



**Grand Cape Mount Child Survival Project  
Improved Child Health in a Transitional State through IMCI**

**Grand Cape Mount County, Liberia  
October 2006 – September 2010**

**In Partnership with**

**Liberia Ministry of Health and Social Welfare  
Grand Cape Mount County Health Team  
Christian Health Association of Liberia**

**Midterm Rapid Health Facility Assessment  
Grand Cape Mount County  
Liberia**

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## ACRONYMS

<b>ANC</b>	Antenatal Care
<b>ARI</b>	Acute Respiratory Infection
<b>CHAL</b>	Christian Health Association of Liberia
<b>CHP</b>	Community Health Promoter
<b>CHT</b>	County Health Team
<b>CHW</b>	Community Health Workers
<b>C-IMCI</b>	Community IMCI
<b>CS</b>	Child Survival
<b>CORE</b>	Collaborations and Resources Group
<b>CSHGP</b>	Child Survival and Health Grant Program
<b>CSP</b>	Child Survival Project
<b>EPI</b>	Expanded Program of Immunizations
<b>GCM</b>	Grand Cape Mount County
<b>GCMCSP</b>	Grand Cape Mount County Child Survival Project
<b>GIK</b>	Gifts-in-kind
<b>HF</b>	Health Facility
<b>HFA</b>	Health Facility Assessment
<b>HHP</b>	Household Health Promoter
<b>HW</b>	Health Worker
<b>IMCI</b>	Integrated Management of Childhood Illnesses
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MNC</b>	Maternal Newborn Care
<b>MOHSW</b>	Liberia Ministry of Health and Social Welfare
<b>MTI</b>	Medical Teams International
<b>MTI/Liberia</b>	Medical Teams International/Liberia
<b>N</b>	Sample size
<b>NDS</b>	National Drug Service
<b>ORS</b>	Oral Rehydration Salts
<b>PHC</b>	Primary Health Care
<b>RHFA</b>	Rapid Health Facility Assessment
<b>USAID</b>	United States Agency for International Development

## I. Executive Summary

In October 2006, Medical Teams International began the Grand Cape Mount Child Survival Project: Improved Child Health in a Transitional State through IMCI aimed at reducing child and maternal mortality and morbidity in Grand Cape Mount (GCM), Liberia. A large part of the project is to increase the capacity of 31 health facilities (HFs) and accompanying staff in GCM County.

In September 2008, the Child Survival team carried out a Rapid Health Facility Assessment as part of a mid term assessment process to assess the projects progress in building the capacity of the 31 health facilities present in GCM County. The assessment measures capacity in the areas of access and inputs, processes, and performance. The team visited 18 of the 31 PHC facilities. Five teams of three individuals, consisting of one supervisor and two enumerators, were developed using the same staff that performed the baseline HFA. This staff was comprised of MTI Supervisors and CHT members. Each team contained at least two members with experience in health. All 18 HFs were scheduled to be surveyed in 4 days. It was necessary to return to 4 HFs to include the needed 6 children, as these 4 facilities were originally visited on slow days due to market days and other factors. Therefore, the entire HFA was completed in 5 consecutive days.

The project has had a significant impact on improving access and care at the Health Facilities through IMCI and C-IMCI. The major areas of concern at the outset of the project, identified through the initial HFA performed at baseline, were in the areas of service availability, supervision, health worker performance and the referral of sick children in the community to the HF. At baseline, only 9.1% of HF clinical encounters occurred in which all assessment tasks were made by HWs for sick child. Through IMCI training of HWs by the project, coupled with alternating, bi-monthly supervisory visits and mentoring visits by MTI Supervisors, this indicator has now been increased to 28%, with the percentage of assessment tasks being performed on average at each HF at 66%. No facilities were providing growth monitoring, which is the reason the indicator for the percentage of HF that offer child, immunization, and growth monitoring services was 0% at baseline. As part of the IMCI training, growth monitoring was to be implemented at each HF. 44% of HFs are now providing growth monitoring. At baseline only 4.5% of HF had received external supervision at least once in the previous 6 months. The project has implemented a regular system of supervision, and has increased this indicator greatly. The indicator has now changed to the percentage of HFs that have received external supervision in the last 3 months, versus 6 months, and still the project attained 56%. Household Health Promoters (HHPs) have been trained by the project and are now referring sick children to the facilities. It is encouraging that 100% of the HFs now offer ANC services at least once a week. In addition, 61% of health facilities have now received in-service or pre-service training in child health and in maternal neonatal care in the last 12 months. With regard to medications, 61% of HFs had all first line medications for child health in stock, with the percentage of HF attainment at 90% (meaning each HF had an average of 90% of the immunizations in stock). Also, 44% of HF were found to have all nationally mandated immunizations in stock, with the percentage of HF attainment at 69%. A summary of the 12 core indicators measured in the RHFA are as follows:

## ACCESS (INPUTS)

1. **Service Availability:** At midterm, 44% of HFs were deemed to offer all 3 basic child health services. This is increased from baseline, in which 0% of HFs offered all 3 basic child health services.
2. **Staffing:** 56% of all staff who provide clinical services were present on the day of the midterm survey, and the average HF attainment was 77% (meaning the average HF had 77% of its staff present). This indicator has been changed since baseline, and therefore the midterm finding will be used to track future performance.
3. **Infrastructure:** All essential health infrastructure was present on the day of the survey in 33% of the HFs, with the average HF attainment at 45%. The limiting factors are emergency transport, which was available in only 6% of the HFs, electricity, which was available in only 11% of the HFs, and emergency communication, which was available in only 28% of the HFs on the day of the survey.
4. **Supplies:**
  - a. **Supplies – Child:** While only 44% of HFs had all of the essential supplies to support child health, the average HF attainment of these essential supplies was 79%. This is a decrease from baseline, where 90.9% of HFs had the entire essential infrastructure required for child health. This is due to the fact that infant scales are available in only 67% of the facilities, and timers, pitchers for ORS and a cup or spoon for ORS are only available 78% of the time. Investigation into this revealed that at the start of IMCI all HFs were provided with the proper supplies for administering ORS and all facilities had functional infant scales, so this explains much of the decline.
  - b. **Supplies-MNC:** None (0%) of the HFs have all of the essential supplies available to support maternal-newborn services. This is mainly due to the fact that only 6% of HFs have functioning vacuum extractors, and only 11% of facilities have partographs.
  - c. **Supplies-ANC:** Similarly, 0% of the HFs have all of the essential supplies to support antenatal care. No facilities have hemoglobin or syphilis tests available and only 6% of facilities have urine albumin test strips available.
5. **Drugs:**
  - a. **Child:** At midterm, 94% of facilities have first line drugs for pneumonia and malaria, and 89% had ORS available, showing an improvement in these areas. This compares to baseline where 64% of HFs had all first line medications available, which at that time was defined as ORS, a first line oral antibiotic for pneumonia, and a first line antimalarial. Using the new RHFA indicator, which also includes Vitamin A and a first line antibiotic for dysentery, 61% of HFs have all of the first line medications for child health available. This is comparable to baseline despite the fact that this new indicator is more rigid than the baseline indicator. The limiting factor in drug supply is now Vitamin A, as only 72% of the facilities have Vitamin A in stock

- b. **MNC:** Only 33% of HFs had all of the essential delivery and neonatal drugs present on the day of the survey. The limiting factor in this indicator is Oxytocin, which is available in only 39% of the facilities.

## PROCESSES

### 6. Information Systems

- a. **Child:** The average facility has 82% of the elements required in having up to date records available for child care, with 39% of HFs have all elements. At baseline, 0% of the facilities had all of the elements in place
  - b. **ANC:** The average facility has 81% of the elements required in having up to date records available for antenatal care, with 39% of HFs have all elements. At baseline, 0% of the facilities had all of the elements in place.
7. **Training:** 61% of the HF had HW who reported receiving in-service or pre-service training in both maternal neonatal care and child health in last 12 months. The baseline finding of 79% was for the indicator “receiving any in-service or pre-service education relevant to their work in last 12 months” versus these more rigorous indicators. However, these numbers are comparable or higher than the baseline numbers when you consider that MNC training alone was provided to 72% of HW.
8. **Supervision:** External supervision has increased since baseline, from 4.5% of HF receiving external supervision at least once in the last 6 months, to 56% of HFs receiving external supervision in the last 3 months

## PERFORMANCE

9. **Utilization of Curative services:** The percentage of HF with > 1 sick child encounter per child under the age of 5 in GCM County was 5.0%. This is an increase from the baseline of 1.89%.
10. **HW Performance (Assessment):** The midterm found that the average facility was performing 66% of the key assessment tasks. Therefore, only 28% of the facilities were found to routinely perform all key assessment tasks. This is an improvement over the baseline, however, where only 9% of facilities were found to routinely perform all key assessment tasks.
11. **HW Performance (Treatment):** It is encouraging that in 72% of the HFs, the treatment given by the HW is appropriate to diagnosis (meaning provided in at least 5 of the 6 observed cases). This is a marked improvement over the baseline frequency of 45.5%.
12. **HW Performance (Counseling):** The weakest area noted, in regards to HW performance, is in the area of counseling the caretaker on the proper method of administering the medicines prescribed. Only 11% of HFs were properly instructing caretakers in how to correctly administer drugs prescribed for their child. This is a decrease from baseline, where it was reported that 48.5% of caretakers could correctly describe how to administer all prescribed drugs. The major factor contributing to this low percentage is the fact that the most experienced HW, who has been trained by the project in IMCI, was often not at the

facility on the day of the survey. New regulations will be implemented in the HFs, by the CHT, to ensure that HWs are present during all normal HF hours. In addition, the project will follow up with the HWs trained in IMCI to ensure that they are committed to providing this training to the other pertinent staff in their HF, as agreed upon at the start of the IMCI training sessions.

