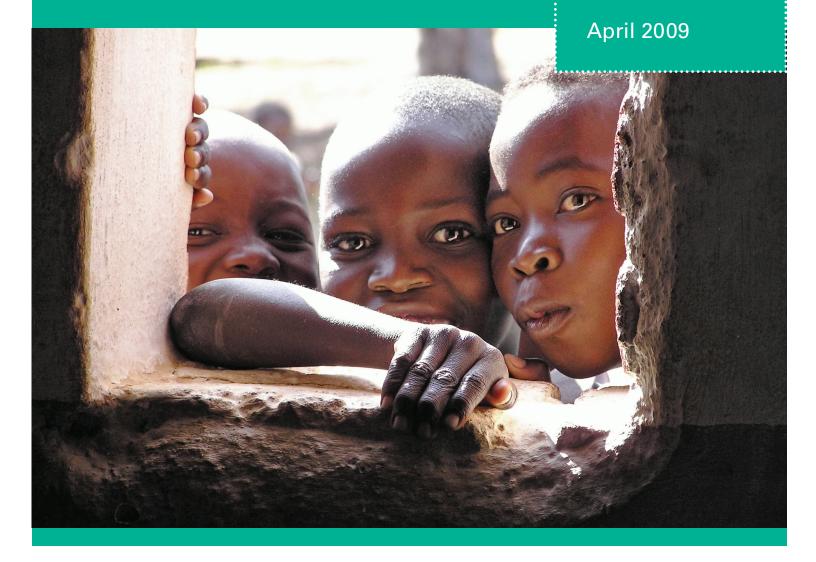
Community Approaches to Child Health in Malawi:

Applying the Community Integrated Management of Childhood Illness (C-IMCI) Framework









This document was made possible by support from the Child Survival and Health Grants Program within the Bureau of Global Health, U.S. Agency for International Development (USAID) under cooperative agreement GHS-A-00-05-00006-00. This publication does not necessarily represent the view or opinion of USAID. It may be reproduced if credit is properly given.

Abstract

The C-IMCI Framework, created in January 2001 based on nongovernmental organization (NGO) child health program experiences, presents a guide for programming community-based efforts that involve all of the institutions and people who play a critical role in improving child health.

The C-IMCI Framework is made up of three elements: (1) improving partnerships between health facilities and the communities they serve; (2) increasing appropriate and accessible health care and information from community-based providers; and (3) integrating promotion of key family practices critical for child health and nutrition, and a multi-sectoral platform. The intent of the C-IMCI Framework is to enable NGOs and governments to categorize their existing community-based program efforts and develop and implement a coordinated, integrated strategy to improve child health. The framework is designed to address each of the three key elements and a multi-sectoral platform that would be most effective in improving child health.

Now that multiple NGOs have been implementing C-IMCI for several years, the CORE Group seeks to document NGO country programs that have used the framework to: 1) improve health outcomes; 2) positively influence health policy; and/or 3) expand coordinated delivery of health interventions at a district or regional level.

This paper documents World Relief's approach to C-IMCI interventions at the household level in Malawi, where the government is dedicated to implementing C-IMCI through its community network of health surveillance assistants.

Recommended Citation

CORE Group, April 2009. Community Approaches to Child Health in Malawi—Applying the C-IMCI Framework.

Acknowledgements

Special thanks to Victor Kabaghe, World Relief Field Program Director in Malawi; Melanie Morrow, World Relief Director of Maternal and Child Health Programs; and Olga Wollinka, consultant to World Relief. Thanks also to Dr. Henry Perry, Drs. Warren and Gretchen Berggren, W. Meredith Long, Lynette Walker, Karen LeBan, Nazo Kureshy, Erika Lutz, and Julia Ross for review and editing several drafts. Additionally, Dr. Carl Taylor, and Paul Makandawire provided helpful comments on early drafts.

CORE Group

CORE Group fosters collaborative action and learning to advance the effectiveness and scale of community-focused public health practices. Established in 1997, CORE Group is a 501(c) 3 membership association based in Washington, DC that is comprised of citizen-supported NGOs working internationally in resource-poor settings to improve the health of underserved populations.

World Relief

World Relief is a Christian international development organization working directly in 15 countries around the world and 22 cities in the United States. Its core program areas include disaster response, maternal and child health, HIV/AIDS, child development, economic development and refugee resettlement. World Relief serves those in need, regardless of religious affiliation. World Relief is a member of the CORE Group. Web site: www. wr.org

USAID Child Survival and Health Grants Program

The World Relief projects described in this document were funded under the U.S. Agency for International Development (USAID) Child Survival and Health Grants Program. World Relief's first Malawi child survival project ran from 2000–2004; a second child survival project runs from October 2005 through September 2009.

The purpose of the Child Survival and Health Grants Program is to contribute to sustained improvements in child survival and health outcomes by supporting the work of nongovernmental organizations and their incountry partners. This work is aimed at reducing infant, child, maternal and infectious disease-related morbidity and mortality in developing countries. Sustained health improvements are achieved through capacity building of communities and local organizations and improved health systems and policies. In addition, the program seeks opportunities to scale up successful strategies to the national level, introduce innovations in communityoriented delivery and contribute to the global capacity and leadership for child survival and health through the dissemination of best practices.

For more information, visit: www.usaid.gov/our_work/global_health/home/Funding/cs_grants/cs_index

All photos courtesy of World Relief.

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Acronyms

C-HIS	community-based health information system
C-IMCI	Community-based Integrated Management of Childhood Illness
DRF	drug revolving fund
HSA	health surveillance assistant
IMCI	Integrated Management of Childhood Illness
KPC	knowledge, practice and coverage
МОН	Ministry of Health
NGO	nongovernmental organization
ORS/ORT	oral rehydration solution/ oral rehydration therapy
SP	sulfadoxine-pyrimethamine
STI	sexually transmitted infection
TBA	traditional birth attendant
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

Introduction

In 1992, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) developed the Integrated Management of Childhood Illness (IMCI) strategy to address the five major causes of child mortality—diarrhea, pneumonia, malaria, measles and malnutrition. The cornerstone of the IMCI strategy was the development of standard treatment guidelines and training of health workers.

In subsequent years, global health experts recognized that success in reducing childhood mortality requires more than the availability of adequate services with well-trained personnel. Around the world, many children do not have access to health facilities due not only to distance, but to barriers related to cost, health beliefs, and language. Additionally, because families bear the major responsibility for caring for children, success requires a partnership between health providers and families with support from their communities. Health providers need to ensure that families can provide adequate home care to support healthy growth and development of their children. Families also need to be able to respond appropriately when their children are sick, seeking appropriate and timely assistance and giving recommended treatments.

