion, answering any questions on diagnosis, treatment and any other relevant actions that came out of the case studies.
- Wrap up by emphasizing take-away learning.

Take-away learning: Appropriate application of diagnosis and treatment actions for pregnancy and delivery danger signs.

---- LUNCH---- 1 HOUR

Session 5: Newborn Danger Signs: introduction & recognition of signs (105 minutes).

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation

Q/A, Discussion

Teach Back

Materials

flip chart paper, markers, tape

Enlarged pictures No. 13-20 from Folha 2

Activities and Procedures

1) Defining 'newborn' stages of life, description of newborn conditions (30 minutes).

- Trainer asks participants what age range is covered by "childhood?"
- Confirm correct answer (0 to 5 years).
- Trainer asks participants what age is a "newborn"? Answer: 0-28 days
- Trainer reminds participants CHWs need to visit newborns to make sure they are healthy.
- Trainer asks participants why it is necessary to focus special attention on the first 7 days. (most newborn deaths occur during the first seven days)
- Trainer listens and confirms responses.
- Trainer asks the participants to describe a healthy newborn. It is important to clearly describe the status of a HEALTHY NEWBORN, i.e., the absence of any illness or problem condition.

On a flip chart, list the characteristics that the participants describe, repeating each one for retention.

- Confirm understanding.
 - Trainer asks the participants to think about the opposite of the healthy newborn.
 - Participants list some characteristics they can recall of a non-healthy newborn. Add these to the flip chart in another column labeled unhealthy newborn. Repeat each one out loud.

Characteristics of a healthy newborn baby:

- Good color*
- Feeds well*
- Not too sleepy, alert*
- Content or happy after eating*
- No fever*
- Umbilical heals quickly*
- Clear eyes, no pus*

2) Recognizing the visual description of danger signs in newborns (60 minutes).

- Trainer displays the enlarged Pictures No. 13-21 from Folha 2. Pass them around so each participant can view them once.
- Trainer recovers all pictures.
- Trainer takes one picture at a time, and clearly describes the conditions in the image using information in the chart below.
- Confirm understanding with participants. Emphasize that while most deaths occur during the first seven days, it is important for mothers to watch for these signs anytime during the first 28 days. CHWs need to teach these signs to mothers.
- Completing all of the visuals, trainer now randomly distributes one visual to different participants.
- Each participant with a visual now describes the conditions in the image as per the trainer's explanation.
- Large group confirms or enhances description from the participant.
- If time permits, re-distribute visuals and do another round.

Newborns – Folha 2

 <p>Não consegue mamar</p>	<p>A newborn who does not breastfeed for more than a few minutes at a time or who has little interest in eating is not healthy. The family needs to take this child to the health facility as soon as possible. Any newborn who cannot “latch on” to the breast also needs to be taken to the health facility by his mother.</p>
 <p>Move-se menos do que o normal</p>	<p>When a newborn moves very little or not at all, there is something wrong. The child may be ill or have a congenital defect. Parents must take this child to the health facility where the health worker can determine what is wrong and what to do for the child.</p>
 <p>Respiração rápida (menores de 2 meses: 60 ou mais respirações por minuto)</p>	<p>If a newborn is breathing very rapidly (more than sixty breaths per minute) the child likely has pneumonia and will die very quickly if not taken to the health facility and given antibiotics.</p>
 <p>Gemido</p>	<p>Sons leves e curtos que um lactente faz ao expelir o ar, devido a dificuldade que tem em respirar. An infant will make a groaning sound (synonyms include: moan, wail, whimper, blea) if s/he is having difficulty breathing and expelling air.</p>
 <p>Diarreia</p>	<p>Any child who has diarrhea is at risk, especially newborns. Breastfeed the child as much as possible and take him/her to the health facility right away. DO NOT GIVE ORS or OTHER LIQUIDS OR REMEDIES.</p>

 <p>Prematuro (nasceu antes do tempo) ou com baixo peso (inferior a 2,5 kg)</p>	<p>A child who is born very small is at great danger of dying. These children can be saved if they are dried quickly, put on the mother's breast right away, and kept there where it is warm. The mother and child should go to the health facility as soon as possible to be checked for any problems.</p>
 <p>Prematuro (nasceu antes do tempo) ou com baixo peso (inferior a 2,5 kg)</p>	<p>This picture also shows a premature infant or one who is born very small, less than 2.5 kg. The most important thing is to dry the child quickly without bathing and put him/her on the mother's breast where it is warm. As soon as possible the child should be checked by a health worker.</p>
 <p>Febre</p>	<p>If a newborn has a fever, it may indicate an infection, or in an older baby it may indicate malaria or another illness. Any child less than 28 days with a fever needs to be taken to a health worker for diagnosis and treatment.</p>
 <p>Umbigo avermelhado ou com pus</p>	<p>Omphalitis, is an infection of the umbilical stump and usually presents within the first 2 weeks of life. Signs and symptoms are redness, warmth, swelling, pain, and pus from the umbilical stump, fever, fast heart rate (tachycardia), low blood pressure (hypotension), somnolence, poor feeding, and yellow skin (jaundice). Omphalitis is usually caused by bacterial infection and can cause death if untreated.</p>
 <p>DOENÇA GRAVE/ PERIGO DE MORTE</p>	<p>Newborns with problems or illnesses will die very quickly. Families must make decisions to take them to the health facility at the first sign of a problem. Waiting even half a day may be too long and the child will die.</p>

Take-away learning: *Recognition of a healthy newborn and signs of a non-healthy newborn.*

---- END OF DAY ONE ----

DAY TWO

REVIEW EXERCISE ABOUT DAY ONE (30 minutes)

Materials: flip charts from Day One, small ball.

- Trainer greets participants, asks about any problems or issues that may affect their ability to engage in the training for another day.
- Trainer confirms schedule – break at xx hrs, lunch at xx hrs.
- Trainer asks one participant to recall what the topics from the previous day – just the themes. Listen and complete information. Ask for more input from other participants.
- Trainer reviews Day One, picks out key words and concepts, recalls the TAKE AWAY LEARNING.
- Trainer takes out the ball, and explains that they will now play a game to sharpen their memory and understanding of Day One key information. Everyone should stand up.
- Trainer will ask a question and toss the ball to one participant; participant will answer the question. Confirmation by trainer of answer, or correct if necessary.
- Participant with the ball will now toss to another participant to answer the next question. Those who answer questions correctly, leave the circle.
- The game continues on until everyone has answered at least one question correctly.
- Trainer stops the game and asks everyone to take their place.

Questions for ball toss game

1. What age is a "newborn"?
2. When do most newborns die?
3. True or false: swelling of the feet is normal during pregnancy
4. True or false: If a woman loses a little blood from her vagina during pregnancy, she can wait a few days before going to the health facility.
5. True or false: Most women lose lots of blood during delivery.
6. True or false: Swelling of the hands and face during pregnancy indicates a problem.
7. True or false: A healthy newborn feeds well and is not too sleepy.
8. True or false: If a woman has bad-smelling discharge after delivery, she has an infection.
9. True or false: A newborn with diarrhea needs ORS.
10. True or false: It is normal to have a headache after delivery.
11. True or false: Having malaria puts a woman at risk during pregnancy.
12. True or false: Women can take iron pills (sal ferroso) for anemia.
13. Which women are most at risk during pregnancy and delivery?
14. Where should a woman with danger signs go for help?
15. Who should watch for danger signs in the newborn? (family and CHW)

Session 6: Health Problems of Children: general overview (1 hour).

Purpose: Identify existing knowledge levels of participants, correct misinformation with accurate information.

Methodology

Lecture/Presentation

Q/A, Discussion

Teach Back

Materials

flip chart paper, markers, tape
 Enlarged pictures No. 27, 29, 34, 40 from Folha 3

Activities and Procedures

1) Ranking and prioritizing childhood illness: participant knowledge check (20 minutes).

- Trainer asks participants to call out the major childhood illnesses they know about. List on flip chart (for the trainer’s memory).
- Trainer identifies the top four: *RESPIRATORY ILLNESS, DIARRHEA/DEHYDRATION, ‘FEVER’, EAR ACHE.*
- Trainer then tapes the enlarged pictures along the wall, stating the name of one illness each time s/he tapes a card. The cards should be high on the wall to allow participants to understand them.



- Trainer asks all participants come up and stand under the picture that represents an illness they are most concerned about.
- Trainer asks one of the participants to explain their choice.
- The trainer explains that these are the four main illnesses participants will learn about.
- Trainer now asks the participants to think of their own children or grandchildren in the childhood age range (0-2 years).
- For each illness, trainer asks participants to raise their hand if their child or grandchild has suffered from this illness in the last six months. Trainer adds up the number of children and writes it directly below the illness.
- Trainer confirms that these illnesses are present in the community.