# **CHAPTER 1**

## **Program Overview**

### Project Area and Description:

Medical Teams International is implementing the Grand Cape Mount County Child Survival Project (GCMCSP) in Grand Cape Mount County (GCM) located in southwestern Liberia. The goal of the GCMCSP is to reduce morbidity and mortality of children under five and women of reproductive age within Grand Cape Mount County, Liberia. The interventions and level of effort are: Nutrition 30%, PCM 20%, CDD 20%, Malaria 20%, and EPI 10%. All interventions are being implemented within the recently adopted IMCI framework for Liberia and in accordance with MOHSW policy.

Implementing partners for this project include the Christian Health Association of Liberia (CHAL), a local NGO responsible for implementing the Care Group and community mobilization activities, and the County Health Team (CHT) which is charged with the responsibility of coordinating the delivery of health services throughout the county.

Working in partnership with the MOHSW, the CHT, and CHAL, MTI/Liberia is implementing a project that aims to improve the health of village communities in GCM County through strengthening HFs and the MOHSW's ability to address community health needs. This is accomplished through targeted behavior change at the household level, community mobilization, improving quality of care and access at the clinic level, and institutional capacity building for MTI and partners.

### **Quality of care and access at the clinic level**

At the county level, the MOH has created County Health Teams as a means of decentralizing management and encouraging good governance. The CHT is comprised of the County Health Officer, Community Director, Administrator, Nursing Director, Medical Director, Financial Officer, and a Logistics Officer. The decentralization process was on hold during recent war years, but is now resuming.

At baseline there were a total of 17 functioning government health facilities out of a potential 31. This number has now increased to 31 at midterm. In the county, there one physician, 14 registered nurses, 20 certified midwives, 19 physician's assistants, and 10 licensed practical nurses.

The provision of essential drugs is still problematic. Public HF drugs are supplied through the National Drug Service (NDS) and mainly financed through international donors. In 2001 a cost sharing scheme was introduced; subsidized drugs were charged to patients at 50% of cost and drug revolving funds were established in 213 HFs. Subsequently, the system collapsed and currently all drugs and treatment are free of charge. The supply of drugs is becoming more stable at midterm through donor intervention. For example,

supplies of vaccine, ACT, Vitamin A, and ORS are currently on hand; and UNICEF and WHO are rehabilitating five drug supply depots and the distribution system.

After fourteen years of instability, health staff knowledge regarding recent medical advances had not been updated at the start of the CSP. Most health staff had not received sufficient in-service training in the last decade. Supervision was inadequate, focusing on frequency of visits at the expense of structure and content, and collecting statistics rather than a process of sharing experiences, reinforcing skills, assessing needs, following up on achievements, and resolving conflicts.

Access to health care was an over-riding issue. At baseline, access was constrained by the lack of adequate functional facilities, poor maintenance of facilities, an insufficient number of competent, well trained and motivated professionals, shortage of logistical support, and chronic shortages of drugs and medical supplies. Rural HFs are generally open from 8 a.m. to 4 p.m. On the demand side, utilization was constrained by negative cultural influences, long distances, and poor public transportation. The main means of transportation to a HF is by walking. It is estimated that less than 10% of the population have reasonable access to any kind of healthcare, a decrease from 30% before the war. The number of facilities in GCM County has risen from 14 to 30, which has greatly increased accessibility.

The objective of the GCMCSP is to improve the quality of care and access at the health facility level by implementing IMCI through training, mentoring, supportive supervision, and systems development in referral and logistics. The project has implemented the three components of IMCI through the following activities:

Component 1: Improving case management skills of the health facility staff:

- Implementing IMCI in 31 clinics and one health center by supporting skills application of health workers in assessment, classification, standard case management, referral, and counseling
- Facilitating the training of HF staff, MTI, CHAL, CHT in IMCI in the 11 days IMCI training utilizing the national MOH training team
- Provide an orientation on IMCI for HF support staff, government, and traditional leaders
- Training HF staff in complementary topics to improve clinic management and quality of care such as counseling, supportive supervision, management, logistics, M&E, rational drug use, and BCC
- Facilitating an exchange visit for MTI, CHAL, and the MOH to a Child Survival project in Sierra Leone and to the Liberia Improved Community Health project
- Exploring coordination with a Liberian training institution for certification of staff after training
- Quality of care will be monitored and evaluated by HF staff, CHT, and MTI following IMCI training. Quality of care indicators will be developed with the IMCI task force, coordinated by WHO.

Component 2: Improving the overall health system:

- Funds and GIK donations have been made available to improve the availability of drugs and supplies for implementing IMCI.
- Coordinating with other agencies to improve drug supply (NDS, UNICEF, WHO, other NGOs)
- Providing training and support to HF staff to more effectively utilize logistics systems
- The referral system has been instituted utilizing the HHPs and CHPs through the Care Group model.
- Implementing a mentoring and supportive supervision system for reinforcement of new skills
- Strengthening the existing HIS, with a focus on use of information for decision making and introduction of new tools such as LQAS and quality of care checklists
- Supporting monthly health sector County Coordinating Committee meetings chaired by the CHT to improve coordination between government and other NGOs working in the county

Component 3: Improving family and community health care practices:

C-IMCI is being phased into all districts of GCM and will include three elements:

Element 1: Improving partnerships between health facilities and the communities they serve

- Clinic staff participate in training and supervising HHPs with assistance from MTI and CHAL.
- Developed a referral system to improve referral of sick children from HHPs to 1<sup>st</sup> level HFs
- Established monthly meetings at the HFs for CHWs and TBAs for information sharing, continuous education, and problem solving
- HHPs/CHCs will encourage families to use HF services and ensure equity of access.

Element 2: Increasing appropriate and accessible care and information from community providers

- Training approximately 250 HHPs and 150 TBAs in 131 communities in C-IMCI including management of illnesses, danger signs and prompt care-seeking, maternal and child nutrition including micronutrients and breastfeeding, environmental health and hygiene, promotion of EPI (including TT), community HIS, communication/adult learning, home visits, and the 16 key family practice messages
- Providing assistance to HHPs/TBAs/CHCs in applying the above training through supportive supervision by HF/CHT/project staff
- Developing a plan for motivating and sustaining HHPs in coordination with the CHCs
- Encouraging the establishment of community-based emergency transport systems and the formation of Susu and/or Savings Clubs to fund health emergencies.
- Advocate with the MOH for the establishment of a supply of essential drugs at the community level (ORS, Vitamin A, and iron)

Element 3: Integrating promotion of key family practices critical for child health and nutrition

- Promote community education by CHW/TBA/CDC/clinic staff utilizing effective integrated IEC/BCC methodologies for the promotion and adoption of key household practices

The increased capacity of the health facilities and health facility staff will improve the quality of treatment and the outcomes for all of the major childhood diseases causing morbidity and mortality in GCM County:

*Respiratory Infections:* The prevalence of ARI (children with a chest related cough and fast/difficult breathing) in children aged 0-23 months in GCM County was 51.7%. At baseline children with ARI were treated by seeking advice or treatment at a qualified health facility at a rate of only 43.2%. Also, children with ARI were treated by either seeking advice/treatment at a qualified health facility or treated with an antibiotic at a rate of only 49.7%, which revealed that most mothers were not routinely seeking help when their child was sick, and did not understand the importance of seeking timely medical advice or seeking proper antibiotic treatment for their children who are ill with cough and respiratory infection.