IMCI now consists of three components: 1) improving the skills of health workers; 2) improving health systems; and 3) improving household and community health practices. The third component, also referred to as Community IMCI, or C-IMCI, is the topic of this paper.¹

The complexity of culturally-tailored, integrated, community-based programs has posed a challenge to investment in C-IMCI. To assist field managers in starting C-IMCI programs, the CORE Group and BASICS II Project, with support from the U.S. Agency for International Development (USAID) and the Child Survival Technical Support project, hosted a 2001 workshop to develop a descriptive framework for C-IMCI based on child health and nutrition program experiences.

The C-IMCI Framework enables nongovernmental organizations (NGOs) and governments to better communicate and plan public, private and household interventions that improve child health and reduce child mortality and morbidity. The framework includes three categories of activities (called elements) and a multi-sectoral platform that focus on specific behaviors and practices of health workers and caregivers of young children. Each of the elements focuses on an institution, or set of people, with a critical role to play in efforts to

"To be successful in reducing child mortality, programmes must move beyond health facilities and develop new and more effective ways of reaching children with proven interventions to prevent mortality. In most highmortality settings, this means providing case management services at community level, as well as focusing on prevention and on reducing rates of undernutrition."

> -WHO IMCI/Multi-Country Evaluation Main Findings

¹ Multi-Country Evaluation of IMCI: Effectiveness, Cost and Impact. Progress Report May 2002–April 2003 Department of Child and Adolescent Health and Development – World Health Organization.

promote appropriate child care, illness prevention, illness recognition, home management, care-seeking and treatment compliance practices.

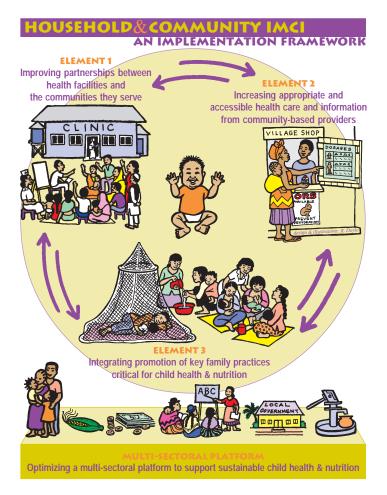
This descriptive framework is based on the assumption that C-IMCI will differ from country to country, and within countries, to respond to local opportunities and needs. Its elements are described below:

- **Element 1:** Improving partnerships between health facilities and the communities they serve
- **Element 2:** Increasing appropriate and accessible health care and information from community-based providers
- **Element 3:** Integrating promotion of key family practices critical for child health and nutrition

Multi-sectoral Platform: Linking health efforts to those of other sectors to address determinants of ill health and sustain improvements in health.

A 2002 *Health Policy and Planning* article concluded that "while the Framework provides a useful reference for a vision of C-IMCI implementation, many people want to 'see' what one looks like in the field . . . Documentation of different approaches to implementation of the three Elements is crucial, and will allow program planners to appreciate the options before them as they seek ways to implement child health and nutrition interventions at scale."²

This case study takes on that challenge by documenting community-based programs and C-IMCI implementation in Malawi by the international NGO World Relief. The study also shows how an effective C-IMCI approach links and supports health workers within a broader health system, in line with elements 1 and 2 of the overall framework.



² Winch P., LeBan K., Casazza L., Walker L., Pearcy K. (2002). An implementation framework for household and community integrated management of childhood illness. Health Policy and Planning, 17 (4): 345–353.

I. Background

Malawi is a peaceful country with a historically strong health focus; the first president was a medical doctor. Malawi's health system is managed at the national, provincial and district levels, and health services are provided by the Ministry of Health (60 percent) and the Christian Health Association of Malawi (37 percent). AIDS, poverty, drought and malaria are long-term challenges and continue to undermine health advances.

In 1998, Malawi adopted the IMCI strategy with technical support from the WHO and UNICEF. By the end of 2005, the Ministry of Health (MOH) had implemented IMCI in 18 out of 28 districts. Ten districts were implementing all three elements of IMCI; eight were implementing Elements 1 and 2 (improving health worker skills and facility services); and one district was implementing only Element 3 (improving household and community health practices).³ An Accelerated Child Survival and Development Strategic Plan has been developed to promote IMCI scale-up by providing 60 percent of health workers with improved case management skills and 40 percent of households with the promotion of key health practices.

The Catalytic Initiative to Save a Million Lives (Catalytic Initiative) is an international partnership focused on the Millennium Development Goal to reduce child mortality by two-thirds by 2015. In Malawi, UNICEF has worked with the MOH and other partners to train almost 6,000 community health workers as part of the government's five-year strategic plan for child survival and development. Canadian funding enabled the purchase of key drugs including antimalarials, antibiotics and oral rehydration solution (ORS) packets for use by community health workers.

Together with Christian mission hospitals, bilateral and multilateral organizations and NGOs have carried out health programs in Malawi for decades. World Relief and the Presbyterian hospitals of northern Malawi first worked together in AIDS orphan care, and then in a USAID-funded child survival project from 2000–2004. This program integrated separate vertical programs for health outreach services from each of the three Synod of Livingstonia hospitals in Mzimba and Rumphi districts (population 165,000 in areas served by the three hospitals). Hospital administrators recognized that they needed a comprehensive C-IMCI program to provide equitable and effective health education to the entire Synod hospitals service area.

World Relief's current (2005–2009) USAID-funded child survival project in Chitipa district (population 174,786) was designed as a comprehensive

³ Malawi IMCI Policy Final Draft January 2006.

C-IMCI approach and is integrated with the MOH system. In Chitipa district, World Relief and the MOH trained health facility clinicians in IMCI and community members in C-IMCI, linking the three components of the framework to improve health system services. The MOH is currently expanding C-IMCI into additional districts through strategic partnerships with donors and NGOs.

World Relief also supports the MOH in training government health workers and improving facility services, and in training community members in C-IMCI so that they can support facilities, provide basic treatment within the community, and increase knowledge of good family practices.

II. World Relief's Care Group Model

Beginning in Mozambique in 1995, World Relief began to respond to the needs of vulnerable children and mothers through a community-based approach known as the Care Group model, which extends the health system into local homes, recognizing that educating and empowering mothers is the key to raising local health status.