- Conditions that contribute to childhood illness (40 minutes).

- Trainer explains that illnesses do not ‘live’ in a box, waiting to jump out and attack us.
- Trainer asks: “Where do such illnesses come from?”
- Listen and acknowledge responses.
- Trainer makes a list on the flip chart:

Where do illnesses come from?

- Poor nutrition in mother and child
- Inadequate hygiene
- Pathogens, viruses, bacteria
- Etc.

- Trainer asks the participants to identify those conditions which lead to illness that they have some control over in their own household and community.
- Trainer puts a check ✓ beside those mentioned.
- Trainer asks participants for some actions they can take in their own household to minimize the risk of illness.
- Trainer summarizes by reading back the true causes on the list: - poor nutrition, inadequate sanitation, pathogens such as viruses and bacteria and emphasizes that families have some control over all of these, which will be discussed later. .

Take-away learning: The top four childhood illnesses, the conditions that create the environment for illnesses.

Session 7: Recognizing Critical Danger Signs – Children 2 Months to 5 Years Old. (60 minutes)



Purpose: Orient participants to the four critical danger signs of childhood illness which indicate the need for immediate referral.

Methodology:

Q/A, Discussion

Lecture/Presentation

Materials:

Tape

All Enlarged Pictures from Folha 3

Activities and Procedures

1) Introduction Q/A

- Trainer puts the all the enlarged pictures (except No. 50) from Folha 3 in the middle of the floor and asks the participants to sit or stand in a circle around them.
- Trainer explains that there are many signs or symptoms to alert us when a child is seriously ill which are shown in the pictures on the floor. Four of those indicate a child has such a serious problem that they might die soon and the CHW must refer the child to the health facility immediately.
- Trainer asks the participants to look at all the pictures from Folha 3 on the floor and choose the four that show these signs. Participants pass the pictures around the circle and when someone thinks a picture is not one of those signs, she may lay it behind her out of the circle.
- When only four pictures remain, the trainer asks the participants to explain why these four signs are the most critical. After listening to their reasons, without correcting them, the trainer displays the four correct pictures (No. 21, 22, 23, 24).

2) **Lecture** – Trainer describes how to assess for the four critical signs using the information in the chart below.

	<p>A child has the sign “not able to drink or breastfeed” if the child is not able to suck or swallow when offered a drink (clean water) or breast milk. When you ask the mother if the child is able to drink, make sure that she understands the question. If she says that the child is not able to drink or breastfeed, ask her to describe what happens when she offers the child something to drink. For example, is the child able to take fluids into his mouth and swallow it? If you are not sure about the mother’s answer, ask her to offer the child a drink of clean water or breast milk. Look to see if the child is swallowing the water or breast milk.</p>
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	<p>A child has the sign “VOMIT EVERYTHING” if the child is not able to retain anything he/she has eaten or drank. Everything that goes into the child’s mouth comes back out of the child’s mouth. The community health worker needs to ask the mother if the child vomits every time he/she is being fed or offered drink. For this sign to be positive, the answer needs to be every time. If the child is able to retain something, then this sign is absent. If in doubt, the community health worker should offer the child something to drink; and observe what happens. If the child vomits everything immediately, he/she has retained nothing and the child has vomited everything. Then this sign is present. If the child doesn’t vomit immediately, the child is retaining some food or drink and this sign is not present.</p>
	<p>During a convulsion, the child has trembling movements of the entire body. The child’s arms and legs stiffen because the muscles are contracting. The child may lose consciousness or not be able to respond to spoken directions. Ask the mother if the child has had convulsions during this current illness. Use words the mother understands. Or give an example that the mother may know as convulsions such as “fits” or “spasms.”</p>
	<p>A very sleepy child is not awake and alert when she should be. The child is drowsy and does not show interest in what is happening around him. Often the very sleepy child does not look at his mother or watch your face when you talk. The child may stare blankly or without any facial expression appearing to not notice what is going on around him. An unconscious child cannot be awakened. He does not respond when he is touched, shaken or spoken to. Ask the mother if the child seems unusually sleepy or if she cannot wake the child. Look to see if the child awakens when the mother talks to the child, shakes the child or claps her hands near the child.</p>

- Trainer answers any questions from participants about the information just given.
- Trainer explains to participants:

For a child less than two months old, if you notice anything different about the child or the child has a fever, refer the child for medical care.

3) Urgency of Referral – Case Studies

- Trainer asks the participants to listen to each situation and tell what advice they would give the parents. Pause after reading each situation and call on one or two participants to give their opinion on the symptoms and what they would do.

Situation 1:

The CHW is called to the home of a family. The family is very frightened because their 4-year-old child has had two “fits” today, one early in the morning and another late in the afternoon. From their description, you know the child had a convulsion. They think a bad spirit has entered the child and they want to take him to the imam (religious leader) tomorrow.

Situation 2:

The mother tells you her child is vomiting everything for two days. The eight-month-old girl looks very sick and weak, but is breastfeeding as her mother talks to you. The mother says she vomits food more than breastmilk and she does not vomit during the hour you are watching her.

Situation 3:

Your neighbor has been gone all day, working in her fields. She had her four-month-old child with her all day. When she comes back in the evening, you notice that the child is not moving on her

back and not making any noise. When you touch the child, he looks past you with dull eyes and doesn't respond to your touch. The mother says he is just very tired and hot. When she offers him her breast, he does not eat.

- After listening to the participants, trainer confirms that Situation 1 and 3 require referrals. Situation 2 does not meet the "vomits everything" because the child is taking some breast milk and keeping it down. In Situation 1, the CHW must convince the family to take the child to the health worker first, then, to the imam. In Situation 2, the mother must continue to monitor the child, breastfeed as much as possible, and continue to try to give her very soft food. For Situation 3, the child is not alert and not eating and must be referred.
- Trainer asks the participants: Which family must try to go to the health worker, even though the day is late? Answer: the child in Situation 3 is in immediate danger. The child in Situation 1 might be able to wait until morning, but not longer. **Whenever a referral is made, families should go as soon as possible!**

Take away learning: Recognition of the four critical danger signs of childhood illness that must always be referred.

Session 8: Using the MoH Referral Form: Introduction and Practice (90 minutes).

Purpose: Familiarize the participants with the symbols, algorithm and sequencing of the MoH Referral form, and master the use of the form.

Methodology:

Q/A, Discussion
Lecture/Presentation
Demonstration
Teach Back

Materials:

Flip chart paper, markers, tape
Enlarged Picture No. 50 from Folha 1
Poster-size MoH Referral Form
Referral symbol cards
Duplicate copies of referral form, enough for at least 2/participant

Activities and Procedures

4) Introduction of the MoH Referral Form – review of referral process (30 minutes).

- Trainer shows the enlarged Picture No. 50 from Folha 1 and asks the question: "What do we mean by 'referral' – or 'transfer'?"
- Listen and acknowledge responses.
- Trainer asks the question: "Why do we refer or transfer?"
- Trainer asks the question: "Where do we refer patients to"? What happens at that location?"
- Listen and acknowledge responses.
- Trainer displays the wall-sized poster of the MoH referral form.
- Trainer asks if one participant can come forward to explain the process of referral, based on the form.

- Volunteer “walks” the group through the form.
- Trainer asks another volunteer to come forward and do the same.
- Trainer **DOES NOT** point out faults or inaccuracies of the volunteers, if there are any.
- Trainer then “walks” the group through the form, then asks if anyone has questions.

CHWs should all be fully aware of what the procedures are at the referral location – reception, paperwork, fees if any, etc. Ideally, a group visit to the nearest referral facility should be scheduled. This experience will assist the CHWs in encouraging and preparing their clients for the visit.

- Trainer reviews all of the responses that were given to the questions: “What does it mean – refer? Why refer? Where do we refer to? What happens there?”

5) MoH Referral Form – recognition of symbols (30 minutes).

- Trainer now displays the individual symbols taken from the MoH referral card. S/he holds them up one by one, with no explanation.
- Trainer asks the participants to get into pairs – 2 persons together.
- Trainer distributes the symbol cards to the pairs.
- Trainer instructs participants to explain what to each other what is happening in the picture. Give them 2-3 minutes.
- Trainer now instructs one person in each pair to move to another person, forming a new pair. The pair again explains the picture one to the other.
- 2-3 minutes.
- Trainer does one final round of trading pairs, explaining to each other the picture.
- Trainer collects all pictures, and tapes them on the wall for everyone to see.
- Trainer asks one participant to explain one picture. Ask the group to confirm the accuracy of the description. Correct as necessary.
- Trainer moves through all pictures, each time asking a different participant to explain; and asking the group to confirm the description. Correct as necessary.

6) Using the MoH Referral Form – Practice and follow up (30 minutes).