To address these issues, the project utilizes the Case Management Training on IMCI to improve the knowledge and skills of health workers in the assessment and treatment of infants and young children with respiratory problems. Ensuring that antibiotics are readily available at the HF level is also a priority of the project through the GIK and working along with the CHT and other partners (NGOs) in the county who support other health facilities.

*Diarrhea:* While diarrhea is a major cause of morbidity in Liberia and GCM County, due to seasonal fluctuations the prevalence of diarrhea at the time of the baseline KPC survey was 30.1%, which is somewhat lower than found at other times of the year. Key home practices that are emphasized by this project include continued breastfeeding and fluids as well as the frequent feeding of small amounts of food, and catch-up feeding. The project is coordinating with the CHT to ensure a regular supply of ORT at both the level of the health facilities and at the community level.

*Malaria:* The prevalence of fever in children aged 0-23 months in GCM County was found to be quite high in the baseline survey at 70%. Part of the reason for this can be explained by the fact that at baseline only 17.7% of children less than 24 months were sleeping under an insecticide treated bed net. Of the children who had a fever that had ended in the 2 weeks prior to the survey, only 20.5% were brought to a qualified health facility within 48 hours of the start of the fever. Only 3.6% of mothers treated their child with an effective anti-malarial drug within 24 hours after the fever began.

Project activities for malaria are focused on the prevention of malaria with the distribution of Insecticide Treated Nets (ITNs) and community education on proper use of these nets through Care Groups and home visits. The project has begun to work with the MOHSW Malaria Control Division, NDS and GIK sources to ensure adequate ACT pharmaceutical availability at HFs in the county and training health care workers in their use. GIK will also

supply Fansidar for use in IPT as well as drugs for malaria treatment, where gaps exist, according to MOHSWSW protocols.

*Immunization:* Immunization rates are low in GCM County, with full EPI coverage by 12 months of age found to be only 18.9% at baseline in children aged 12-23 months. EPI Health System Performance, measured by card verified rates of DPT3 vaccination by 12 months of age, was only 30.6%.

MTI and its partners are utilizing the IMCI and C-IMCI approach at the 31 functioning health facilities in GCM County in order to improve vaccination rates and utilization of vaccination services by the community. Demand for EPI services is being created through CHWs, CHPs, and HHPs, including messages to the community about bringing children in for immunization. The project provides logistical support for National Immunization days, advocates for the implementation of routine EPI services, and reduces missed opportunities for immunizations through IMCI at the HF level. The project is presently addressing gaps in present immunization service delivery, including a lack of training of MOHSW staff and gaps in the cold chain and other equipment at the HF level. In addition, the MOHSW in conjunction with MTI/Liberia project staff is conducting immunization training with HF staff in logistics and drug forecasting, and injection technique and safety.

The percentage of mothers at baseline survey receiving at least two immunizations in GCM County was only 61.3%, indicating some utilization of antenatal care services and tetanus immunizations being performed by antenatal health care staff when these services were utilized, but this rate needed improvement to ensure protection of mothers and children from tetanus. The project is addressing this problem by strengthening the MOHSW's ability to address this need through enhancing the capacity of antenatal care staff and providing consistent preventative-based services that include immunization services.

*Nutritional Status:* The nutritional status of children aged 0-23 months is of major concern in GCM County. The Baseline KPC Survey conducted in November 2006 found the overall rate of under-nutrition to be 27.1%, with 14.1% moderately underweight and 13.1% severely underweight. The survey also showed low rates of immediate and exclusive breastfeeding. Mothers were immediately and exclusively breastfeeding their newborns at a rate of only 33.7%. Inappropriate complimentary feeding practices also contribute to the high rates of undernutrition. The Child Survival Project through its case management training on IMCI of health workers and Community IMCI trainings of HHPs continue to promote immediate initiation of breastfeeding, exclusive breastfeeding, and proper complimentary feeding for children aged 6-23 months. The introduction of IMCI at health facilities has also improved both growth monitoring and nutrition counseling services.

*Antenatal Care:* The Maternal Mortality rate is 578 per 100,000, one of the highest in the world. The principal causes of mortality are anemia, postpartum hemorrhage, and sepsis, as well as pregnancy related complications, toxemia and infections related to unsafe abortions. Thirty two percent of deaths occur in pregnancy, 34% during delivery, and 26% postpartum. Maternal morbidity in GCM is caused mainly by malaria and by complications during labor/delivery (GCM Surveillance 2005). Prenatal care levels were quite low, at 56.3% at baseline, but have now improved to 92.71% at midterm. In addition, delivery care was provided by a skilled health professional at only 21.3% at baseline. This rate continues to be

low at midterm, at 23.96%. At baseline, postpartum visits with a skilled professional occurred at an alarmingly low rate, which was 6.0% for mothers and 7.0% for newborns. By midterm these numbers have improved, due to health education messages provided in the Care Groups and home visits stressing the utilization of health services for child and antenatal care. Postnatal visits within 3 days of the birth of the child are now occurring at a rate of 28.13% for the mother and 36.46% for the child. The CSP, through its case management training on IMCI of health workers and Community IMCI trainings of HHPs continue to promote prenatal, delivery, and postnatal care at the HF.

## **CHAPTER 2**

### **Purpose of the Rapid Health Facility Assessment and Methodology**

The objective of a Health Facility Assessment is to collect both quantitative and qualitative data regarding the health system in the project area, particularly the primary health care (PHC) facilities (level 1) providing maternal, neonatal, and child health (MNCH) services. The new Rapid Health Facility Assessment (RHFA) used to collect this data has been designed and recently upgraded by CSTS, and is now called RHFA Version 2.1.

The RHFA is designed to be rapid and cost effective, and is designed to be used at the local level to devise strategies, with the MOH entity present in the project area, and to improve the delivery of integrated child health services. The baseline assessment was conducted before IMCI training had begun, and prior to any interventions aimed at health facilities so that an integrated strategy to improve the quality of health care could be implemented. The midterm RHFA will measure progress in the 12 core areas of HF capacity, and will compare these results to baseline so that areas of needed improvement may be identified. The R-HFA version 2.1 assessment includes the first six children, under the age of five, entering the health facility on the day of the survey with diarrhea, fever, or cough and examines three major areas of health care delivery.

- Case management: Does the healthcare worker (HW) assess, diagnose, and treat children with diarrhea, fever (malaria), and ARI properly? Does the HW explain follow up care to the caretaker well?
- Health facility infrastructure: Does the health facility have the necessary equipment, supplies, medications, and privacy to perform adequate MCH services?
- Management (Processes): Are the proper management processes being followed in the health facility (supervision, record keeping, and continuation of training)?

The R-HFA focuses on the delivery of care for the most important causes of infant and child morbidity and mortality, which include: diarrhea, acute respiratory infections (ARI), malaria, measles, and malnutrition. The purpose of collecting this data is to allow the project, in conjunction with the MOH, DHO, and other health workers in the project area, to determine gaps in service and prioritize their response in order to provide essential, integrated health services. There are four main modules in the R-HFA, with a fifth optional module. All are formatted in Excel for ease of use.

- a. Observation Checklist for sick child care: To observe the HW in the assessment, diagnosis, and treatment of six consecutive cases of care of children under the age of five with fever, diarrhea, or breathing difficulty. The HW is assessed for adherence to the national (IMCI) protocol for assessment, classification, and treatment of childhood illness.
- b. Client (Caretaker) Exit Interview: To assess whether the caretaker has the correct knowledge of how to administer drugs given for diarrhea, malaria, and/or breathing difficulty (used a proxy for adequate counseling), and whether the caretaker knows under what circumstances the child is to return to the clinic.

- c. Health Facility Checklist: To assess the presence of a minimal level of infrastructure, equipment, supplies, and medications.
- d. Health Worker Interview and Record Review: To assess the staffing, MNCH services offered, and also assess the frequency of training, supervision, and other key processes.
- e. CHW Survey and Checklist (optional): To collect data on CHWs regarding six of the twelve health facility core indicators (through examination of registers).

#### *Selecting the Sampling Frame*

The sampling methodology has been revised by CSTS to use a quality assurance type approach similar, but not identical, to that used in LQAS. The new methodology dictates that at least 80% of the health facilities perform adequately, according to the indicators chosen in the HFA, for the project area to pass. This is called the performance benchmark. Also, an unacceptable level of 50% is chosen as the level that should not go undetected in determining that the health facilities are not performing adequately in regard to a given indicator. The alpha and beta errors have been placed at 10%. The new R-HFA software automatically calculates the sample size needed, and calculates the results following the survey. Because the number of facilities in the project area is 31, using a performance standard of 80% and a lower threshold of 50%, the sample size needed is 18 health facilities

#### *Selecting the Sampling Unit*

The new R-HFA version 2.1 methodology made choosing the sampling frame a straightforward process. A simple random sampling methodology was used.