The Care Group model saturates entire villages with health information and support services through networks of devoted community volunteers, usually comprised solely of women. About 10–15 women come together in a Care Group every two weeks to learn life-saving health messages from a health educator. Each woman is then responsible to teach the health lessons they learn to 10–15 of her neighbors. The Care Groups reinforce health lessons through group interaction and become a primary source of support and encouragement for the volunteers.

Through this model, women are empowered with information to make their families and the families of their neighbors healthy. They teach mothers how to cook nutritious meals from locally available foods, how to care for children with diarrhea, and how to prevent malaria by using insecticide-treated bed nets and other life-saving health information. As women are empowered with health knowledge, their profile increases and their husbands and village leaders begin to recognize them as effective agents of change.

The Care Group model is applied as part of a comprehensive approach to child survival programming; World Relief tailors the model to the specific needs of each country and community it works in. Following successful implementation of Care Groups in Mozambique, World Relief replicated the model in Cambodia, Malawi, Rwanda and Burundi, adapting to local conditions.



Through World Relief's Care Group model, women are empowered to improve their families' health.

III. Programming with the C-IMCI Framework

In programming for C-IMCI, World Relief decided the Care Group model was appropriate and needed in Malawi, and would likely be a success based on its application in other countries. World Relief staff reasoned that Care Groups could sufficiently address the gap created by a limited number of government health workers at the community level; extend the reach of the government health system; increase community engagement with the health system; and help individual households adopt effective health promotion practices.

Program staff therefore chose to first emphasize Element 3 of the C-IMCI framework, which would leverage the Care Group model to focus on promotion of key family health practices. Emphasis on Element 3 also corresponds with World Relief's prioritization of underserved areas where interpersonal channels for health information are weak.

Staff also used the C-IMCI framework to assess other parts of the health system, including the quality of facility and private sector services, along with their accessibility and willingness to work with local communities. Application of the framework's other three elements naturally followed after Element 3 mechanisms were in place.

1. Element 3: Integrating promotion of key family health practices

The practices of parents and other caretakers of young children at the household and community levels are addressed in Element 3. Promotion of practices critical for child health and nutrition has long been the cornerstone of child health programs. The task facing C-IMCI is not how to implement single interventions or program components such as oral rehydration therapy promotion, immunization or promotion of exclusive breastfeeding, but how a program can promote a whole range of key family practices without sacrificing the effective characteristics of the single intervention-focused programs.⁴

If C-IMCI is to be effective and sustainable, communities need to be empowered to take responsibility for their own health. This means that communities must develop a sense of ownership over the key practices, and assume the responsibility for practicing and promoting them over the long term. Participatory research methods and community-based monitoring and evaluation efforts are important tools for communities to learn about and assume responsibility for these behaviors.

4 Ibid.

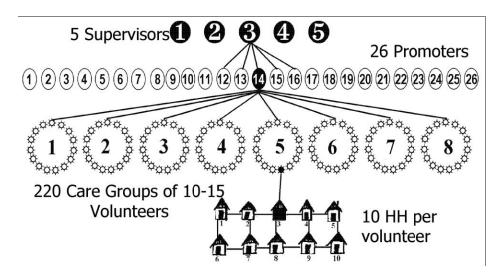
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CARE GROUPS

In World Relief's Mozambique project, paid health promoters (locally referred to as an "animators") were assigned about eight Care Groups to meet with biweekly to train in the promotion of key health messages on disease prevention and care-seeking. Over the next two weeks, each volunteer then visited ten homes to teach family members these same key messages. Volunteers also collected vital data regarding births, deaths and pregnancies.

In the Care Group model, regardless of the size of the project population, ratios should remain constant: one volunteer per 10–15 households, and 10–15 volunteers per group. Each paid staff person can oversee about eight groups, or about 80–120 volunteers. These volunteers can then reach 800–1,800 households, depending on the population density of their village.

World Relief staff begin the program by conducting a census of beneficiaries (women of reproductive age and children under five years) in order to assure full and equitable coverage of households, and to help managers allocate staff to defined geographic areas. The diagram below illustrates how 32 program staff in Mozambique educated and provided services to 130,000 people, with 10 households per volunteer.



Management and Supervision of Care Groups and Volunteers

Promoters, usually recruited locally, comprise the foundational level of paid program staff. They daily span the boundary between the project and the community, working directly and closely with Care Group volunteers and community members and leaders in the field. Each supervisor supports and manages about five promoters. The supervisors visit their assigned promoters in the field every week, going with them to visit their Care Groups, households, health centers, village health committees, village headmen and other community members. The supervisors ensure quality, provide support to promoters and volunteers and, represent the program to local staff of the MOH and other government officers within their supervision area. The total number of staff, therefore, varies with the coverage of the project, but the ideal ratio of staff to volunteers is fairly constant.

In Mozambique, promoter training camps were held in villages about four times a year as each intervention was phased in. Program staff slept in tents, and community members cooked for them. Following morning training sessions, promoters practiced their new knowledge and skills with village Care Groups in the afternoon. This kept training relevant, practical and interesting while maintaining a high level of transparency within the community. After the promoters were all trained in one intervention, they took several months to teach all messages, one lesson at a time, to their own Care Group volunteers, who in turn taught the mothers in their assigned ten homes.

This gradual approach gives volunteers and mothers a chance to discuss, understand and practice new messages before receiving a new message. Because villagers simultaneously discuss the same health message, they become a critical mass for changing and sustaining health beliefs and practices in the entire project area.

CARE GROUPS IN MALAWI

In Malawi, World Relief's current child survival project has recruited 3,060 Care Group volunteers, supported by 40 promoters and seven supervisors. World Relief's previous child survival project in Malawi (2000–2004) had 2,400 volunteers, supported by 45 promoters, three area coordinators and four health educators. The first project's volunteer dropout rate for years two through four was approximately 2 percent per year. There was higher turnover in the initial year as Care Groups were getting established and some individuals volunteered with expectation of payment (despite communication to the contrary) and/or underestimation of volunteer responsibilities.

To bolster the work of Care Groups in Malawi, World Relief trained government-supported health surveillance assistants (HSAs)—who provide a number of curative services to communities (see page 16)—in the IMCI algorithm and to oversee Care Groups. Village headmen on zonal committees also support Care Group leaders by reinforcing health messages and attending meetings. When the Chitipa mid-term evaluation team interviewed 177 volunteers, 92 percent stated that a community leader had attended one of their meetings in the previous month. When asked if they felt supported by the village headman, 83 percent of the volunteers said that they felt "a lot" of support.