- Trainer explains that the referral process is more than just the form. The previous discussion and the explanation of the pictures all contribute to the accurate application of the referral system.
- Trainer divides the participants into 5 groups of 2 to 3 persons each. They will do a role play – in each group one person is the CHW, one is the mother or pregnant woman. The third person can be another family member or the health worker at the health post.
- Trainer distributes 1 copy of referral form to each group.
- Allow discussion in each group about who will take which role, and what the scenario for referral should be. The trainer and helpers should work with each group to help them develop their role play. (15 minutes.)
- Topics for role plays:
 Group 1 – CHW looks at child health card and finds that the child does not have measles vaccine.
 Group 2 – The mother comes to tell the health worker that her child has a very high fever.
 Group 3 – CHW visits a mother who just gave birth and finds that the baby is very small.
 Group 4 – The mother tells the CHW her child has had diarrhea for two weeks.
 Group 5 – The CHW learns that a young woman is pregnant for the first time but has not gone to health facility yet.
- Trainer calls the groups to attention; they will present their role play to each other.
- The trainer asks for observations. Problems? Misunderstandings? What is done well? What needs work?
- Trainer now distributes one referral form to each participant. They will listen to a description of a situation, and make their diagnosis for referral on the form.

The CHW visits a woman at home. The woman is in her final month of pregnancy. It is her 2nd pregnancy. She has swollen ankles, face, and hands.
Answer: Sinal de perigo na gravidez.

- All participants each mark the referral they would make for this woman. The trainer must move around the room to make sure everyone has marked the form correctly.
- Trainer thanks everyone for their active participation, and reminds them they should arrive at 1:30 hours, energized and ready to continue.

Skills learned: *Appropriate interpretation and use of the MoH referral form.*

--- LUNCH --- 60 MINUTES

Session 8: Recognizing signs of Respiratory Problems (90 minutes).

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation
Q/A, Discussion
Teach Back

Materials

Enlarged pictures No. 25, 26, 27, 28 Folha 3
Watches or timers
Four or five children who are 4 or 5 years old for final activity



Activities and Procedures

1) Defining respiratory problems and conditions that lead to them (15 minutes).

- Trainer asks participants to describe the various respiratory problems in children. Trainer listens and confirms responses, then, explains:

Coughing is a common symptom of diseases of the lungs.

A child with cough or difficult breathing may have an illness that is not life threatening, such as the common cold. The child may also have a severe and life-threatening disease such as pneumonia.

Pneumonia is an infection of the lungs. Pneumonia is often caused by bacteria. Children with bacterial pneumonia may die from too little oxygen in their blood because the infection spreads into the entire body.

Most of the children with cough that you will see will have only a mild infection. These children are not seriously ill. They do not need treatment with antibiotics. Their families can manage them at home giving them extra liquid and food while they are ill.

- Trainer explains: You need to identify the few, very sick children with cough or difficult breathing who need treatment with antibiotics. Fortunately, you can identify almost all cases of pneumonia by checking: FAST BREATHING, CHEST IN-DRAWING, and STRANGE SOUNDS when breathing.

2) Using the MoH Folha 3 to recognize and 'diagnose' respiratory problems (30 minutes).

- Trainer displays the MoH Visuals/Folha 3. Pass them around so each participant can view them once.
- Trainer recovers all visuals.
- Trainer takes one visual at a time, and clearly describes the conditions in the image.
- Confirm understanding with participants.

 <p>Tiragem</p>		<p>When a child has pneumonia, the lungs become stiff and when the child breaths, the chest must pull in hard to allow air to enter. This is very visible when looking below the lowest rib. When the child breaths in the chest draws IN. Normally, the chest and ribs go OUT when a person breaths in. If this in-drawing occurs all the time, this sign is present.</p>
 <p>Ruidos ao respirar</p>		<p>If you hear strange and harsh sounds when the child is breathing IN, this may mean that the child's air tube is being obstructed. This may be due to an inflammation. Very little air may be reaching the lungs and the child may die. If you hear the strange sound only when the child is crying, this is not considered a strange sound. A strange sound is only considered if you hear the sound all the time and when the child is calm and breathing IN.</p>
 <p>Tosse há 21 dias ou mais</p>		<p>Any cough that continues for 21 days or more is a sign that there may be a serious lung disease. The child needs to be examined by a health worker to determine what is causing the cough.</p>
 <p>Respiração rápida</p>	<p>(2 a 12 meses: 50 ou mais respirações em 1 minuto; 1 a 5 anos: 40 ou mais respirações em 1 minuto)</p>	<p>To decide if a child has fast breathing, use a watch with a second hand or a digital watch to count the number of breaths in one minute. The child must be quiet and calm, not crying. The child can be asleep. Look for breathing movement anywhere on the child's chest or abdomen. (The number of breaths per minute depends on the child's age as shown to the left by the picture.) Babies normally breathe faster than children over one year of age.</p>

- **Review exercise (15 minutes)**
 - After describing all of the pictures, trainer now randomly distributes one picture to different participants.
 - Each participant with a visual now describes the conditions in the image as per the trainer's demonstration.
 - Large group confirms or enhances description from the participant.
 - If time permits, re-distribute visuals and do another round.

- **Practice Counting Breathing (30 minutes)**
 - Divide the participants into groups of three. Provide each group with a watch or timer. One person will keep time (one minute) while the other two count breathing.
 - Each group will observe a child who should be lying on a mat.
 - The person with the timer will tell the others when to start counting silently and when to finish at the end of one minute.
 - When they finish, each one will say aloud how many breaths they counted. They must repeat the exercise until they both say the same.
 - Women who do not know how to count, may observe the activity and help keep the children still.

Take-away learning: Recognition of pneumonia symptoms.

END OF DAY TWO

DAY THREE

REVIEW EXERCISE: SIGNS OF CRITICAL CHILD ILLNESS< RESPIRATORY ILLNESS, MOH REFERRAL FORM (30 minutes).

- Trainer greets participants, asks about any problems or issues that may affect their ability to engage in the training for another day.
- Trainer confirms schedule – break at xx hrs, lunch at xx hrs.
- Trainer asks one participant to recall what the topics from the previous day – just the themes. Listen and complete information. Ask for more input from other participants.
- Trainer reviews Day Two, picks out key words and concepts, recalls the TAKE AWAY LEARNING.
- Trainer now asks everyone to stand up and spread out across the room.
- Trainer explains they will now play a game to sharpen their memory and understanding of Day Two key information.
- Trainer divides the group into two smaller groups. Group 1 will name all the danger signs for cough (respiratory illness) and Group 2 will name the four critical signs of child illness. Allow two or three minutes for group members to discuss their list.
- Ask Group 1 to say their list of danger signs. Ask Group 2 if they said them all correctly.
- Now, ask Group 2 to say their list and ask Group 1 if they said them all correctly.
- Trainer stops the game and asks everyone to take their place.
- Ask for a volunteer to explain the MoH referral form. Congratulate her for her explanation and add any details or explanation she may have missed.

Session 9: Making the most of home visits (60 minutes).

Purpose: Identify the successful approaches to home visits, including interpersonal communication techniques and assuring follow-up of referral recommendations.

Methodology

Reflection

Small Group work

Role Play (scripts found at end of session)

Materials

“Talk to Me” cards (shown below)

Activities and Procedures

1) *What goes on during a home visit? The interpersonal side of visits (20 minutes).*

- Trainer asks participants to think back to the last home visit that they made to a family.
- Trainer asks one volunteer to describe the visit. Trainer probe for details:

“What time of day was it? What were the weather conditions? Where did the visit take place – inside or outside? Who was home at the house? Who was also present during the visit? What problems were discussed? How long did the visit last?”

- Trainer now asks the participant to describe herself in the visit: (ask and listen for the responses) –

“How did you greet the mother? Did you address her by name? Did you greet all the other family members who were present? Did you explain the purpose of the visit? Did you remind

her of the last time you visited? Did you sit down with her? What materials did you have with you? What clothes were you wearing? Did you notice the conditions of the house (clean, messy, etc.)? Did you ask about the family and any other recent events? How did you take your leave? Did you fix another time to meet?"

- Trainer thanks the volunteer and she returns to her place.
- Trainer asks for comments on the information provided by the volunteer. What kind of 'feeling' did the home visit have? Apart from the technical delivery of information, the home visit has a social goal to it. Why is that important?

2) Listen more than you talk: One technique to make the most of the Home Visit (40 minutes).

- Trainer states the following 'proverb':

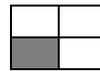
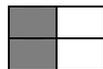
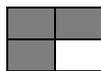
"We were given two ears but only one mouth. That is because God knew listening is twice as hard as talking!"