- In GCM County there are 31 PHC health facilities in the project area, and therefore the software determined that a sample size of 18 is needed. The listing of HFs is available in Annex 1.
- Each health facility was listed, and each was given a number between one and 31.
- Using a two-digit random number table, 18 random numbers were selected between 01 and 31.

#### *Selecting the Survey Teams*

Five teams of three individuals, one supervisor and two enumerators, were developed using the same staff that performed the baseline HFA. This staff was comprised of MTI Supervisors and CHT members. Each team contained at least two members with experience in health. Therefore, all 18 HFs were scheduled to be surveyed in 4 days. It was necessary to return to 4 HFs to include the needed 6 children, as these 4 facilities were originally visited on slow days due to market days and other factors. The entire HFA was completed in 5 consecutive days.

Each element of the R-HFA is administered by the following members of the R-HFA survey team:

- a. Observation Checklist for sick child care: Enumerator with experience in health
- b. Client (Caretaker) Exit Interview: Enumerator, with guidance from Enumerator with experience in health
- c. Health Facility Checklist: Supervisor

- d. Health Worker Survey: Supervisor of Enumerator with experience in health; should be performed by whichever team member has completed their other duties.
- e. CHW Survey and Checklist (optional): Enumerator with guidance from Supervisor or Enumerator with experience

### *Training the Survey Team*

The training of the survey team required four days. The main objectives of the training were to discuss the purpose of the survey and the resulting information; discuss the logistics of the survey; review and practice each of the forms; and practice administering these forms in the facility setting. Sinje Clinic, a health facility that was near the training site and which was not randomly chosen for the HFA was used for the field test. The training schedule provided by CSTS, used to train the survey team is available in Annex 2.

## **The Survey Process**

### *Observation of Clinical Care and Caretaker Exit Interview*

The first six children under the age of five presenting to the facility during the survey period whose caretakers describe them as having diarrhea/vomiting, fever/malaria, or cough/difficulty breathing/pneumonia were included in the sample. The caretakers were met as they entered the clinic, and if they agreed to take part in the survey they were followed throughout the facility. If the caretaker brought more than one sick child under the age of five, one child was randomly chosen to be the index child. The enumerator with experience in health observed the clinical encounter between the HW and the caretaker and child. The second enumerator conducted the Exit Interview with the caretakers of sick children outside of the facility as they exited, following receiving the child's medications.

### *Health Facility Checklist*

After ensuring that these interviews were proceeding well, the supervisor completed the Health Facility Checklist with an available HW at the facility. A HW was present because determining the conditions in the consultation room and of some of the equipment required some discussion with the HW.

### *Health Worker Survey*

Following completion of the observation of six consultations between the HW and the caretaker/child, the enumerator with experience or the supervisor, whichever was available, performed the HW Survey.

### *CHW Survey and Checklist*

The CHW Survey and Checklist were performed if CHWs are involved in the health facility. In total there were only 5 CHWs interviewed.

### *Providing Feedback to the Staff*

Surveyors were instructed to provide some feedback to staff on the day of the assessment. The feedback was positive wherever possible to alleviate any anxiety the staff may have felt due to the survey, but also included any comments necessary to improve clinical treatment and management techniques. It was recommended during the training that feedback regarding the following items be given.

- Strengths and problems in case management, particularly in the assessment and treatment of sick children
- Quality of home-care advice and communication between health workers and caretakers
- Inappropriate use of medications
- Problems in record keeping
- Ways to improve clinic organization
- Major barriers to effective practice

#### *Checking the Completed Questionnaires*

Completed questionnaires were checked by the supervisor or enumerator administering the questionnaire immediately at the conclusion of the interview so that any discrepancies or missed questions could be discussed with the person being interviewed. At the end of each facility session, the Supervisor reviewed all forms with the enumerators before leaving the facility. The completed forms were then brought to the central point chosen for data entry and given to the data entry staff. This was done nightly so that data entry could be performed during the data collection period. The data entry staff reviewed the completed questionnaires for accuracy while the survey team was there, in order to clarify or correct any unclear or incorrect items noticed in the forms.

#### *Data Entry*

During the data collection phase of the survey, data was entered into the R-HFA Excel program provided in the R-HFA zip file available on the CSTS website. Data entry was performed by the M&E Specialist and M&E Officer, who are trained in data entry. As much as possible, data was entered daily throughout the survey so that any discrepancies could be discussed with the supervisors as soon as possible. Cleaning of the survey data was accomplished by the data entry staff as the data was presented. Following data entry for the final assessment, all data was then combined in the single Excel file provided by CSTS.

The R-HFA survey forms file has a tabulation plan for hand tabulating the disaggregated indicators (each indicator alone), and the aggregated indicators that comprise the 12 core indicators. This includes bar graphs and tables that will provide useful reporting tools to provide in the HFA Report.

#### **Constraints/Difficulties:**

Four of the HF did not have the required number of children present with illness, due to environmental factors such as market day in the village or an adjacent village, and the

preparations for Ramadan. Therefore, the same interview team returned to these facilities the following day to complete the survey. This did not effect the results.

## CHAPTER 3

<b>Main Findings: Accomplishments and Priorities</b>
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Overall, the project has had a significant impact on improving access and care at the Health Facilities through IMCI and C-IMCI. The major areas of concern, identified through the initial HFA performed at baseline were in the areas of service availability, Supervision, health worker performance and the referral of sick children in the community to the HF. At baseline, only 9.1% of HF clinical encounters occurred in which all assessment tasks were made by HWs for sick child. Through IMCI training of HWs by the project, coupled with alternating, bi-monthly supervisory visits and mentoring visits by MTI Supervisors, this indicator has now been increased to 28%, with the percentage of assessment tasks being performed on average at each HF at 66%. No facilities were providing growth monitoring, which is the reason the indicator for the percentage of HF that offer child, immunization, and growth monitoring services was 0% at baseline. As part of the IMCI training, growth monitoring was to be implemented at each HF. 44% of HFs are now providing growth monitoring. At baseline only 4.5% of HF had received external supervision at least once in the previous 6 months. The project has implemented a regular system of supervision, and has increased this indicator greatly. The indicator has now changed to the percentage of HFs that have received external supervision in the last 3 months, versus 6 months, and still the project attained 56%. Also, no CHWs were referring patients to the HFs at baseline. The project has instituted C-IMCI and has trained HHPs to visit every household in the county with children under 5, on a regular basis, and refer sick children to the HFs. This is monitored through monthly Care Group reports. It is encouraging that 100% of the HFs now offer ANC services at least once a week. In addition, 61% of health facilities have now received in-service or pre-service training in child health and in maternal neonatal care in the last 12 months. With regard to medications, 61% of HFs had all first line medications for child health in stock, with the percentage of HF attainment at 90% (meaning each HF had an average of 90% of the immunizations in stock). Also, 44% of HF were found to have all nationally mandated immunizations in stock, with the percentage of HF attainment at 69%. The results, listed by domain, are discussed below.

### ACCESS (INPUTS)

#### 1. Service Availability

Indic. #	Domain	Indicator	% HF with all elements
<b>1 CHILD</b>	Service Availability - Child	% HF that offer all three basic child health services (growth monitoring, immunization, sick child care)	<b>44%</b>

<b>1 ANC</b>	Service Availability - ANC	% HF that offer ANC at least once a week	<b>100%</b>
<b>1 NEO</b>	Service Availability - Delivery	% HF that offer delivery services on all days	<b>39%</b>

At midterm, 44% of HF were deemed to offer all 3 basic child health services. This is increased from baseline, in which 0% of HF offered all 3 basic child health services due to the fact that no facilities offered growth monitoring. As part of the IMCI protocol, growth monitoring has been introduced to the HF, and at midterm 44% of HF are providing growth monitoring services in the facility and/or through outreach. In addition, 100% of the facilities are offering Immunization services through the facility and/or outreach. Also, 100% of HF in GCM County offer sick child services through the facility and/or outreach for a total of 20 days or more per month. Most facilities provide sick child services Monday-Friday, for a total of 20 hours per week, but only 11% of the HF provide outreach. The project had been concentrating on providing outreach services through the HHPs, who refer sick children to the HF. The project will continue to work to increase HF capacity in providing growth monitoring, and will continue improving outreach services to the community through the HHPs and Care Groups. It is encouraging to note that 100% of HF in GCM County offer ANC services, but only 39% of these facilities offer delivery services on all days. This is because most offer delivery services during their normal operational hours, which constitute 20 days per month, and do not offer outreach services.