Though the Care Group model has reported success in Malawi, World Relief faced some initial challenges in introducing it, including difficulty with community acceptance and mobilization. For example, some villages refused to participate in the first project until they saw what was happening in nearby, participating villages. The project held staff training camps in the vicinity of resistant villages to spark curiosity and increase the project's exposure to local residents. In time, every village in the project area asked to be included and received training in all of the project's interventions.

The current project in Chitipa district has been especially demanding because distances between homes in some areas are much longer than in the first child survival project. In addition, the impact of the HIV epidemic has been felt in the deaths of HIV-positive staff and volunteers. Also, volunteers have been more consumed with responsibility for caring for sick family members. On a positive note, the cultural practice of wife inheritance, which can contribute to the spread of HIV, is reported to have decreased or even been eliminated in some villages in conjunction with household education through Care Group volunteers and encouragement from the village health committees to abandon the practice.



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

World Relief chose Element 1 as its next priority in Malawi, focusing on increasing the use of formal health services and outreach services through the formation of equitable partnerships that include community input into health services and participation in management of health facilities. Activities under this element include joint village-level outreach by community- and facility-based providers, collaborative oversight, Behavior change communication messages encourage mothers and children to wash their hands before handling food.

Photo by Richard Crespo.

Table 1. Illustrative Behavior Change Communication Messages,World Relief's 2000-2004 Malawi Child Survival Project

Malaria and Pneumonia

- 1) Malaria is a disease spread by mosquitoes that causes fever. It can also cause convulsions and lead to death.
- 2) Take a child with fever to the health facility or drug revolving fund (DRF) volunteer for treatment right away. Prompt treatment can save your child's life.
- 3) Pregnant women should go at least twice to get sulfadoxine-pyrimethamine (SP) during antenatal care at the mobile clinic or health facility. SP protects pregnant women and unborn babies from malaria.
- 4) Buy and sleep under treated bed nets to protect your family from mosquitoes that spread malaria.
- 5) Give pregnant women and children under five priority in sleeping under treated nets. They are the most vulnerable to malaria.
- 6) Bed nets need to be retreated with insecticide to continue to repel mosquitoes. Retreat your net at least once a year. Participate in retreatment activities in your community.
- 7) Pneumonia is a disease that causes cough with rapid breathing. If your child has rapid, difficult breathing (with or without fever), seek treatment right away at a health facility or from a DRF volunteer. Prompt treatment can save your child's life.

Nutrition and Breastfeeding

- 1) Babies should exclusively breastfeed immediately after birth and for the first six months.
- 2) Colostrum protects the baby from getting sick.
- 3) Breast milk contains all the nutrients required for a child from birth to six months.
- 4) Introduce other foods after six months and continue breastfeeding for a minimum of two years, even if the mother becomes pregnant again.
- 5) Pregnant and breastfeeding women and children older than six months should take adequate nutritious foods of different color groups: yellow, green, brown and white.
- 6) Offer meals and nutritious snacks five times per day to young children.
- 7) Pregnant and breastfeeding women should receive and take at least three months of daily iron supplements (90 tablets) during pregnancy and while breastfeeding.

Growth Monitoring and Counseling

- 1) All children under five should be weighed each month and receive counseling based on their weight.
- 2) Children that do not gain weight for two consecutive months are considered at risk. All at-risk children should receive special care as counseled.
- 3) Parents and guardians should attend the under-5 clinics to be counseled on child care.

Disease Prevention and Home Management

- 1) All immunizations should be completed by the child's first birthday.
- 2) Wash hands with soap after contact with feces and before handling food or feeding children.
- 3) Children with diarrhea should be given fluids/oral rehydration solution (ORS) frequently.
- 4) Sick and recovering children should be given more food and breast milk in small, frequent feedings.

Safe Delivery

1) Deliver your baby at a health facility or with a trained traditional birth attendant.

2) Discuss with your family a plan for emergency transport to get to the nearest health facility.

management and supervision of health services by community committees, and collaboration on community-based health information systems.⁵

Implementation of this element calls for changes in the roles of both health workers and community members. Health workers need to not only improve interpersonal counseling with clients in health facilities and increase community outreach and education of community members about danger signs requiring care-seeking, but also become more receptive to input from the community, and more accountable for the quality of the services they provide. Through training in quality assurance techniques, health workers can come to see input from the community as constructive and useful, rather than as negative and interfering.

In his evaluation of World Relief's USAID-funded child survival project in Chokwe, Mozambique, Dr. Carl Taylor noted that there is "a symbiotic relationship between demand for services and motivation of health care workers."⁶ This symbiosis is a key element in successful C-IMCI programs. When community members value the services that health care workers provide, they are more likely to access those services, and, more importantly, approach the workers with an attitude of trust.

Many health care workers respond to increased community trust and appreciation with better and more compassionate service delivery. Elements 2 and 3 of the C-IMCI framework, along with facility-based IMCI training, are designed to enhance the development of partnerships. Once a working partnership is established, community members and their leaders, as well as MOH staff and leaders, are better able to resolve emerging problems to preserve what both groups have come to value. Additionally, when a good monitoring and reward system is in place within the MOH, the clinic staff who work in effective partnership with the surrounding communities are more likely to be rewarded and recognized for their health outcomes.

World Relief's USAID-funded child survival projects in Malawi have employed several methodologies to implement this first C-IMCI element, presented below.

COMMUNITY OUTREACH SESSIONS

World Relief trained Care Group volunteers to help the MOH conduct community outreach sessions for growth monitoring, immunization, and other services. These volunteers reached each household to assure that MOH-led community outreach sessions were well attended and addressed any false expectations concerning the services that were available. World Relief also assisted with the transport of MOH personnel and supplies for

⁵ Winch P. et al.

⁶ Taylor, Carl. Final Evaluation of Vurhonga 2, World Relief Mozambique's USAID-funded Child Survival Program, 2003.

outreach sessions in coordination with its own staff. During these sessions, child survival staff and volunteers assisted with tasks including growth monitoring and counseling.



Community outreach sessions cover topics including child growth monitoring and immunization.

Health Facility Assessments

In both Malawi child survival projects, World Relief and the MOH jointly conducted health facility assessments to monitor the quality of IMCI services. They met quarterly with the district head of planning to review data on quality of care, service utilization, drug supply and management, and develop initiatives for improving quality of IMCI services. World Relief staff trained health center and health post staff in standard case management protocols, essential drug supply monitoring, establishing effective surveillance systems, and improving access to health services. They also trained health staff in basic problem-solving approaches, supportive supervision, maintaining good referral systems, joint activity planning, and staff management. The World Relief Malawi Child Survival Program Manager is a member of the national IMCI working group, which provides feedback to influence national and district IMCI policy. This group includes representatives of the MOH, various NGOs, and the Ministries of Agriculture, Water and Social Welfare.