- Trainer relates Listening Skills to the participants' personal experience. Ask the question:
"Do you feel people listen to what you have to say?" All of the time? Some of the time? Rarely?"
The question is a reflective one. Participants do not need to speak out their answer, but keep it in mind as they work on this activity.
- Trainer explains that the CHW clients need someone to listen to them. Home visits are more than just a time to 'teach' or 'diagnose' a health problem. It is a moment to listen and learn about the client's life and concerns which always play a part in her decisions and choices for healthy living.
- Trainer asks participants what are the key elements to good listening. List as people identify elements. If no one provides information, suggest the following:

Pay 100% attention to the person. Ask simple questions- wait patiently for response – look directly at the person – open hand gestures – use of phrases such as 'tell me more'; 'I understand what you are saying', 'how do you feel about that'? etc. Trainer can add more empathy phrases.

Other key elements include showing respect and understanding.

- Trainer displays the "Talk to Me" cards. The 3 cards have some colored squares. The color represents the amount of time the CHW spends talking to the client. One card shows "talk time" by the CHW is 75%, next is 50%, and the last one is 25% "talk time".



- Trainer asks participants to interpret the amount of time on each card. Assist in interpretation if necessary.
- Trainer now distributes a set of cards to each participant. S/he asks participants to think back to the last home visit they conducted. Each participant should select the card that best represents the time they spent talking to the client. All participants hold their card up for trainer to see.
- Trainer explains that participants will now conduct role plays of home visits. The purpose of the role plays is to practice good listening skills. *We are **not** going to critique skills in diagnosis or recognition of danger signs.*

- Trainer calls for 4 volunteers to stage a role play. Trainer gives them the 'script' (below) and 5 minutes to prepare. Volunteers move to another area of the room to prepare.
- Trainer reviews the "Talk to Me" cards with the remaining participants. S/he can make comparisons to participant's home life – are they the 'talker', the talker/listener', or the 'listener' at home?
- The first role play is delivered. At the end, the observers are asked to raise the card that they think best describes the behavior of the CHW. Discuss.
- Trainer asks for 3 different volunteers. Trainer gives them the 'script' and they take 5 minutes to prepare.
- Second role play is staged. At the end the observers are asked to raise the card that they think best describes the behavior of the CHW. Discuss.
- Trainer summarizes the importance of Listening.

Script 1: CHW makes an education visit to a mother, but the mother is concerned that her four-year-old has a fever and is not eating much. The CHW starts to give her lesson anyway, but the mother keeps interrupting with questions about how to treat the child's fever. The CHW finally suggests that the mother take the child to the health facility.

Script 2: CHW goes to a home and greets the family. CHW comments that planting is done and asks how the crop is growing. CHW asks mother, father, and grandmother about their health. They say they are fine but one child is coughing all the time. CHW asks how long the child has been coughing and checks other danger signs. The child has none. The CHW advises parents that the child needs to eat, drink and rest more to recover, but does not need medicine unless the cough continues past 21 days.

Take-away learning: Listening is a very important skill during a home visit.
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Session 10: Diarrhea & dehydration: basics and recognizing danger signs (1 hour).

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation
Q/A, Discussion
Teach Back

Materials

flip chart paper, markers, tape
Reference materials
Enlarged pictures No. 29, 30, 31, 32, 33 from Folha 3 on diarrhea & dehydration



Activities and Procedures

3) Defining ‘diarrhea’ and ‘dehydration’ (1 hour).

- Trainer reminds participants that yesterday they discussed general childhood illnesses. Trainer recalls that the group prioritized 1 through 5. Confirm recollection of participants.
- Trainer asks participants how often children in their community have diarrhea.
- Trainer asks participants what conditions in the community might cause diarrhea. *(Possible correct responses: not enough hand-washing, lack of latrines or people who don't use latrines, flies, drinking unclean water, eating spoiled food or food that has been kept too long, eating too much unripe fruit)*

Disease ‘myths’ may surface in the responses about the origin of the illnesses in question. This is the opportunity for the trainer to minimize the false beliefs about the origin of some illnesses. In the event that the belief is actually harmful, it should be noted for future attention in a BCC message.

- Trainer explains that diarrhea means having 3 or more watery stools in one day (24 hours). Mothers recognize when their children have diarrhea. There are several things mothers can do for diarrhea at home.

1. **Breastfeed more:** If the child is being exclusively breast fed, offer the child the breast more often.
2. **Give available liquids:** If the child is over six months of age, give the child more breastfeeding and also other liquids such as tea, boiled water, or rice water. If available, give the child ORS.
3. **Food:** Continue feeding the child, giving small amounts of cooked foods more often.

- With this care, most children get well. Some children, however, may need to go to the health facility. If children have either of these signs of diarrhea, they must go to the health facility right away:
 - **Diarrhea that lasts more than 14 days**
 - **Blood visible in the stools**
- Trainer explains that even when children do not have either of these signs, they may die from diarrhea due to dehydration. Dehydration means the body has lost too much liquid. When we have diarrhea we are losing a lot of liquid. CHWs can recognize dehydration and refer children.
- Trainer asks participants to look at the MoH Referral Form and find the place to mark diarrhea.

3) Using the MoH Folha 3 to recognize and ‘diagnose’ dehydration.

- Trainer displays the enlarged pictures from Folha 3. Pass them around so each participant can view them once.
- Trainer recovers all visuals and explains that these are signs that a child is dehydrated. A dehydrated child should be offered available liquid by spoon he/she before going to the health facility. **DO NOT WAIT TO PREPARE ORS**, give any clean liquid, at least 1 cup.
- Trainer takes one visual at a time, and clearly describes the conditions in the image.

- Confirm understanding with participants after each picture.

 <p>Olhos fundos, encavados</p>	<p>A dehydrated child's eyes may be sunken. Ask the mother if the child's eyes look different than normal. A very dehydrated child may not have tears when he or she cries.</p>
 <p>Pregha cuthanea lenta</p>	<p>Gently pinch a fold of skin and all layers under it on the side of child's abdomen halfway between the umbilicus and the side. The child should be laying flat with arms down. The fold should be lengthwise to the body. If the fold goes away very slowly (takes more than one second, the child may be dehydrated and must be referred. Compare how slowly the fold goes away to that of another healthy child to verify.</p>
 <p>Inquieto</p>	<p>A dehydrated child will feel miserable. Assess such a child for the other signs of dehydration and offer liquids before referring the child.</p>
 <p>Tem muita sede</p>	<p>Offer children under 6m of age the breast, offer children >6m of age some water in a cup or a spoon. If the child drinks with much thirst, he has this sign. If the child cannot swallow, he has the critical danger sign of "unable to eat or drink". In both cases, the child must be referred.</p>

Note: when describing the skin fold, the trainer should demonstrate where to pinch the skin, how to do it with the sides of thumb and first finger avoiding use of the fingertips (which will cause pain), how much tissue to fold, and that the fold must be lengthwise to the body as in the picture.

- Completing all of the visuals, trainer now randomly distributes one visual to different participants.
- Each participant with a visual now describes the conditions in the image as per the trainer's demonstration.
- Large group confirms or enhances description from the participant.
- Trainer asks participants what must be done for a child with any of these symptoms. (Response: Give the child some liquid by spoon and refer to go to health facility right away.)

BREAK – 15 MINUTES

Session 11: Oral Rehydration Solution (ORS) – Practice (45 minutes)

Purpose: Confirm familiarity with the principle of ORT, confirm ability to use ORS packets and administer therapy.

Methodology

Demonstration
Q/A, Discussion
Teach Back

Materials

ORS packets
 Certeza
 Mixing materials
 Water

Activities and Procedures

1) What is Oral Rehydration Therapy (ORS) and why is it useful? (15 minutes).