## 2. Staffing

<b>Indic. #</b>	<b>Domain</b>	<b>Indicator</b>	<b>% HF with all elements</b>	<b>Index Value (% avg. HF attainment)</b>
<b>2</b>	Staffing	% HF with all staff who provide clinical services working on the day of survey	<b>56%</b>	<b>77%</b>

This indicator has been changed since the baseline HFA was performed, at which time it was: “%HF with at least one provider meeting the country definition as qualified to provide curative care for children is present on day of survey”. All HF met this requirement (100%) at baseline, and would have met it at midterm as well. However, the new indicator determines the number of each type of staff, and determines if they are all present on the day of the survey. In the midterm HFA, 56% were present, and the average HF attainment was 77% (meaning the average HF had 77% of its staff present). The project has already conducted meetings with the CHT to discuss this, because at this point in the project only the most experienced HW in each facility has been trained in IMCI, and has the responsibility of training the other HWs in their facility. This HW is therefore responsible to be at the HF to provide services, and also to train other staff in IMCI. The CHT has introduced new guidelines to all of the HW in the county to ensure their presence at the HF.

### 3. Infrastructure

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
3	Infrastructure	% HF in which all essential infrastructure is present and functioning on day of the survey ( <b>improved water source; functional latrine for clients; setting allowing auditory and visual privacy; power; communication equipment; emergency transport; overnight beds</b> )	33%	45%
Has at least one bed				56%
Has 24 hour staff coverage				56%
Has functioning emergency communication				28%
Has emergency transportation usable today				6%
Has electricity from the grid or a generator with fuel				11%
Has a usable client latrine				61%
Has water from protected water source on or near grounds				56%
Has auditory and visual privacy				89%

All essential health infrastructure was present on the day of the survey in 33% of the HFs, with the average HF attainment at 45%. At baseline 50% of HFs had all essential infrastructure, but this is because this indicator is also more rigid than the last version of the HFA, in which communication equipment, overnight beds, and emergency transport was not required. As can be seen in the preceding table, the limiting factors are: emergency transport, which was available in only 6% of the HFs, electricity, which was available in only 11% of the HFs, and emergency communication, which was available in only 28% of the HFs. The project has been working with the communities through the CHCs to develop emergency transportation systems in each village in order to work around the fact that HFs do not have the means for transportation systems. The project will also continue to advocate for increased infrastructure through the CHT of the MOH, and will compare this midterm finding to final HFA performed at the final evaluation.

#### 4. Supplies

##### Supplies - Child

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
4 CHILD	Supplies - Child	% HF with all essential supplies to support child health on day of the survey (accessible and working scale for child, accessible and working scale for infant, timing device for diagnosis of pneumonia, spoon/cup/jug to administer ORS)	44%	79%
Has functioning and accessible infant scale				67%
Has functioning and accessible scale for children/adults				94%
Has functioning timer or watch				78%
Has pitcher for ORS				78%
Has cup or spoon for ORS				78%

While only 44% of HFs had all of the essential supplies to support child health, the average HF attainment was 79% of these essential supplies. This is a decrease from baseline, where 90.9% of HFs had the entire essential infrastructure required for child health. The table of disaggregated indicators reveals that infant scales are available in only 67% of the facilities, and timers, pitchers for ORS, and a cup or spoon for ORS are each only available 78% of the time. The project will coordinate with the MOH to ensure proper ORS supplies are available, and see if infant scales may be made available.

##### Supplies - MNC

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
4 MNC	Supplies - MNC	% HF with all essential supplies to support maternal-newborn health present on day of the survey (partograph, vacuum extractor, resuscitation device, weighing scale, antibiotics and baby wraps)	0%	33%
Has functioning neonatal resuscitation equipment				39%
Has functioning and accessible infant scale				56%
Has functioning vacuum extractor				6%
Has neonatal wraps for warming				56%
Has partographs				11%

None (0%) of the HFs have all of the essential supplies to support maternal-newborn health available. This is mainly due to the fact that only 6% of HFs have functioning vacuum extractors, and only 11% of facilities have partographs. In addition, only 39% of facilities have neonatal resuscitation equipment, and only slightly more than half (56%) of facilities have neonatal wraps and infant scales. The project will work with the CHT to determine the feasibility of obtaining these badly needed items.

### Supplies - ANC

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
4 ANC	Supplies - ANC	% HF with all essential supplies to support antenatal care present on day of survey (blood pressure machine, tetanus toxoid vaccine, hemoglobin reagents, syphilis testing kit, and albastix for protein)	0%	42%
Has functioning refrigerator				72%
Has functioning blood pressure equipment				94%
Has hemoglobin testing reagents				0%
Has syphilis testing kits				0%
Has malaria test kits				78%
Has urine albumin test strips				6%
Has tetanus toxoid				72%

Similarly, 0% of the HF's have all of the essential supplies to support antenatal care. No facilities have hemoglobin or syphilis tests available and only 6% of facilities have urine albumin test strips available. The other disaggregated indicators for this indicator are acceptable, so the project will work with the CHT to increase availability of the testing kits.

### 5. Drugs

#### Drugs - Child

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
5 CHILD	Drugs - Child	% HF with all first line medications for child health present on day of the survey (ORS, oral antibiotic for pneumonia, first line oral antibiotic for dysentery, first line antimalarial, vitamin A)	61%	90%
Has ORS packets				89%
Has first line child pneumonia drug				94%
Has first line dysentery drug				100%
Has first line antimalarial				94%
Has vitamin A				72%

At baseline, 64% of HF's had all first line medications available, which at that time was defined as ORS, a first line oral antibiotic for pneumonia, and a first line antimalarial. At midterm, 94% of facilities have first line drugs for pneumonia and malaria, and 89% had ORS available, showing an improvement in these areas. In total, 61% of HF's have all of the first line medications for child health available. This is comparable to baseline, but this new indicator is more rigid than the baseline indicator because it includes Vitamin A. The limiting factor in drug supply appears to be Vitamin A, as only 72% of the facilities have Vitamin A in stock. The project will work with the CHT to ensure the proper supply of

Vitamin A, ORS, first line antibiotics for pneumonia and dysentery, and first line antimalarials.

#### Drugs - MNC

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
5 MNC	Drugs - MNC	% HF with all essential delivery & neonatal drugs present on day of survey (i.e., oxytocin, antibiotics for newborn sepsis and eye infections)	33%	74%
Has antibiotics for newborn sepsis/pneumonia			89%	
Has neonatal eye ointment			94%	
Has oxytocin			39%	
Has niveripine (in high HIV prevalence areas only)			0%	

Only 33% of HF's had all of the essential delivery and neonatal drugs present on the day of the survey. The limiting factor in this indicator is Oxytocin, which is available in only 39% of the facilities. The project will work with the CHT to attempt to secure Oxytocin for the delivery unit. It should be noted that Niveripine is not available in GCM County. The project would need to secure supplies of Niveripine should the project expand into PMTCT of HIV.

## PROCESSES

### 6. Information Systems

#### Information System - Child

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
6 CHILD	Information System - Child	% HF that maintain up-to-date records of sick U5 children (age, diagnosis, treatment) and for HF: have report in last 3 months and evidence of data use	61%	82%

The average facility has 82% of the elements required for having up to date records available for child care, with 39% of HF's have all elements. At baseline, 0% of the facilities had all of the elements in place regarding records. They were not broken out into child or ANC, but this still reveals that there have been tremendous improvements made in record keeping.

### Information System - ANC

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
6 MNC	Information System - ANC	% HF that maintain up-to-date records of antenatal care (TT, blood pressure, expected date of delivery) & deliveries (present & up to date)	39%	81%
An ANC register was observed			100%	
ANC register with complete delivery information, last 3 months			83%	
ANC register with complete TT information, last 3 months			67%	
ANC register with complete BP information, last 3 months			89%	
ANC register with entry in last 7 days			83%	
Delivery register was observed			89%	
Delivery register was up to date (entry in last 30 days)			72%	

The average facility has 81% of the elements required for having up to date records available for antenatal care, with 39% of HF's have all elements. At baseline, 0% of the facilities had all of the elements in place regarding records, revealing that there have been improvements made in record keeping

### 7. Training

Indic. #	Domain	Indicator	% HF with all elements
7 CHILD	Training - Child Health	% HF in which interviewed HW reported receiving in-service or pre-service training in child health in last 12 months	61%
7 MNC	Training - Maternal- Neonatal Care	% HF in which interviewed HW reported receiving in-service or pre-service training in maternal neonatal care in last 12 months	61%
Interviewed HW received any MNC training in last 12 mo.			72%
<b>MNC</b>			
Immunization training			28%
Pneumonia case management training			44%
Diarrhea case management training			44%
Malaria case management training			56%
ACT use training			56%
ITN use training			50%
Nutrition training			33%
Breastfeeding promotion training			44%
IMCI training			56%

<b>CHILD HEALTH</b>	
IPT use training	50%
Newborn care training	44%
Post-partum care training	6%
ANC training	11%
Infection control training	11%
AMTSL training	11%
Ob / neonatal emergencies referral training	22%

61% of the HF had HW who reported receiving in-service or pre-service training in both maternal neonatal care and child health in last 12 months. Training in MNC consists of training in MNC and at least one other of the trainings listed above in the MNC section. Training in child health consists of training in MNC and at least one other of the trainings listed above in the child health section. In looking at the subjects in which training is given, MNC training was the highest, at 72%. ANC training was the lowest, at 11%. The baseline finding of 79% was for the indicator “receiving any in-service or pre-service education relevant to their work in last 12 months” versus these more rigorous indicators. However, these numbers are comparable or higher than the baseline numbers when you consider that MNC training alone was provided to 72% of HW. The project is committed to continuing training of HW staff in all aspects of IMCI.