Community-based Health Information System

A community-based health information system (C-HIS) is an essential component of the Care Group model applied in Malawi. The C-HIS is

intended to provide timely and reliable information to community members, the health care system, and World Relief staff at every level, from the individual households covered by one Care Group to the entire project area. During Care Group meetings, volunteers report on the vital events that occurred during the past two weeks in their assigned households, such as births, deaths, or significant diseases.

Literate program staff or volunteers, often the Care Group leaders, compile these data for their Care Group, reporting it upward through their promoters and supervisors so that it can be aggregated for each village and district. Instead of blindly passing this information up to others in authority, however, the volunteers discuss their findings together during the Care Group meetings, and act upon it immediately, perhaps discussing how to introduce change in a household that resists it or appointing a delegation of volunteers to help mobilize community resources for a family in special need.

Program staff and elected Care Group volunteer leaders also report C-HIS results to the health facilities and health districts. The World Relief Malawi Child Survival Program leadership meets with the MOH on a quarterly basis to review C-HIS data and lessons learned. Results are reported to community members using graphs suitable for low literacy audiences (where appropriate). The C-HIS is a tool not only to monitor impact, but to help community leaders, village health committees, and the MOH make timely and responsive decisions.

The MOH formed *village health committees* in the early 1980s in response to a new maternal health strategy to provide supervision to community health volunteers and share information with HSAs. Village health committees are composed of 10 members (six men and four women) selected by the community to serve as the link between the community and MOH, and advocate for improved community health services. They conduct village health inspections and mobilize households to participate in immunization campaigns, child health days and other outreach activities.

While originally created for health activities, most village health committees also plan and initiate local projects, such as construction of shelters for growth monitoring and counseling, maintenance of shallow well sites, and promotion of sanitation initiatives. Committees hold monthly meetings where activity planning, updates and program review occurs, and local health-related policies are made.

The national health system has recognized village health committees as an integral part of the community's health system. Committees report to village headmen and receive technical support from HSAs. Because village headmen are influential local decision makers, World Relief child survival project staff work through village health committees to recruit the headmen in efforts to raise awareness about disease prevention and control.

Table 2: World Relief C-IMCI Element 1 Strategy, Malawi

District MOH Roles	Community Roles	NGO Roles
 MOH participated in meetings with community members, village health committees, and NGO staff, and accepted feedback on health system. MOH and World Relief conducted health facility assessments to improve quality of care and drug supply. MOH staff established and monitored a referral system for referrals from community volunteers. 	 Volunteers collected C-HIS data, and acted on it immediately. Communities provided leaders for village health committees, and supported their work. Communities identified Care Group volunteers who helped with MOH outreach sessions by mobilizing people to attend and provide health education. 	 Designed the C-HIS with MOH staff input. Shared results of monitoring and evaluations with MOH. Supported the implementation of facility- based IMCI by helping with curriculum planning, training, and health facility assessments. Trained village health committees. Linked with Roll Back Malaria partners to promote use of insecticide-treated bed nets. Worked with MOH to improve drug supply management through improved planning.

3. Element 2: Increasing appropriate and accessible care and information from community-based providers

Community-based providers often are the first point of contact for both care of sick children and provision of health information. They include community health workers and other volunteers, traditional healers and midwives, physicians in private practice, and unlicensed providers such as drug sellers or shopkeepers. Together, their practices often surpass the formal health system in terms of patient volume because they may be the most accessible sources of care at the community level.

These workers play an important community role in reducing child mortality from diarrhea, pneumonia and malaria. They can decrease the sale of purgatives, antibiotics, and anti-diarrheal drugs and promote oral rehydration therapy, use of increased food and fluids, and when available, zinc tablets for children with diarrhea. They can also promote early treatment of presumptive cases of malaria in the community, and in some countries provide the first treatment for pneumonia while facilitating referral to a health facility.⁷

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Community providers generally fall into two broad categories. Independent providers operate outside the aegis of the formal health system and include traditional practitioners such as traditional and faith healers, herbalists and birth attendants as well as "quack" doctors and local drug sellers. The second category includes volunteers and local providers trained by MOH/ NGO staff. Some local providers distribute insecticide-treated nets while some volunteers manage village drug kits.

In Malawi, World Relief provided training to the second category of community-based health care providers as well as caregivers in individual households.

TRADITIONAL HEALERS AND OTHER PRIVATE/INFORMAL COMMUNITY-BASED PROVIDERS

Malawi has many active traditional healers, most of whom have received no training by the MOH or NGOs. Some traditional treatments are harmful, while others increase risk by delaying a patient seeking treatment from the formal sector, sometimes for several days. World Relief's strategy was to weaken healers' position in the market by educating and empowering community members with new health knowledge and practices, and strengthening the appeal of trained practitioners.

As community members learned about harmful practices and became empowered in appropriate home care, they began to choose a health facility for treatment instead of a local healer. Simultaneously, World Relief trained government facility staff in IMCI to improve quality of care and supply of essential drugs, making health facilities more attractive. Traditional healers eventually fell out of favor in World Relief's child survival program catchment area as people were educated about malaria, malnutrition, pneumonia, and obstetrical emergencies. Some healers became volunteers themselves, promoting health messages and referring patients with illnesses requiring immediate care and treatment.

World Relief, following MOH policy, included outreach to traditional birth attendants (TBAs), who continue to play a significant role in home deliveries. For example, hospital administrators rewarded TBAs for bringing women with danger signs and difficult deliveries to health centers. Because the hospitals within the project area compensated TBAs for their loss of a "thank you" chicken in payment, TBAs referred more women for delivery, and birth outcomes for women improved.

MOH-Approved and NGO-Trained Community-Based Providers

World Relief Malawi and its local implementing partner for the first child survival project recruited and trained drug revolving fund (DRF) volunteers in conjunction with the MOH as a cost-effective way to improve community access to essential drugs and treatment. Under the first project, DRF volunteers were community-based volunteers who provided firstline treatment for common childhood illnesses, including uncomplicated malaria, ORS for diarrhea, and wound care, for a fee. Drug kits used by the volunteers were provided by UNICEF through the MOH system, and replenished from money generated from sales.

Under this model, one DRF volunteer served one village, and many DRF volunteers came together to form DRF committees where community health issues were discussed. Volunteers were supervised directly by HSAs.