- Trainer asks one participant to remind the group why a person can get dehydrated during a bout of diarrhea. (*The body is losing much liquid with the stools.*)
- Trainer asks others to complete the explanation or confirm the explanation.
- Trainer asks the question: “*what is ORS?*” (*A special mix that comes in a packet to put in water.*)
- Trainer shows the packet and asks participants where they can get ORS.
- Trainer listens and corrects or completes the information.
- Trainer asks the question: “*why is ORS useful?*” (*To put back the liquid the body has lost*)

2) Demonstration for treating water with Certeza, mixing and giving Oral Rehydration Solution (45 minutes)

- A 20 L or 40 L jug will be used to show participants how to purify water used in the preparation of ORS. Discuss with participants other methods of purifying water such as boiling the water or using drops of bleach. Explain where to get Certeza.
- Trainer explains that now the participants will practice mixing and giving ORS. Reinforce the following key points:
 1. ORS is for children 6 months old or older. Children <6m old should be offered breast milk with increased frequency when they have diarrhea.
 2. Purified water must be used to make ORS.
 3. ORS must be made in one liter of water. The amount of water is very important for the ORS to have its life saving characteristics.
 4. If the child has difficulty drinking all the ORS, s/he should be offered sips of ORS every five minutes until s/he has consumed the entire liter.
 5. Present a variety of containers that are often found in the community (coke bottles, plastic cups, empty jugs of oil, etc...) Using a measuring glass that clearly indicates 1 Liter of water, fill up the community containers with 1 Liter of water.
- Trainer calls for 3 volunteers to come forward. Each group receives 1 ORS packet, a spoon, and at least one type of commonly found containers and/or a pitcher.
- Trainer asks one volunteer to describe what is in the ORS packet.
- Trainer asks the other participants if this is correct.
- Listen and complete/correct information.
- Trainer now asks the 3 volunteers to organize their utensils and water.
- The volunteers together make a mix of ORS using the purified water made early by the group.
- The other participants watch.
- Trainer asks one volunteer to demonstrate how to give ORS to one of the other volunteers.
- The other participants watch.
- Trainer thanks the volunteers and they return to their places.
- Trainer asks observers to give feedback on the mixing process.
- Trainer corrects or confirms the proper mixing procedure.
- Trainer asks observers how much ORS to give a child and what to do if the child is having difficulty drinking the ORS. (One liter per day and give by spoonfuls every five minutes if the child cannot drink a larger amount by cup.)
- Explain that ORS cures dehydration, it does not cure the diarrhea, which should go away by itself.

- Ask the participants, “If the diarrhea has blood or lasts more than 14 days, what do you do?” (Refer the child for medical treatment.)

Take-away learning: *Recognition of signs of severe diarrhea and dehydration.*
 Skills learned: *Preparation of ORS and review of water purification.*

Session 12: Fever- Basics and Recognizing Danger Signs (45 minutes)

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation
 Q/A, Discussion
 Teach Back

Materials

Flip chart paper, markers, tape
 Enlarged pictures from Folha 3 on fever



Activities and Procedures

1) What is fever, and what is it an indication for? (15 minutes).

- Trainer reminds participants that yesterday they discussed general childhood illnesses. Trainer recalls that the group prioritized 1 through 5. Confirm recollection of participants.
- Trainer asks participants if ‘fever’ was listed. Was **Malaria** listed? Fever is a symptom of the disease Malaria.
- Trainer asks a volunteer to describe a child with ‘fever’.
- Trainer asks the group if this is a description of **Malaria**.
- Trainer listens and confirms responses. Trainer asks participants what conditions in the environment might contribute to malaria.

Malaria is a parasite that infects the red blood cells of a person. The parasite is transmitted by the bite of a mosquito. If a mosquito carrying the parasite that causes malaria bites a person, the person will develop the disease called Malaria. Mosquitoes carry malaria from one person to another. Mosquitoes breed in standing water and bite people in the evening and during the night.

- Trainer asks for questions about malaria or mosquitoes.

2) Using the MoH Folha 3 to recognize and ‘diagnose’ fever (30 minutes).

- Trainer displays the enlarged pictures from Folha 3. Pass them around so each participant can view them once.
- Trainer recovers all visuals.
- Trainer takes one visual at a time, and clearly describes the conditions in the image.

- Confirm understanding with participants.

	Any child who has had fever for seven days should be referred for malaria. To check whether the child has fever, put the back of one hand on the forehead of the child and the back of the other hand on the forehead of the mother or another person who doesn't complain of fever. Decide if the child's forehead feels hotter.
	A rash may be a sign of malaria only if the child also has had a fever for at least seven days. There are many causes of rash, and most rashes will go away. Refer the child only if there is also fever, or if the child is under two months old.
	Qualquer sintoma rigidez de rigidez de nuca deve ser referida imediatamente porque pode tetanus, malaria cerebral, meninguitis entre as mas comunes e graves.
	Red eyes may be a sign of malaria only if there is also a fever which has lasted for seven days.

- Completing all of the visuals, trainer now randomly distributes one visual to different participants.
- Each participant with a visual now describes the conditions in the image as per the trainer's demonstration.
- Large group confirms or enhances description from the participant.
- If time permits, re-distribute visuals and do another round.

Take-away learning: Recognition of the cause and symptoms of malaria.

---Lunch 60 minutes---

Session 13: Ear Aches- Basics and Recognizing Danger Signs (60 minutes)

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation

Q/A, Discussion

Teach Back

Materials

Flip chart paper, markers, tape

Enlarged pictures from Folha 3 on fever



Activities and Procedures

1) Ear aches in children (15 minutes).

- Trainer asks participants to think about how a child who may not yet be able to talk expresses an ear ache. (most likely answer – crying).
- Trainer asks participants if they can remember having an ear ache themselves.
- Trainer asks a volunteer to describe what an ear ache feels like. Ask questions:
Can you see an ear ache? Can you feel an ear ache? Smell an ear ache? How can you tell when someone has an ear ache?
- Trainer listens and confirms responses.
- Trainer explains that an ear ache is an infection inside the ear caused by bacteria and it may spread to the bones behind the ear. An ear ache, if untreated, may make the child deaf.

2) Using the MoH Folha 3 to recognize and ‘diagnose’ ear ache (45 minutes).

- Trainer displays the MoH Visuals/Folha 3. Pass them around so each participant can view them once.
- Trainer recovers all visuals.
- Trainer takes one visual at a time, and clearly describes the conditions in the image.
- Confirm understanding with participants.

 <p>Swelling behind the ear</p>	<p>Swelling behind the ear is not always present when there is an ear ache. If the swelling continues, even without an ear ache, the child should be referred to the health facility as it may be the sign of another illness. If the child has both swelling and pain behind the same ear, this is a sign that the infection has spread to the bone and the child needs medical care as soon as possible.</p>
 <p>Pain inside the ear</p>	<p>An ear ache is any pain inside the ear. A child who cannot speak may rub the ear while crying. As the infection progresses, the pain may actually lessen, particularly if the ear drum breaks. The child should be referred as soon as there is pain because he/she will need treatment with antibiotics to prevent the infection from becoming worse.</p>
 <p>Pus coming out of the ear</p>	<p>Pus coming out of the ear indicates a serious infection and the child should be referred to the health facility right away. If the child has any other liquid coming out of the ear and has not been in the water, then, this is also a sign of an ear infection.</p>

- Completing all of the visuals, trainer now randomly distributes one visual to different participants.
- Each participant with a visual now describes the conditions in the image giving the same information that the trainer gave.
- Large group confirms or enhances description from the participant.
- If time permits, re-distribute visuals and do another round.
- Trainer asks the participants to find the place on the MoH referral form to mark ear ache.

Take-away learning: Recognition of earaches and the need for referral.

Session 14: Recognizing Anemia (60 minutes)

Purpose: Identify existing knowledge levels of participants, confirm ability to accurately use knowledge and skills to identify and refer children with anemia.

Methodology

Lecture/Presentation

Q/A, Discussion

Teach Back

Materials

Flip chart paper, markers, tape

Enlarged pictures No. 45 and 46 from Folha 3 on anemia

- Trainer asks participants what they know about anemia. Ask “Have any of you been told you had anemia?” How did you feel when you had anemia? (*tired, weak, headache, sometimes felt cold*)
- Trainer explains that anemia is a shortage of the red part of the blood, which is necessary to carry oxygen around inside the body. Men, women and children can all have anemia. Since we already talked about anemia in women, we are going to talk about anemia in children now.
- Trainer asks “What causes anemia?” After listening to the responses, trainer explains that in Mozambique, there are many causes of anemia. Some of the causes are: low iron intake from food, malaria, having other parasites including worms, losing a lot of blood. Many people have anemia and don’t know about it, but it affects their ability to work and learn.
- Explain that anemia can be cured by taking iron tablets (sal ferroso), but it is just as important to prevent anemia by keeping the child free from worms and malaria and making sure the child eats foods with iron.
- Trainer shows the picture No. 45 from Folha 3 and asks “How do we know if a child has anemia?” After listening to the responses, the trainer explains that we must look at the color of the palms of the hands. If they are very pale, the child may have anemia. This is called pallor. Compare the hands of the child to those of other children, the mother, or another adult. Within the same family, everyone may have anemia, so the CHW may have to look for a neighbor or those of her own child to compare.
- Explain that we don’t go by the lack of color inside the eyelids because so many children also have conjunctivitis or another eye disease, their eyelids may look pink from that, even if they have anemia.
- Have the participants compare their palms with those of the others in the room. Do those with the most pallor know whether they have anemia?
- Ask the participants to look at the MOH referral form. Ask where they would mark a referral for a child with anemia.
- Trainer asks what the health worker can do for a child with anemia. (*Responses: give iron tablets, treat for malaria, de-worming*) Explain that it is very important for the child to take all the iron tablets and to complete the malaria treatment, if given.