## 8. Supervision

<b>Indic. #</b>	<b>Domain</b>	<b>Indicator</b>	<b>% HF with all elements</b>
8	Supervision	% HF that received external supervision at least once in the last 3 months (supervision included one or more of the following: checked records or reports, observed work, provided feedback, gave praise, provided updates, discussed problems))	56%

External supervision has increased since baseline, from 4.5% of HF receiving external supervision at least once in the last 6 months, to 56% of HF receiving external supervision in the last 3 months. Despite the fact that the indicator has changed from 6 months to 3 months, the midterm results are encouraging. The project is planning to conduct supervisory visits in conjunction with the CHT, and the project is confident that this percentage will continue to improve.

## PERFORMANCE

### 9. Utilization of Curative services

Indic. #	Domain	Indicator	% HF with $\geq 1$ encounter/child in GCM
9 CHILD	Utilization of Curative Services	Annualized number of clinical encounters for sick children per U5 population (% HF with $\geq 1$ sick child encounter per U5 in catchment area)	5.00%

The percentage of HF with > 1 sick child encounter per child under the age of 5 in GCM County was 5.0%. This is an increase from the baseline of 1.89%. The number of sick children being seen in the facilities has increased over the 2 years of the project, and we will continue to strive to improve utilization of the services through the HHPs and Care Groups providing health education and providing referrals of sick children encountered in the community to the facilities. It should be noted that this indicator was hand tabulated using the number of clinical encounters with sick children fewer than 5 in last three complete calendar months divided by the most recent figure available from the CHT regarding the number of children under 5 in the catchment area.

### 10. HW Performance (Assessment)

Indic. #	Domain	Indicator	% HF with all elements	Index Value (% avg. HF attainment)
10 CHILD	HW Performance (Assessment)	% HF where key assessment tasks are routinely performed (check presence of general danger signs, assess feeding practices, assess nutritional status, check vaccination status)	28%	66%

In order for a HF to be considered as having key assessment tasks routinely performed, in greater than 80% (5 or 6 out of the 6 cases observed) of the encounters the HW must perform all of the key assessment tasks. The midterm found that the average facility was performing 66% of the key assessment tasks. Therefore, only 28% of the facilities were found to routinely perform all key assessment tasks. This is quite an improvement over the baseline, however, where only 9% of facilities were found to routinely perform all key assessment tasks. The survey team discussed this finding during and after the evaluation, and determined the major factor contributing to this low percentage is the fact that the most experienced HW, who has been trained by the project in IMCI, was often not at the facility on the day of the survey. A meeting was held with the CHT where this finding was discussed, and new regulations will be implemented in the HFs to ensure that HW are present during all normal HF hours. In addition, the project will follow up with the HW trained in IMCI to ensure that they are committed to providing this training to the other pertinent staff in their HF, as agreed upon at the start of the IMCI training sessions. The project will now begin to expand its IMCI training to include all HWs at each facility. This

will be accomplished by scheduling a planned training session at each HF in the county, in which all HWs that treat children will be given a one day training in the most needed aspects of IMCI-the performance of key assessment tasks and the counseling of caretakers in administering prescribed medications to their child. This will be in addition to the regular training that is to be provided to these HWs by the most experienced HW, who has been fully trained in IMCI.

### 11. HW Performance (Treatment)

<b>Indic. #</b>	<b>Domain</b>	<b>Indicator</b>	<b>% HF with all elements</b>
<b>11 CHILD</b>	<b>HW Performance (Treatment)</b>	<b>% HF where treatment is routinely appropriate to diagnosis (for encounters in which at least one of the presenting problems was fever, breathing problem, or diarrhea)</b>	<b>72%</b>

It is encouraging that in 72% of the HFs, the treatment given by the HW is routinely appropriate to diagnosis. The HW must diagnose and treat the sick child correctly in greater than 80% (5 or 6 out of the 6 cases observed) of the encounters observed in order for a HF to be considered as providing correct treatment. This is a marked improvement over the baseline frequency of 45.5%. The project will continue to provide regular, scheduled training in IMCI, along with supervisory visits and mentoring, to continue to improve HW performance.

### 12. HW Performance (Counseling)

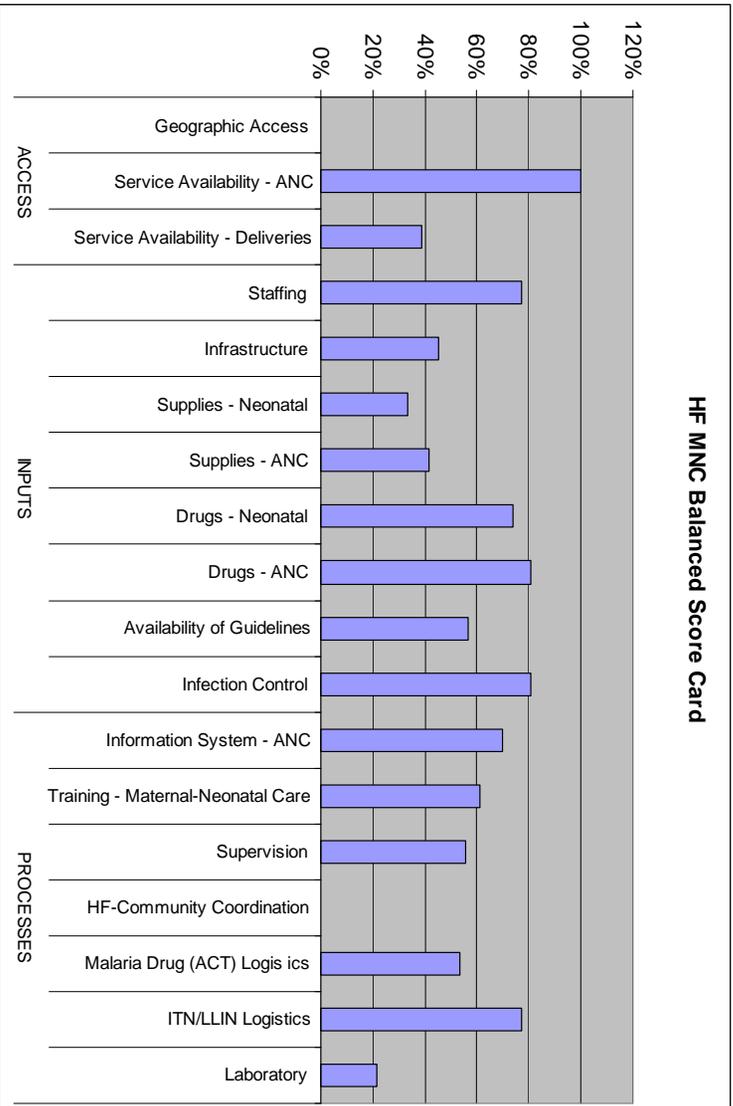
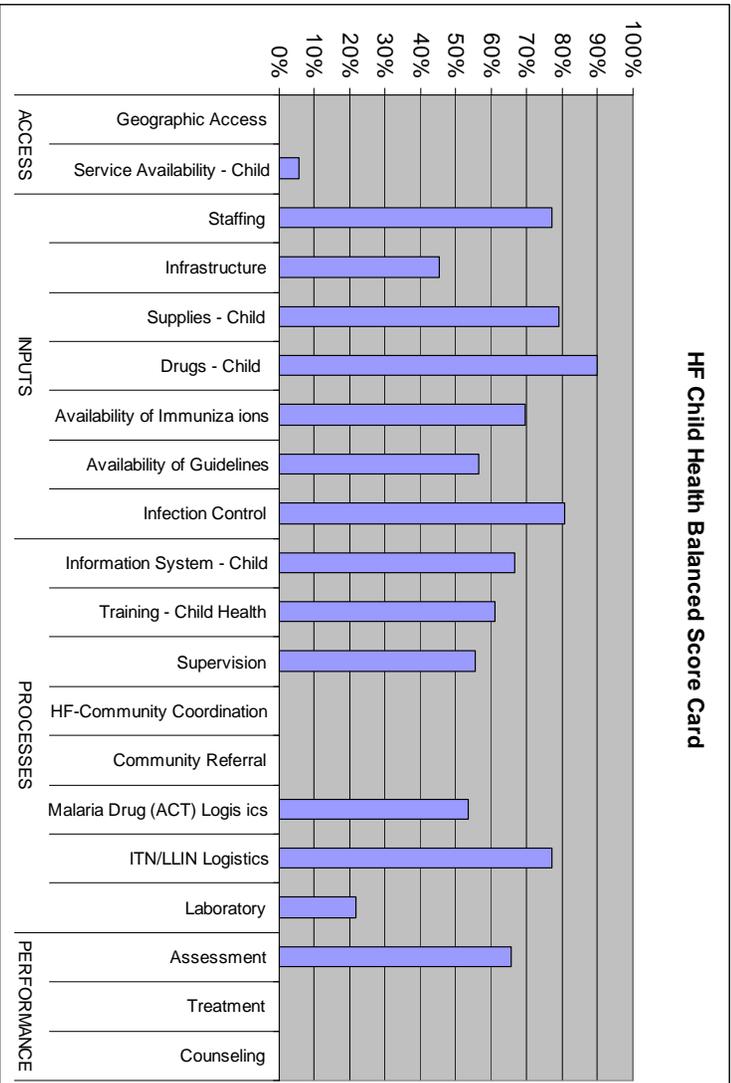
<b>Indic. #</b>	<b>Domain</b>	<b>Indicator</b>	<b>% HF with all elements</b>
<b>12 CHILD</b>	<b>HW Performance (Counseling)</b>	<b>% HF where caretakers whose child was prescribed an antibiotic, antimalarial, or ORS, correctly describe how to administer all prescribed drugs</b>	<b>11%</b>