In contrast to working with independent care providers already present in the community, World Relief and the MOH were able to maintain control over recruitment, training, and supervision of DRF volunteers, and provision and restocking of supplies. While World Relief (together with the Synod of Livingstonia) and MOH staff trained and supervised volunteers, the community provided social support and nominal cost-sharing via small user fees.

Since the beginning of World Relief's current child survival project in Malawi, the MOH has shifted away from using DRF volunteers, instead choosing to increase the number of HSAs at community level.

HEALTH SURVEILLANCE ASSISTANTS

The Chitipa district project incorporates HSAs, who are full-time, paid MOH staff members. Some HSAs, in a similar approach to World Relief's *socorrista* initiative in Mozambique (see box, right), provide primarylevel preventive and curative health services at health posts. They treat uncomplicated malaria, diarrhea, conjunctivitis, and provide growth monitoring services. HSAs also provide weekly immunization services at health posts and outreach services every month.

Each HSA serves a population of 2000; a total of 92 HSAs serve Chitipa district. HSAs are O-level graduates who receive eight weeks of initial training before taking their posts. Some HSAs have specialized roles, such as for voluntary counseling and testing for HIV, cold chain supervision, skin disease control, border health, and nutrition rehabilitation. In addition, HSAs work with communities to identify, prioritize and develop strategies to solve community health problems, and implement behavior change communication activities.

HSAs also provide technical support to village health committees and DRF volunteers. HSAs use standard reporting forms for collecting demographic data and vital data, which are reported to senior HSAs. The data are then collated and sent to the District Environmental Health Officer and eventually the district statistician, who enters them into the district health information database. World Relief staff trained HSAs in the IMCI algorithm and to oversee Care Groups. HSAs currently are trained at the

Socorristas in Mozambique

In Mozambigue, World Relief, through its USAID child survival program in Gaza Province, revived and revitalized the role of community-level first aid workers, referred to as socorristas. During the project, socorristas were appointed by village health committees and trained to dispense chloroquine (at that time the first-line treatment for malaria), oral rehydration solution, Mebendazole, eye ointment, iron tablets, and aspirin, in addition to first aid care for wounds. World Relief and MOH staff trained the workers to identify and refer pneumonia, malnutrition, and diarrhea to health centers as appropriate.

The village health committees authorized a service fee, fully competitive with traditional practitioners, which included **MOH-approved consultation** and MOH-provided medicine. The nominal fee helped to assure quality of care and provided a small income to the socorrista. As a result of the extension of health care through socorristas, 100 percent of villages in Chokwe district are now within 5 kilometers of a health post, and 90 percent of fevers were treated within 24 hours upon last measurement.

In Malawi, DRF volunteers and HSAs fill a role similar to that of socorristas, bringing basic curative services closer to communities. same time as World Relief promoters, assist in the training of Care Groups and participate in home visits with promoters. They will assume supervision of Care Groups by the end of World Relief's 2005–2009 child survival program.



In Malawi, health surveillance assistants provide weekly immunization services at health posts.

A mid-term evaluation team interviewed 36 HSAs in Chitipa district. All knew about Care Groups, and nearly 90 percent stated that it was worth their time to work with the Care Groups. Further, 75 percent stated that they had participated in trainings that promoters carry out with Care Group volunteers. Sixty percent of HSAs stated that they conducted home visits with the promoters, and 85 percent stated that health promoters assisted them with community-based growth monitoring.

4. Multi-sectoral platform: Linking health efforts to those of other sectors in order to address determinants of ill health and sustain improvements in health

The multi-sectoral platform includes the three linked elements of the C-IMCI framework but is also comprised of all the social, economic and environmental factors that facilitate or hinder the full health of children. The adoption of key family practices does not assure the health of children. Children thrive when their families have sufficient income, when they have access to education, when they have clean water and sanitation and when government and civil authorities protect and nurture their welfare. C-IMCI, then, is most effective when it is a part of a multi-sectoral strategy.⁸

8 Ibid.

Building on previous successes in Rwanda and Mozambique, World Relief Malawi brings groups of pastors together (usually about 50 at a time) for training in C-IMCI interventions and to solicit their support for C-IMCI-related activities in the community. Working with pastors is a natural fit for the faith-based World Relief, which regularly partners with churches. Involving pastors has proved helpful in two ways: First, people often call on pastors when they or their children are sick. Pastors who know C-IMCI messages can refer cases of malaria, malnutrition or diarrhea and give families good advice. Secondly, pastors' support for controversial practices, such as family planning in Rwanda, is vital for community acceptance. More generally, public endorsement of Care Group volunteers and their messages in religious and other forums lends credibility to the Care Group volunteers in the eyes of the community.

Community networks, relationships and mediating groups (Care Groups, village health committees) become valuable community-based resources for other related efforts. World Relief saw evidence of this in three areas in Malawi: disaster response, income generation and related health interventions.

DISASTER RESPONSE

After a drought occurred at the beginning of the 2002 growing season, the Ministry of Agriculture estimated that nearly 2700 farm families (18 percent in specific geographic areas of the project) were without food. Child survival project staff assisted with nutrition surveys and other activities used to identify and select 3000 of the most vulnerable individuals to benefit from ration distribution. Beneficiary selection was carried out in collaboration with the Ministries of Health and Population, local village chiefs and Synod of Livingstonia health staff. Child survival project staff and volunteers also assisted with monthly distribution of maize, maize flour, *likuni phala* and coconut oil to identified beneficiaries over a 5–6 month period.

In March 2003, in the midst of the food crisis, a landslide obliterated more than 50 homes and caused 56 villages to be evacuated in Livingstonia, also part of the project area. Care Group volunteers conducted assessments, reported to the MOH, helped select beneficiaries, and distributed materials including blankets, dishes and food supplies, as well as chlorine to ensure safe water supplies.

INCOME GENERATION

Care Groups have become trusted affinity groups for income generation activities and have linked individuals within the project area with local

Pastoral Care Groups in Rwanda

Working in Rwanda's former Kibogora health district, World Relief recruited pastors from 11 denominations to participate in monthly pastoral care groups for C-IMCI. World Relief staff trained 667 church leaders in family planning methods; these leaders in turn helped communities accept contraceptives. Contraceptive use increased from 3 percent in November 2001 to 18 percent in September 2005. This increase was particularly notable because birth spacing was not one of the project's original interventions. Rather, teaching on the topic was added after other C-IMCI interventions had been covered and in response to evident need.