- **Role play**

- Trainer asks two volunteers to come to the front of the room. One will be the mother of a child with anemia and the other will be the CHW. If possible, have a child present. Ask the one who is CHW to show what she will do to find anemia and what advice she will give the mother. (10 minutes)

- At the end of the role play, trainer asks the other participants, if the CHW left out any steps or left out important counseling for the mother. Did she explain to the mother why it was important to take the child to the health facility? Did she explain what would happen at the health facility? Which treatments the child might receive? Did she give any advice on how to take the iron tablets? On how to prevent anemia? Thank the volunteers for their performance.
- Thank the participants for their participation today and remind them to come at 8:30 tomorrow.

END DAY THREE

DAY FOUR

Session 15. REVIEW EXERCISE: Diarrhea/Dehydration, Fever, Ear ache, Anemia (30 minutes).

Game: ‘See, Hear Do’

Purpose: Review learning from the previous day.

Materials:

Three large cards: One has a symbol for “See” (an eye), another has an ear as a symbol for “Hear”, the third has a drawing of a hand as a symbol for “Do”.

- Trainer greets participants, asks about any problems or issues that may affect their ability to engage in the training for another day.
- Trainer confirms schedule – break at xx hrs, lunch at xx hrs.
- Trainer asks one participant to recall what the topics from the previous day – just the themes. Listen and complete information. Ask for more input from other participants.
- Trainer now displays the See, Hear, Do cards. Ask for recognition of the symbols.
- Trainer explains that s/he will ask a question and depending on the card that is flashed, the participant will give an answer, example:

“What is a sign of severe diarrhea?” [Flash ‘See’ card]. Participant states a visual sign of diarrhea. (blood in the stool)

“What do you know about malaria?” [Flash ‘Hear’ card]. Participant repeats some information they have heard from the trainer.

“What should you do to prevent anemia?” [Flash ‘Do’ card]. Participant states an action to take. (protect the child from worms, malaria)

“What is a sign of an ear infection?” [Flash ‘See’ card]. (pus coming from the ear, or child rubbing the ear)

“What did you learn about ORS? [Flash ‘Hear’ card].

“What should you do for a child with dehydration when you refer the child?” [Flash ‘Do’ card]. (Give the child spoonfuls of available liquid)

- Trainer does at least 2 rounds of each card.

Session 16: Malnutrition (60 minutes)

Purpose: Identify existing knowledge levels of participants, correct misinformation and confirm ability to accurately use knowledge and skills.

Methodology

Lecture/Presentation

Q/A, Discussion

Demonstration

Materials

Enlarged pictures No. 44, 45, 51, 52, 53, 54, 55 from Annex

Activities and Procedures

- **Defining Malnutrition**

- Trainer asks the participants “what is malnutrition?” Sum up responses by saying that malnutrition is a condition caused by lack of food or lack of the right combination of foods, or it can result from repeated illness of the child.

- Trainer explains that when children are malnourished they don't grow properly and they are at higher risk of dying from the childhood illnesses we have been talking about. Malnourished children who survive may not do as well in school or be able to work hard when they are adults.
- Trainer explains that there are different types of malnutrition in our communities. The most common is under-nutrition, which is often hard to identify. These children are simply very thin or do not gain weight or grow taller as they should. If a child seems to be very thin for several months without change, the CHW should refer the child to the health facility to be weighed and measured.
- Trainer shows the enlarged pictures and explains them, confirming understanding.

 <p>Enfraquecimento</p>		<p>This form of malnutrition is called wasting or, in the most severe form, marasmus. The child will have very skinny limbs, no fat on the buttocks, and an old-looking face. This child has not had enough to eat for a very long time. The child must be referred to a health facility for treatment.</p>
 <p>Inchaço nos pés</p>		<p>Another form of severe malnutrition is kwashiorkor. This type of malnutrition comes on following severe illness or sudden withdrawal of food. The child may look "fat" but is actually swollen in the feet and face. Press one finger on the swollen foot. If a dent remains for more than a second, this is a sign of this kind of malnutrition. The child may also have thin, light-colored hair and/ or light patches on the skin. Children with these signs must be referred for treatment.</p>

- Trainer asks one participant to repeat what was said about the signs of severe malnutrition. Other participants may add any information missing.
- Ask participants to look at the MoH referral form to find the place to mark for referral for malnutrition.

- **Identifying Feeding problems**

- Trainer asks participants "What is the best way to assure that small babies don't become malnourished?" (*Responses: Keep them healthy, give them only breast milk for six months.*)
- Trainer shows enlarged picture No. 51 and asks "If a newborn is not sucking well or not interested in eating, what do we do?" (*make a referral*)
- Trainer asks "Do first-time mothers always know how to breastfeed their newborn or do they sometimes have problems?" "Should we visit them shortly after delivery to see if they have problems?"
- Trainer explains that two common problems we can observe are attachment (boa pega) and position.

 <p>POSIÇÃO</p>	<p>Holding the child in the correct position not only enables the child to suck easily, but also prevents the mother from having cracked or sore nipples. The child's abdomen should be flat against the mother and the child should be crosswise to the mother's body.</p>
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	<p>Good attachment is very important. The child should have the entire dark area around the mother's nipple in his or her mouth. This stimulates the milk glands so that the mother will produce sufficient milk. A child who sucks only on the end of the nipple will not stimulate milk production and the mother may get a sore nipple.</p>
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- Trainer explains that if there are problems with attachment or position, the CHW helps the mother, but does not need to refer the mother to the health facility.
- Trainer asks a participant to explain good attachment and another to explain good position. If participants have babies with them, they may demonstrate good attachment and position.
- Trainer explains that we will talk about other causes of malnutrition and advice to give mothers in another session.

Take-away learning: Recognition of signs of severe malnutrition and feeding problems.

Session 17: Review all signs of childhood illness (1 hour)

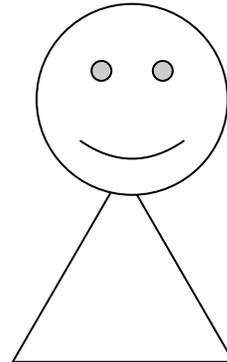
Purpose: Review and confirm that the participants have a good grasp of the top 5 childhood illnesses affecting their community, and that they can recognize the signs of the illnesses.

Methodology

Team Quiz
Paper Doll collection

Materials

Questions and Answers for all 5 childhood illnesses
Paper Dolls cut from folded paper.
All enlarged pictures of danger signs from Folha 3 and the additional ones for malnutrition from Annex.



Activities and Procedures

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1) Team Quiz on Childhood Illnesses: Paper Doll collection)

- Trainer explains that it is now time for participants to prove their new knowledge.
- Trainer will show signs of the illnesses that have been discussed in the training: *RESPIRATORY ILLNESS, DIARRHEA, FEVER, EAR ACHES, ANEMIA, MALNUTRITION*. Participants must explain the sign shown in the picture.
- Divide participants into two teams, Team Blue and Team Red.
- Teams line up facing the trainer, one person behind the other.
- Trainer explains that s/he will show a picture to the first person on Team Blue.
- If the person describes the danger sign correctly, they receive a Paper Doll.
- The next picture goes to the first person on Team Red. Correct answer receives a Paper Doll.
- If the person answers incorrectly, no Paper Doll, and the question rolls over to Team Red.
- The game progresses as more and more Paper Dolls are given.

- The team with the most Paper Dolls at the time limit wins. Trainer explains that each paper doll symbolizes a life saved by proper recognition of a danger sign and referral.

--BREAK--

Session 18: Using the MoH Guide: practice signs and filling in (2 hours)

- Note the length of this session might require a mid-point 5 minute break.

Purpose: Review and confirm that the participants have mastered the use of the MoH Guide (folhas).

Methodology

Game – Directions left, right, up, down

Game – Scramble

Practice and repetition

Role Play

Materials

Individual copies of the complete MoH Guide (folhas 1,2,3,4)

Enlarged pictures (annex)

Scripts for role play

MoH guide- individual copies for each participant

Activities and Procedures

1) Walking through the MoH Guide (folhas): 'reading' left & right, up & down – 20 minutes

- Trainer explains that the participants will now learn to 'navigate' the MoH Guide Folha cards.
- Trainer asks everyone to stand up. Everyone stick out their left arm. LEFT. Check that all participants know their left.
- Everyone stick out their right arm. RIGHT. Check that everyone knows their right.
- Trainer asks everyone to lift both arms up to the sky. UP.
- Trainer asks everyone to drop both arms down to the ground. DOWN.
- Trainer now explains they will repeat the gestures in rapid motion. Trainer calls out LEFT, RIGHT, UP, DOWN. Mix up and call out UP, LEFT, DOWN, RIGHT.
- Create an atmosphere of energy and fun!
- Trainer points out that the information in the MoH Guide moves left, right, up and down. Participants must be able to visually move ('navigate') their way through the card to make the right decisions.
- Participants return to their places.
- Trainer distributes a copy of Folha 1 to all participants. Participants look closely at the boxes and organization of images and information.
- Trainer asks one participant to demonstrate how to move left through the boxes.
- Confirm or correct demonstration.
- Trainer asks one participant to demonstrate how to down through the boxes.
- Confirm or correct demonstration.
- Call for questions.