The weakest area noted, in regards to HW performance, is in the area of counseling the caretaker on the proper method of administering the medicines prescribed. Only 11% of HFs were properly instructing caretakers in how to correctly administer drugs prescribed for their child. This is a decrease from baseline, where it was reported that 48.5% of caretakers could correctly describe how to administer all prescribed drugs. Instruction was given to each of the HWs encountered during the survey that was having difficulty with this, during the feedback given to the HW following the data collection. The major factor contributing to this low percentage is once again the fact that the most experienced HW, who has been trained by the project in IMCI, was often not at the facility on the day of the survey. The HWs present that have not undergone IMCI training did not fully explain the medications prescribed for the child to the caretaker. New regulations will be implemented in the HFs,

by the CHT, to ensure that HWs are present during all normal HF hours. In addition, the project will follow up with the HWs trained in IMCI to ensure that they are committed to providing this training to the other pertinent staff in their HF, as agreed upon at the start of the IMCI training sessions.

# CHAPTER 4

## Action Plan/Conclusions/Recommendations



The Grand Cape Mount Child Survival Project has improved the inputs, processes, and performance in the HFs in the first two years of the project. The midterm RHFA has verified that the project has had a significant impact on service availability, drug availability, information systems being instituted, supervision, and most areas of HW performance. Some areas require additional attention, and the CSP is committed to increasing the HFs capacity in these areas. The following is a summary of each of the 12 core indicators, along with the Action Plan items for each indicator in need of continued improvement. These items have been discussed with the CHT and will be implemented at the HFs during the course of the next two years. The graphs above provide a visual summary.

### **ACCESS (INPUTS)**

1. **Service Availability:** At midterm, 44% of HFs were deemed to offer all 3 basic child health services. This is increased from baseline, in which 0% of HFs offered all 3 basic child health services due to the fact that no facilities offered growth monitoring. As part of the IMCI protocol, growth monitoring has been introduced to the HFs, and at midterm 44% of HFs are providing growth monitoring services in the facility and/or through outreach. With regard to increasing referrals to the HFs, The project has been concentrating on providing outreach services through the HHPs, who refer sick children to the HFs. The project will continue to work to increase HFs capacity in providing growth monitoring, and will continue improving outreach services to the community through the HHPs and Care Groups.
2. **Staffing:** 56% of all staff who provide clinical services were present on the day of the midterm survey, and the average HF attainment was 77% (meaning the average HF had 77% of its staff present). This indicator has been changed since baseline, and therefore the midterm finding will be used to track future performance. The project has already conducted meetings with the CHT to discuss this, because at this point in the project only the most experienced HW in each facility has been trained in IMCI, and has the responsibility of training the other HWs in their facility. This HW is therefore responsible to be at the HF to provide services, and also to train other staff in IMCI. The CHT has introduced new guidelines to all of the HW in the county to ensure their presence at the HF.
3. **Infrastructure:** All essential health infrastructure was present on the day of the survey in 33% of the HFs, with the average HF attainment at 45%. The limiting factors are emergency transport, which was available in only 6% of the HFs, electricity, which was available in only 11% of the HFs, and emergency communication, which was available in only 28% of the HFs. The project has been working with the communities through the CHCs to develop emergency transportation systems in each village in order to work around the fact that HFs do not have funding for transportation systems. We will also continue to advocate for increased infrastructure through the CHT of the MOH, and will compare this midterm finding to final HFA performed at the final evaluation.
4. **Supplies:**
  - a. **Supplies – Child:** While only 44% of HFs had all of the essential supplies to support child health, the average HF attainment was 79% of these essential

supplies. This is a decrease from baseline, where 90.9% of HFs had the entire essential infrastructure required for child health. The table of disaggregated indicators reveals that infant scales are available in only 67% of the facilities, and timers, pitchers for ORS and a cup or spoon for ORS are only available 78% of the time. Investigation into this revealed that at the start of IMCI all HFs were provided with the proper supplies for administering ORS and all facilities had functional infant scales, so this explains much of the decline. The project will coordinate with the MOH to ensure proper ORS supplies are available, and advocate to have infant scales made available .

- b. **Supplies-MNC:** None (0%) of the HFs have all of the essential supplies available to support maternal-newborn. This is mainly due to the fact that only 6% of HFs have functioning vacuum extractors, and only 11% of facilities have partographs. In addition, only 39% of facilities have neonatal resuscitation equipment, and only slightly more than half (56%) of facilities have neonatal wraps and infant scales. The project will work with the CHT to determine the feasibility of obtaining these badly needed items.
  - c. **Supplies-ANC:** Similarly, 0% of the HFs have all of the essential supplies to support antenatal care. No facilities have hemoglobin or syphilis tests available and only 6% of facilities have urine albumin test strips available. The project will work with the CHT to increase availability of the testing kits.
5. **Drugs:**
- a. **Child:** At midterm, 94% of facilities have first line drugs for pneumonia and malaria, and 89% had ORS available, showing an improvement in these areas. This compares to baseline where 64% of HFs had all first line medications available, which at that time was defined as ORS, a first line oral antibiotic for pneumonia, and a first line antimalarial. In total, 61% of HFs have all of the first line medications for child health available. This is comparable to baseline, but this new indicator is more rigid than the baseline indicator because it includes Vitamin A. The limiting factor in drug supply appears to be Vitamin A, as only 72% of the facilities have Vitamin A in stock. The project will work with the CHT to ensure the proper supply of Vitamin A, ORS, first line antibiotics for pneumonia, and first line antimalarials.
  - b. **MNC:** Only 33% of HFs had all of the essential delivery and neonatal drugs present on the day of the survey. The limiting factor in this indicator is Oxytocin, which is available in only 39% of the facilities. The project will work with the CHT to attempt to secure Oxytocin for the delivery unit.

## PROCESSES

### 6. Information Systems

- a. **Child:** The average facility has 82% of the elements required in having up to date records available for child care, with 39% of HFs have all elements. At baseline, 0% of the facilities had all of the elements in place regarding records.
- b. **ANC:** The average facility has 81% of the elements required in having up to date records available for antenatal care, with 39% of HFs have all elements. At baseline, 0% of the facilities had all of the elements in place regarding records,

revealing that there have been tremendous improvements made in record keeping.

7. **Training:** 61% of the HF had HW who reported receiving in-service or pre-service training in both maternal neonatal care and child health in last 12 months.
8. **Supervision:** External supervision has increased since baseline, from 4.5% of HF receiving external supervision at least once in the last 6 months, to 56% of HFs receiving external supervision in the last 3 months. Despite the fact that the indicator has changed from 6 months to 3 months, the midterm results are encouraging. The project is planning to conduct supervisory visits in conjunction with the CHT, and the project is confident that this percentage will continue to improve.
9. **Utilization of Curative services:** The percentage of HF with > 1 sick child encounter per child under the age of 5 in GCM County was 5.0%. This is an increase from the baseline of 1.89%. The number of sick children being seen in the facilities has increased over the 2 years of the project, and we will continue to strive to improve utilization of the services through the HHPs and Care Groups providing health education and providing referrals of sick children encountered in the community to the facilities.