At the end of World Relief's program, Kibogora Health District ranked first nationwide in family planning coverage, for which the MOH awarded the district a certificate of merit. Pastoral teaching in Rwanda also helped people understand how AIDS is spread, and broke down barriers to caring for an HIV-positive person in his or her home.

In Malawi, World Relief has applied a similar approach by training church leaders in C-IMCI messages and encouraging them to play an important role in endorsing Care Group teaching and activities. community banks. In Malawi, some care groups have begun their own small development projects appropriate to the local setting such as raising chickens or goats.

Health Finance

Volunteers in Mzimba and Rumphi districts worked with local hospitals to provide care to patients who did not have money, but had tangible goods that could be sold as long as they arrived at the hospital with a volunteer or other community representative. Some families brought their chickens, nuts or produce to the hospital with them and sold them to hospital staff and used the money the pay their bill, while others were extended credit based on goods verified by the volunteer. Once they returned home, the goods would be sold and the hospital expenses paid.

IV. Results

In Malawi, World Relief's 2000–2004 child survival project area reported the following results at program end: Residents were far less likely to use traditional healers, people stopped using bed nets for fishing, mothers continued breastfeeding children even when pregnant, and children and pregnant women were more likely to eat eggs, high in protein and essential micronutrients. The program's independent evaluator noted that "community norms are gradually but steadily being re-shaped and realigned with key messages, thereby setting standards for acceptable behavior. A significant number of traditional healers abandoned their practice and joined the program as volunteers, isolating and undermining the credibility of those who resisted."⁹

Below are some highlights from the knowledge, practices and coverage (KPC) survey conducted using a 30-cluster methodology at the beginning and end of World Relief's child survival project:

KPC Survey Highlights, World Relief Malawi Child Survival Projects

	2000–2004		2005–2009	
	Baseline	Final	Baseline	Mid-Term
Exclusive breastfeeding	36%	95%	40%	84%
Growth monitoring of children under 3 years of age (Project Area 2 includes children under 5)	65%	97%	81%	94%
Pregnant women getting daily iron/folate	3%	76%	85%	87%
Children under 5 sleeping under a treated bed net	9%	60%	41%	40%
Pregnant women sleeping under a treated bed net (Project area 2 includes all mothers)	15%	60%	37%	38%
Pregnant women getting presumptive treatment for malaria with sulfadoxine-pyrimethamine	31%	61%	58%	69%
Suspected malaria cases in children under age 2 were treated within 24 hours	35%	74%	18%	41%
Children <5 with rapid breathing treated at a health facility within 24 hours	28%	64%	21%	31%
Modern family planning usage	23%	61%		

⁹ Baer, Frank, Final Evaluation of the Tiweko Tose Child Survival Project, July 26 – August 5, 2004, World Relief Malawi/CCAP Livingstonia Synod Hospitals.

V. Lessons Learned

1. A community-based volunteer health system in rural populations saves lives.

Applying the lives saved calculator to data from the 2000–2004 child survival project, an estimated 1,114 lives were saved over the life of the project, 474 from malaria. Based on the project's total budget, the estimated cost per life saved was \$1200.

2. Good community-based programming builds on the existing systems in a country.

Communities exist in the context of their national health system and civil structures. Good community-based programming should reflect that, connecting what is happening at the household and community level to the broader system for sustained improvements in health service utilization, prevention and appropriate home management of illness. Health information should flow in both directions, from the community to the health facilities and vice versa. While bolstering community programming with existing health and civil structures has potential to improve sustainability, in part from the mutual accountability created, it also establishes a template for scaling up that is likely to have relevance elsewhere in the country.



Thanks to Care Group volunteers promoting the use of insecticidetreated bed nets, more pregnant women and children under 5 are now sleeping under nets. In Malawi, World Relief's challenge was how to superimpose the C-IMCI framework-based child survival program into the existing hospital-based primary health care system. The task was further complicated by the fact that the child survival program was geographically large, covering the catchment areas of three hospitals in two districts of northern Malawi. Each hospital supported different kinds of community-based programs and volunteers, depending on funds to support TBAs, drug revolving funds, and insecticide-treated net distributors.

Hospital managers hoped one comprehensive child survival program would unify the various vertical programs and standardize services over the entire area. This goal was not entirely reached because health promoters and Care Groups were perceived as threats by DRF volunteers selling essential medicines and insecticide-treated net vendors.¹⁰ Managers need to explain to communities how Care Group volunteers work alongside other communitybased health workers, and should plan to give significant roles to those who might feel threatened by this new model.

3. C-IMCI programming must be modified to different situations; there is no one-size fits all solution.

C-IMCI programming must be modified in as many different ways as there are contexts for its implementation. Nonetheless, processes that promote meaningful community engagement and behavior change communication strategies that achieve saturation coverage of households are both hallmarks of the C-IMCI projects described here, with applicability to other contexts. For IMCI to be effective, a program must address the issues of staff, systems, and community in a comprehensive manner. As this case study demonstrates, all three elements of the C-IMCI framework, and the multisectoral platform, can contribute to positive health outcomes.

It is important to remember that IMCI and C-IMCI are not mutually exclusive; both MOH facility-based work and community volunteer work are necessary for lasting change. What complicates matters is that funding may be mutually exclusive. For every dollar chosen to spend on C-IMCI, less money is available for health facilities. And the reverse is also true; money spent on facility-based staff and services is not available to train community volunteers. Even an ultimately successful program has to work hard to build relationships with the MOH.

4. The C-IMCI framework provides a tool for managers to identify missed opportunities for improving child health.

The C-IMCI framework is a useful tool for program planning to help managers think comprehensively and systematically about the broad range

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of opportunities to improve child health. The tool can help users to identify areas of strength and those elements that would benefit from improvement, either through expanded programming on the part of the NGO or through linkages to other partners.

In Malawi, World Relief staff helped the MOH monitor quality of IMCI services by meeting quarterly with the district planning secretariat for strategic planning. They reviewed data on quality of care, service utilization, drug supply and management, and developed initiatives for improving quality of IMCI services. The World Relief program director is a member of the national IMCI Working Group, which provides useful feedback to influence national and district IMCI policy. World Relief is also training health center and health post staff in standard case management protocols, essential drug supply monitoring, establishing effective surveillance systems, and promoting improved access to health services.