2) Recognizing the symbols and images on the MoH Guide – Scramble Game (50 minutes – longer if necessary).

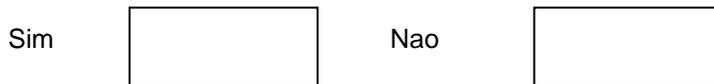
- Trainer explains that the participants will now learn to 'read' the symbols and images on the MoH Guide (folhas).

- Participants have copies of the complete MoH Guide in front of them.
- Trainer instructs the participants to look over the folhas carefully, noticing the symbols, pictures, photos, logos, words – all details of the folhas. Allow 3-4 minutes for this.
- Trainer now divides the participants into 3 groups of five persons. Each group receives a set of enlarged pictures for one illness. The pictures should be shuffled, out of order.
- The group is to sort out the pictures that explain the disease and how to care for that disease. They will line up all the pictures in the order they are shown on the Guide.
- Trainer explains that s/he will call out one childhood illness topic, and the group that has those cards will stand up.
- For the first round, the groups can use their MoH folhas as a reference.
- Trainer calls out *FEVER and that group stands up and shows their pictures in order.*
- The other groups gather around to watch.
- Trainer asks for confirmation or correction from the other groups.
- Trainer
- Repeat the process until all illnesses have been called out.
- Call for questions.
- Participants return to their places.

2) Check boxes – recognizing ‘sim’ and ‘nao’, and the related questions. (20 minutes)

Pre-literate CHWs must be able to memorize the written questions and exactly locate where they are the folha. Memorization and repetition is the only effective means to achieving this under the circumstances.

- Trainer explains that there are 2 important indicators that participants must understand.
- Trainer draws the words and boxes on the flip chart or large paper:



- Trainer asks participants to look on the folha and find these same images.
- Confirm that everyone has found the location.
- Trainer asks someone to explain what these words and boxes mean.
- Trainer reads the words out loud, making a hand gesture at the same time.
- For the word ‘SIM’, trainer opens her hand.



- For the word ‘NAO’, trainer closes her hand.
- Trainer repeats the words and gestures, then, asks participants to do it with her.
- Trainer refers back to the words/images on the large paper, and asks participants to find them again on the Folha.
- Trainer asks one participant to ‘read’ the word and box with the proper hand gesture.
- Participant leads the group in one ‘reading’ of the word, box and gesture.
- Trainer now explains that there are questions the CHWs must answer SIM or NAO.
- Two questions are on the Folha 1 for pregnant women:

Do you take Vitamin A?

Do you take Iodine during pregnancy?

- Trainer shows the participants where these questions are on the Folha 1 and the images that relate to the questions. Everyone find this place.
- Trainer asks one participant what they see next to the question (SIM/NAO boxes).
- Trainer asks the participants what are the questions:
Do you take Vitamin A?
Do you take Iodine during pregnancy?
- Trainer and participants repeat the questions in order.
- Trainer asks the participants what to do when they get the answer to the question.
- Listen for answer (mark one of the boxes).
- Trainer draws a check on the large paper or flip chart. ✓
- Everyone practice making a check on their folha.
- Trainer asks one participant to repeat the questions in order.
- Trainer now finds the questions on Folha 4.
- Three questions are on the Folha 4:
Child takes Vitamin A?
Child takes mebendazole?
Child takes iodine?
- Trainer and participants repeat the questions in order.
- Trainer asks the participants what to do when they get the answer to the question.
- ✓
- Everyone practice making a check on their Guide.
- Trainer asks one participant to repeat the questions in order.
- Call for questions.

3) Using the MoH guides – critical situation role plays for diagnosis, ‘treatment’ and referral. (30 minutes)

- Trainer explains that participants will now conduct role plays to show that they can diagnose, treat or refer children for *RESPIRATORY ILLNESS, DIARRHEA/DEHYDRATION, FEVER, EAR ACHE AND ANEMIA.*
- Participants divide into 3 groups of five.
- In each group, 2 persons are observers/monitors and 3 persons conduct the role play.
- Trainer will read aloud one role play and all three teams will set up the same one. Trainer explains that the teams must decide what to do.
- The observers will watch and listen closely, and decide if the players made the proper process and decision.
- Produce the role plays.
- Observers make their decision.
- General group discussion – did they do the right thing? If not, what should they have done?
- Do a second round, changing the observers for each group.
- Produce the role plays.
- Observers make their decision.
- General discussion.

Take away learning: Understanding and skills in using the AIDI-C Guide to assess sick children, women and newborns.

LUNCH – ONE HOUR

Session 19: Barriers to Seeking Referral Care; Finding Solutions to Barriers (90 minutes).

Purpose: List the reasons that families give for not following the CHW referral advice, identify the real barriers.

Methodology

Q/A

Discussion

Group work

Materials

Flip chart and markers

Activities and Procedures

1) Question and Answer – why families don't always go for referral care (30 minutes).

- Trainer asks participants if they know whether mothers/families always follow through for referral care when the CHW advises to go.
- Ask participants to give an example of a serious case that did not go for referral.
- Ask participants what are the obstacles blocking clients from seeking referral.
- Listen for the following:
 - *Lack of understanding by the family (they think the illness is not a serious problem)*
 - *Lack of transport*
 - *Lack of money (even if transport is available it may cost something)*
 - *Lack of family support or permission*
 - *Lack of trust in the MoH system*
 - *Health facility is open only limited hours on weekdays*
 - *Other?*
- Trainer asks the participants if they can organize these barriers in order of most significant (most often occurring).
- Describe each barrier in more detail. Detail will provide the possible path to a solution.

- Finding pathways around the obstacles- learning from experiences. (45 minutes)

- Trainer will divide the participants into 4 groups and assign each group one of the most common barriers.
- Ask each group to describe their barrier in more detail. (Example: Lack of transport – how many km to the health facility? Is there transport during the day but not at night? What means of transport is available? Is it possible to carry a sick child or pregnant woman by this means of transport? Is it safe to travel after dark? How much does the transport cost? Etc.)
- Remind participants that most referrals are emergencies and the patient may die quickly if not taken to the health facility. Ask them to brainstorm for solutions to their barrier. What can the family do to be prepared in advance? What can the community do to help families when there is an emergency? What can the CHW do to remove fear of going to the health facility?
- After 15 minutes, ask the group to present to the others their barrier, the details, and what solutions they propose.
- After each presentation, ask the other participants to propose additional solutions.
- The trainer will write on a flip chart all the proposed solutions to acknowledge them and to serve as a reminder during later training and monitoring visits.

- When all groups have finished their presentations, the trainer can propose additional solutions that the project may be going to address such as establishing community loan funds or emergency transport plans.
- **Following up on referrals (15 minutes)**
- Trainer asks the participants “How do you know whether a family went to the health facility after a referral? Do you make another home visit the next day?”
- Trainer asks three participants to do a quick role play. One is the pregnant woman who has swollen feet, face and hands, one is the CHW who has referred the woman and returned the next day to find the woman didn’t go, and the third is the husband who didn’t give her permission to go. What will the CHW say to the husband to convince him to take his wife to the health facility? When the role play is finished, ask other participants what else could the CHW say to convince the husband.
- Explain that even if the CHW knows the family went to the health facility, she should visit them to see that they are following the treatment and to find out whether they have any questions about the instructions they received at the health facility. She should use the opportunity to congratulate them for being concerned enough about the child or woman to seek medical care.

<p>Take away learning: It is necessary to find solutions with families or in their communities to enable them to comply with referrals made to the health facility.</p>

END DAY FOUR

DAY FIVE

Session 20 Review of Danger Signs and Referral Form, Barriers to Referral (90 minutes)

Purpose: Review learning from the previous day.

Methodology

Q&A

Teach back

Matching game

Materials

Folhas 1 – 4

Enlarged pictures of all danger signs – lay out on a table or the floor before the session starts. There will need to be duplicates of those pictures that appear more than once in the Guide.