## **PERFORMANCE**

10. **HW Performance (Assessment):** The midterm found that the average facility was performing 66% of the key assessment tasks. Therefore, only 28% of the facilities were found to routinely perform all key assessment tasks. This is quite an improvement over the baseline, however, where only 9% of facilities were found to routinely perform all key assessment tasks. The survey team discussed this finding during and after the evaluation, and determined the major factor contributing to this low percentage is the fact that the most experienced HW, who has been trained by the project in IMCI, was often not at the facility on the day of the survey. A meeting was held with the CHT where this finding was discussed, and new regulations will be implemented in the HFs to ensure that HW are present during all normal HF hours. In addition, the project will follow up with the HW trained in IMCI to ensure that they are committed to providing this training to the other pertinent staff in their HF, as agreed upon at the start of the IMCI training sessions. In addition, the project will now begin to expand its IMCI training to include all HWs at each facility. This will be accomplished by scheduling a planned training session at each HF in the county, in which all HWs that treat children will be given a 1 day training in the most needed aspects of IMCI-the performance of key assessment tasks and the counseling of caretakers in administering prescribed medications to their child. This will be in addition to the regular training that is to be provided to these HWs by the most experienced HW, who has been fully trained in IMCI.
11. **HW Performance (Treatment):** It is encouraging that in 72% of the HFs, the treatment given by the HW is appropriate to diagnosis (meaning provided in at least 5 of the 6 observed cases). This is a marked improvement over the baseline frequency of 45.5%. The project will continue to provide regular, scheduled training in IMCI, along with supervisory visits and mentoring, to continue to improve HW performance.

**12. HW Performance (Counseling):** The weakest area noted, in regards to HW performance, is in the area of counseling the caretaker on the proper method of administering the medicines prescribed. Only 11% of HFs were properly instructing caretakers in how to correctly administer drugs prescribed for their child. This is a decrease from baseline, where it was reported that 48.5% of caretakers could correctly describe how to administer all prescribed drugs. Instruction was given to each of the HWs encountered during the survey that was having difficulty with this, during the feedback given to the HW following the data collection. The major factor contributing to this low percentage is once again the fact that the most experienced HW, who has been trained by the project in IMCI, was often not at the facility on the day of the survey. New regulations will be implemented in the HFs, by the CHT, to ensure that HWs are present during all normal HF hours. In addition, the project will follow up with the HWs trained in IMCI to ensure that they are committed to providing this training to the other pertinent staff in their HF, as agreed upon at the start of the IMCI training sessions.

### **CONCLUSIONS/RECOMMENDATIONS**

The GCMCSP continues to improve the lives of children and families in Grand Cape Mount County through improving the access, capacity, processes, and performance of the HFs in GCM County. The project has been very successful in greatly increasing performance with regard to most of the core indicators of the RHFA. The Action Plan outlined above will guide the third and fourth years of the project in order to continue to improve the indicators with which the project has had such success, and to overcome the barriers and improve the results of the interventions which need continued improvement.

**Annex 1**  
**LIST OF HEALTH FACILITIES**

	<b>Health Facility</b>	<b>District</b>	<b>Supporting Agency</b>	<b>Status</b>
1	Damballa Clinc	Porkpa	AHA	Functional
2.	Bandaja Clinic	Porkpa	World Vision	Functional
3.	Bamballa Clinic	Porkpa	NWMT	To be revitalized
4.	Mano River Clinc	Porkpa	-	Non-functional
5.	Kalwielahun Clinic	Porkpa	-	Non-functional
6.	Jenneh Wonde Clinic	Tewor	AHA	Functional
7.	Genolor Clinic	Tewor	World Vision	Functional
8.	Gordama Clinic	Tewor	World Vision	Functional
9.	Tieni Clinic	Tewor	World Vision	Functional
10.	Bo Waterside Clinic	Tewor	World Vision	Functional
11.	Diah Clinic	Tewor	World Vision	Functional
12.	Mambo Clinic	Tewor	CHT	Functional
13.	Bangormah Clinic	Tewor	-	Non-functional
14.	Tahn Maffa Clinic	Tewor	NWMT	To be revitalized
15.	Kulangor Clinic	Tewor	NWMT	To be revitalized
16.	Fanjah Clinic	Tewor	-	Non-functional
17.	Kpeneji Clinic	Garwula	Private/CAM	Functional
18.	Sinje Health Center	Garwula	AHA	Functional
19.	Kangar Clinc	Garwula	AHA	Functional
20.	Madina Clinic	Garwula	World Vision	Functional
21.	Jundu Clinic	Garwula	World Vision	Functional
22.	Bomboja Clinic	Garwula	NWMT	Functional
23.	Sembehun Clinic	Garwula	AHA	Functional
24.	Bendu Clinic	Garwula	World Vision	Functional
25.	Mbaloma Clinic	Gola Konneh	AHA	Functional
26.	Lofa Bridge Clinic	Gola Konneh	AHA	Functional
27.	Tahn Clinic	Gola Konneh	AHA	Functional
28.	Varguay Clinic	Gola Konneh	NWMT	To be revitalized
29.	Tallah Clinic	Commonwealth	World Vision	Functional
30.	Fanti Town Clinic	Commonwealth	AHA	Functional
31.	St. Timothy Hospital OPD	Commonwealth	CHT	Functional
	<b>Not Included</b>			
	D-8 Private Clinic	Garwula	Guthrie Rubber Plantation	Functional
	Zaway Clinic	Garwula		Non-functional

## Annex 2 Training Of the Survey Team

The training of the survey team should require four days. The main objectives of the training are to discuss the purpose of the survey and the resulting information; discuss the logistics of the survey; review and practice each of the forms; and practice administering these forms in the facility setting. A health facility that is near the training site and which was not randomly chosen for the HFA should be used for the field test. The schedule<sup>14</sup> below combines a discussion of each form with actual facility based practice in collecting the information needed to complete the form.

Day	Activities
1	<p><b>AM: Opening &amp; General Information</b></p> <p>Opening</p> <ul style="list-style-type: none"> <li>• Introduction of the participants</li> <li>• Administrative information</li> </ul> <p>General information</p> <ul style="list-style-type: none"> <li>• Purpose of the survey</li> <li>• Training objectives</li> <li>• Survey protocol and techniques</li> <li>• Introduction of Participant Guidelines</li> <li>• Clarification of participant expectations or concerns</li> </ul> <p><b>PM: Introduction to first two forms: Clinical Observation &amp; Sick Child</b></p> <p>Clinical Observation - Sick Child</p> <ul style="list-style-type: none"> <li>• Review the instrument</li> <li>• Role play</li> </ul> <p>Caretaker Exit Interview – Sick Child</p> <ul style="list-style-type: none"> <li>• Review the instrument</li> <li>• Role play</li> </ul>
2	<p><b>AM: Health facility visit for Clinical Observation and Caretaker Exit Interview</b></p> <ul style="list-style-type: none"> <li>• Visit to health facility for practice of Clinical Observations and Exit Interviews</li> <li>• Debriefing of the health facility visit</li> </ul> <p><b>PM: Intro to Health Worker Interview and Health Facility Checklist</b></p> <p>Health Worker Interview</p> <ul style="list-style-type: none"> <li>• Review the instrument</li> <li>• Role play</li> </ul> <p>Health Facility Checklist</p> <ul style="list-style-type: none"> <li>• Review the instrument</li> <li>• Role play</li> </ul>
3	<p><b>AM: Health facility visit for HW Interview and Health Facility Checklist</b></p> <ul style="list-style-type: none"> <li>• Visit to health facility to practice the HW interview and using the Health</li> </ul>

<sup>14</sup> Training schedule provided by CSTS; R-HFA short instruction 12-09-07; R-HFA Version 2.1; CSTS 2007; [http://www.childsurvival.com/rhfa\\_1.cfm](http://www.childsurvival.com/rhfa_1.cfm)

Facility Checklist

- Debriefing of health facility visit

**PM: Sampling Health Facility and Data Analysis**

Sampling health facilities in districts

- Explanation of how health facilities were sampled in each district
- Reviewing list of health facilities sampled and to be visited during the assessment

Analysis of R-HFA data

- Analysis of data at the health facility level. Identifying strengths and areas of needed improvement
- Analysis of data at the district level. Identifying areas of needed improvement