5. NGOs are key partners in rolling out C-IMCI.

Establishing a new C-IMCI program like those described in this paper requires human resources and experience that most Ministries of Health lack, as evidenced by the challenges many face to train and equip cadres of health workers at the facility level alone. NGOs experienced in working at the grass roots level to facilitate improvements in health are valuable partners for the roll-out of C-IMCI, to establish community systems that in time can be maintained by the MOH with reduced NGO involvement. Specific NGO strengths include an ability to test innovative delivery systems at the local level, extend health services to communities and households, and develop systems for scaling up that are linked to national and private sector systems.

NGOs are vitally involved in supporting government efforts to roll out IMCI, and their expertise in the community component of IMCI deserves more attention and deliberate action. C-IMCI is not more difficult to implement than IMCI; it simply requires a different set of skills. Most MOH staff can point to examples of community work happening in local villages right now; they can learn from these experiences and look for ways to have them benefit more people.

NGOs collaborating with the MOH can provide valuable guidance and support for Ministries to reach their Millennium Development Goals. Ministries can be overwhelmed with coordinating donor and NGO programs, and lack sufficient staff to evaluate every program in their country. It is easy to assume that an NGO program has special funds and inputs that would not be realistic on a larger scale. This is partly true, because special training is often needed for NGO child survival programs, and the C-IMCI model that NGOs use might be new to a country. NGOs recruit and train program staff from the district whenever possible, then leave trained community members and caregivers in place at the end of the program, which helps with future work. Ministries of Health should seek out C-IMCI programs with excellent results and look for ways to scale them up.

6. Good community-based programming takes time.

Good community-based programming takes time to engage and understand the interests of varied stakeholders and then to equip them to address areas of shared priority. Even where funding constraints limit the scope of possible activity, it is still important to design programs that tap into shared values and produce results that the community can see and appreciate. The Care Groups described in this paper are an example of a strategy that requires a lot of groundwork in the community—though once well-established, the potential areas of intervention span beyond even maternal and child health.

All child survival programs face the reality that volunteers expect per diems and other rewards. But to give monetary rewards subtracts from program funds available for essential programming, and robs volunteers of the inner motivation vital for sustainable change. So, programs that use volunteers must set workload expectations that do not interfere with making a living, while finding ways to cultivate sustainable intrinsic rewards that foster community identity and recognition, rewards that do not end abruptly with the conclusion of external funding cycles.



To be effective, community-based programs must incorporate the needs and interests of local families. Carrying out sufficient groundwork takes time.

VI. Discussion: Scale-Up and Costs

Scale-Up

In Malawi, the USAID-funded Improving Livelihood Through Increased Food Security (I-LIFE) project adopted the Care Group model in mid-2007. The five-year (2004–2009) integrated food security program, implemented through a consortium of seven NGOs in seven districts, is using Care Groups to implement nutrition and health community-based health and nutrition interventions. As of mid-2008, about 7,000 Care Group volunteers had been trained to reach more than 60,000 households.

Having seen the benefit of Care Groups in scaling up interventions such as Positive Deviance/Hearth, Malawi's Secretary for Nutrition and HIV/ AIDS office selected I-LIFE to document lessons learned on the adoption of Positive Deviance/Hearth for nationwide use in Malawi.

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C-IMCI programs' comprehensiveness and sustainability make them an excellent value. For example, in its 1999–2003 Vurhonga II Project in Mozambique, World Relief reported that the average cost per direct beneficiary was US\$6.65 per year, including USAID funding and match funding from World Relief (including indirect cost recovery). In World Relief's Malawi project, which ran from 2000 to 2004, the annual cost per beneficiary was US\$4.84. In its 2001–2006 Rwanda project, the annual cost per beneficiary was US\$6.37.¹¹ These calculations included startup costs, such as program design, training, outside evaluations, technical backstopping, headquarters staff visits and indirect cost recovery. Once a program is operational, it becomes more efficient, and less costly.

Among 32 USAID-funded child survival programs ending in the period from 2005 to 2007, the median cost per beneficiary per year was US\$5.55, for a median beneficiary population of 72,700.¹² The median length of these programs was four years.

In World Relief's experience, program costs per household are kept low due to the multiplying effect of thousands of volunteers, who are able to bring new health information and practices to the household level, empowering community members to take a more active role in their own health. Even in the most favorable circumstances, the full cost of initially fielding the Care

¹¹ Laughlin, M., The Care Group Difference: A Guide to Mobilizing Community-Based Volunteer Health Educators, World Relief, 2004, p. 30.

¹² Ricca J., USAID-supported NGO Child Survival projects demonstrate that community-based approaches have high impact and cost effectiveness. Paper presented to the American Public Health Association Conference, Washington, DC. November 5, 2007.

Group model is more than most MOHs can afford to pay on top of their responsibilities for curative care and the provision of essential preventative services.

Establishing a C-IMCI program is affordable, however, when seen as a one-time establishment cost rather than an annual operating expense. Although it takes about six months to organize Care Groups and another several years to conduct all the training and supervision, adding more topics simply increases the cost-effectiveness and value of volunteers. As volunteers develop their skills, they accomplish increasingly complicated tasks, such as community-based rehabilitation of malnourished children, home-based management of fever, growth monitoring, and insecticide-treated bed net promotion and distribution.

The cost of maintaining the C-IMCI benefits of community-based models also becomes increasingly affordable as village health committees or other mediating groups are enabled to give continued encouragement to volunteers. After outside funding ends, for example, Care Groups can be supported by communities in various ways. In Rwanda, Care Groups were sustained by the MOH, who hired some of the World Relief staff into the MOH and through volunteer associations. In Malawi, Care Groups have continued with support from village headmen, village health committees, and HSAs in certain geographic areas. Even when Care Groups ceased meeting formally, the volunteers remained a resource to families in their communities.

Based on documented outcomes of C-IMCI projects worldwide, MOH officials should be able to make a strong case for funding the initiation of effective C-IMCI projects to bilateral and multilateral donors, private donors and NGOs. MOH directors should then carefully examine which districts would make good candidates for pilot C-IMCI programs, select their NGO partners carefully, and choose local MOH officers who are interested in C-IMCI programs.

Additional sources

"UNICEF C-IMCI Briefing package for facilitators" provides guidance for both country-level and district level planning.

"The Care Group Difference: A Guide to Mobilizing Community-Based Volunteer Health Educators." World Relief/CORE Group. Available at: http://www.coregroup.org/diffusion/Care_Manual.pdf.

"Community-Based Solutions for Effective Malaria Control: Lessons from Mozambique," World Relief/CORE Group, March 2005. Available at:

http://www.coregroup.org/working_groups/World_Relief_Mozambique_malaria_case_study.pdf.