- Trainer greets participants, asks about any problems or issues that may affect their ability to engage in the training for another day.
- Trainer confirms schedule – break at xx hrs, lunch at xx hrs.
- Trainer asks one participant to recall what the topics from the previous day – just the themes. Listen and complete information. Ask for more input from other participants.
- Trainer asks the participants to name barriers to referral that were identified yesterday.
- Ask different participants to name the possible solutions to each of these barriers. Review the flip charts from yesterday to remember all the solutions that were proposed. Ask participants if they thought of any more solutions overnight.
- Ask why CHWs should follow-up with patients who were referred.
- Choose four participants to come to the front. Assign each one a different folha. Ask each one to describe the questions that are written on the folha (NOT the pictures). If a participant has difficulty, ask one of the others to help her remember.
- Explain to the participants that we are now going to see how well everyone remembers the pictures. Ask the participants to form a circle around the pictures on the table. Participants will work in pairs.
- Each pair will take one topic:
 - pregnant woman
 - post-partum woman
 - newborn
 - critical danger signs for children
 - respiratory illness
 - diarrhea
 - fever
 - ear ache
 - malnutrition
- The pair will find the pictures of danger signs that correspond to their topic.
- They will then identify where the pictures are found on the Folha. The trainer must look to see if they are correct.
- Next, they will find the place to mark for referral for that illness or condition on the MoH referral form. The trainer again verifies.
- If time allows, return all pictures to the table and mix them up. Give each pair a new topic and have them repeat the process.

Session 21 Exclusive Breastfeeding for the First Six Months (60 minutes)

Purpose: Enhance CHWs' understanding of the importance of exclusive breastfeeding.

Methodology

Q/A

Discussion

Materials

Enlarged picture No. 51

Folha 4

Activities and Procedures

- Define exclusive breastfeeding
- Trainer shows picture No. 51 and explains that we are going to talk a little about breastfeeding. (In another training participants will have an opportunity to learn much more about feeding infants and young children.)
- Trainer asks "Why is it important to give a baby only mother's milk during the first six months?" (Possible answers: *to keep the child healthy, to give good nutrition, breast milk is clean*)
- Trainer asks "Does a baby who is breastfeeding also need water?" (Answer: *No, because breast milk contains a lot of water.*)
- Trainer asks participants to look at the first row on Folha 4. [Same as last row on Folha 2]



- Ask a participant to explain what was said yesterday about good attachment and position. Other participants may add comments. If possible have all participants with babies, demonstrate again good attachment and position.
- According to the pictures, how many times a day should a baby breastfeed? (Answer: *At least ten times in the day and night.*)
- Trainer comments that breastfeeding takes time. Ask "What can other family members do to assure that the mother has enough time to breastfeed her child ten times in the day and night?" (Possible answers: *older children take over some housework, father entertains or feeds child older than the baby, someone else gets up early to start the fire and prepare breakfast, etc.*)

---BREAK---

Session 22 Complementary Feeding (2 hours)

Purpose:

Methodology

Q/A

Discussion

Role play

Materials

Folha 4

Spoons and bowls appropriate for feeding a young child – 5 sets

Prepared food – 1 to show proper consistency and another that is too liquid.

Activities and Procedures

- Consistency of food, how much and how often
- Trainer asks participants “Why do we recommend that babies start eating other food besides breast milk when they are about six months old? Response: *They are growing bigger and breast milk is no longer enough by itself.*
- What are the first foods commonly offered to children?
- Trainer shows the prepared food and asks the participants “Which one is the right consistency?”
- After they respond, ask “What will happen if we give the child only the food that is too liquid?”
- Point out that on the Folha 4, it says that a child should have their own bowl. Ask “why is this important? *(so the child will get enough to eat without competing with the other children, and the mother can tell how much the child ate in case she needs to encourage him/her to eat more).*
- Show the participants the picture of 3 bowls and explain that a child between 6 and 9 months needs to eat food after breastfeeding at least 3 times a day.
- Ask one of the participants to count how many spoonfuls should be in the bowl of a child who is six months old for each time he/she eats.
- Repeat with 7 months, 8 months and from 9-11 months.
- Ask participants to look at the picture and tell how many times a day a child needs to eat after 9 months of age.
- Emphasize that children need to continue breastfeeding, taking the breast after eating the food each time.

- Practicing quantity – game
- Divide the participants into five groups.
- Give each group 12 spoons and five small bowls.
- Trainer explains that he/she will call out a child’s age and the group must hold up the correct number of spoons and bowls for that age of child.
- Trainer will call out 6, 8, 10, 12 and 22 months, but not necessarily in order.
- At the end, congratulate all groups.

- Role plays on counseling about feeding.
- Each of the five groups will now present a short role play showing how the CHW will advise on child feeding.
- Allow the groups five minutes to prepare their role play on the assigned topic.
- Group 1: A mother has not started giving her 8-month old any food. Her mother-in-law says the child doesn’t need food, yet,
- Group 2: A young mother is only breastfeeding her child 6 or 7 times a day and maybe once during the night. She says she has too much work to do and is so tired she doesn’t want to wake up in the night.

- Group 3: The CHW has observed that the 10 month old child is very thin. When she goes to the house, she sees that the child is eating slowly from the same bowl with four other children who take most of the food.

- Group 4: The mother gives the one-year-old child food in his own bowl and a spoon, but goes off about her work. The child eats very little of the food.

- Group 5: The mother gives the child the same thin porridge four times a day.

- After each group presents, allow the other participants the opportunity to suggest additional advice for the mother or family.
- When the role plays are finished, trainer thanks participants and asks for questions.

---LUNCH--- 1 hour

Post –test

- Using the same questions and procedure as for the pre-test, the trainer will take participants aside one by one and ask them to identify danger signs from the pictures and to explain the referral form.
- If the trainer has some helpers, they can divide the participants to make the process go more quickly.
- If the trainer and helpers see that many participants are having similar difficulty or confusion with one part of the post-test, take time to correct that information for the whole group before giving the certificates.

Presentation of certificates

END DAY FIVE

ANNEX Pictures from AIDI Guide

Picture No. 1



Picture No. 5



Picture No. 10

Palidez ou cansaço.



Picture No. 2



Picture No. 6



Picture No. 11

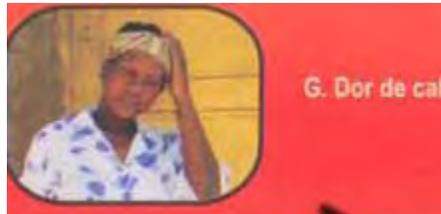


Corrimento mau cheiroso

Picture No. 3



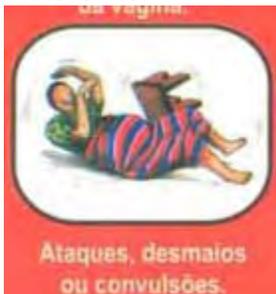
Picture No. 7



Picture No. 50



Picture No. 4



Picture No. 8



Picture No. 9



Picture No. 13



Não consegue mamar

Picture No. 18



Prematuro (nasceu antes do tempo) ou com baixo peso (inferior a 2,5 kg)

Picture No. 50



Picture No. 14



Move-se menos do que o normal

Picture No. 19



Prematuro (nasceu antes do tempo) ou com baixo peso (inferior a 2,5 kg)

Picture No. 15



Respiração rápida (menores de 2 meses: 60 ou mais respirações por minuto)

Picture No. 20



Febre

Picture No. 16



Gemido



Picture No. 17



Diarreia

Picture No. 21



Picture No. 26



Picture No. 31



Picture No. 22



Picture No. 27



Picture No. 32



Picture No. 23



Picture No. 28



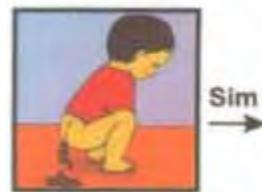
Picture No. 33



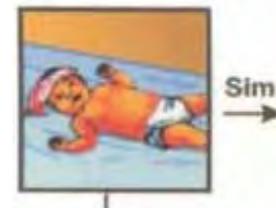
Picture No. 24



Picture No. 29
Está com diarreia?



Picture No. 34
Está com febres?



Picture No. 25



Picture No. 30



Picture No. 35



Picture No. 36



Picture No. 40



Picture No. 45



Picture No. 37



Picture No. 41



Picture No. 46



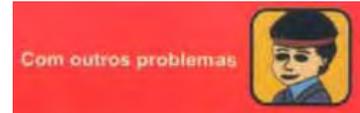
Picture No. 38



Picture No. 42



Picture No. 47



Picture No. 43



Picture No. 48



Picture No. 39



Picture No. 44



Picture No. 50



Picture No. 51



Picture No. 52



Picture No. 53



Picture No. 54 Kwashiorkor



Photo No. 55 Marasmus



Annex 11: C-IMCI Cards (annexed as PDF)

Annex 12: CSTS Data Form (annexed as PDF)

Note:

1. The Final Evaluator is Henry Perry
2. USAID Mission Contact is Maria da Conceicao Rodrigues
3. We have entered the midterm anthropometry results for Phase I districts. However, please note that the best estimate of underweight changes will require weighting of each district. We used LQAS and some districts are larger than others.