USAID
FROM THE AMERICAN PEOPLE

Maternal and Child Survival Program

# Leveraging the Global Fund New Funding Model for Integrated Community Case Management:

## A Synthesis of Lessons from Five Countries

Final Report

May 2015

www.mcsprogram.org

This publication was produced for review by the U.S. Agency for International Development (USAID). It was prepared by Lindsay Morgan as the lead author, and the MCSP Child Health Team.

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-14-00028. The contents are the responsibility of the Maternal and Child Survival Program and do not necessarily reflect the views of USAID or the United States Government.

# Table of Contents

**Abbreviations** ..... **iv**

**Leveraging the Global Fund New Funding Model for iCCM: A Synthesis of Lessons from Five Countries** ..... **v**

**Introduction** ..... **1**

Progress in Child Health ..... 1

The Role of Integrated Community Case Management ..... 2

iCCM Integration Supported through the 'New Funding Model' ..... 3

Research Methods ..... 4

**What iCCM Elements Were Included in Country Concept Notes?** ..... **6**

**What Enabled Integration?** ..... **11**

Technical Consensus Around iCCM ..... 11

Policy Endorsement and Coordinating Structures ..... 11

National Champions ..... 12

Local Evidence and Credible Gap Analyses ..... 12

Framing iCCM as a Good Investment for Malaria ..... 13

Quality Technical Assistance ..... 13

**What Constrained Integration? The Case of Kenya** ..... **15**

**Looking Ahead: What Are the Key Challenges?** ..... **17**

Non-Malaria Commodities ..... 17

Coordinating Implementation and Governance of Integrated Programs ..... 18

Capacity of Community Health Workers ..... 19

Research ..... 19

**Conclusion and Recommendations** ..... **21**

Recommendations ..... 23

**Bibliography** ..... **25**

# Abbreviations

| | |
|---|---|
| ACT | Artemisinin-based Combination Therapy |
| CBA | Community-Based Agent |
| CCM | Community Case Management |
| CHEW | Community Health Extension Worker |
| CHV | Community Health Volunteer |
| CHW | Community Health Worker |
| FTT | Financing Task Team |
| iCCM | Integrated Community Case Management |
| IMCI | Integrated Management of Childhood Illness |
| M&E | Monitoring and Evaluation |
| MCSP | Maternal and Child Survival Program |
| MOH | Ministry of Health |
| NFM | New Funding Model |
| NGO | Nongovernmental Organization |
| NMEP | National Malaria Expanded Programme |
| ORS | Oral Rehydration Salts |
| PR | Principal Recipient |
| RDT | Rapid Diagnostic Test |
| SR | Sub-Recipient |
| TWG | Technical Working Group |
| UNICEF | United Nations Children's Fund |
| USAID | U.S. Agency for International Development |
| WHO | World Health Organization |

# Leveraging the Global Fund New Funding Model for iCCM: A Synthesis of Lessons from Five Countries[1]

This report reviews the experience of five countries—Ghana, Kenya, Nigeria, Uganda and Zambia—with the Global Fund New Funding Model (NFM).[2] Specifically, the report reviews efforts to incorporate integrated Community Case Management (iCCM) into eligible countries' malaria and health systems strengthening concept notes to leverage resources to scale up iCCM. iCCM is a strategy to extend case management of childhood illness to populations underserved by health facilities so that more children have access to lifesaving treatments for the most common causes of mortality and morbidity. This report analyzes how the Global Fund concept notes were developed, and what factors enabled and constrained the process and outcome. It is based on five qualitative, retrospective case studies that drew on document reviews and semi-structured interviews. In the five countries selected for this review, the U.S. Agency for International Development (USAID) funded technical assistance through the Maternal and Child Survival Project (MCSP) to assist country teams with program and financial gap analyses, costing the iCCM package and drafting the iCCM portion of the concept notes. With child health stakeholders increasingly focused on mobilizing resources to scale-up iCCM as an important strategy to complement investments at the facility level, a close look at these country stories provides valuable lessons about ways to increase the likelihood of integration to ensure that all children have access to lifesaving health services. The recent push to consolidate funding and increase efficiency using existing resources makes these stories important to inform efforts to leverage other funding sources to ensure equitable access to case management.

[1] This assessment was funded by USAID through the Maternal and Child Survival Program and prepared by Lindsay Morgan, a senior health consultant, who also prepared the Kenya case study. The Uganda and Zambia case studies were prepared by Nairobi-based consultant, Philip Wambua; and the Nigeria and Ghana cases were prepared by Sarah Amahson, an Abuja-based consultant, with support from Lindsay Morgan and the MCSP HQ team. Others, who either contributed content or comments to the report and/or supported field work, include Dyness Kasungami, Maura Gaughan, and Michel Pacque, all of MCSP.
[2] Consult MCSP for individual country case studies

# Introduction

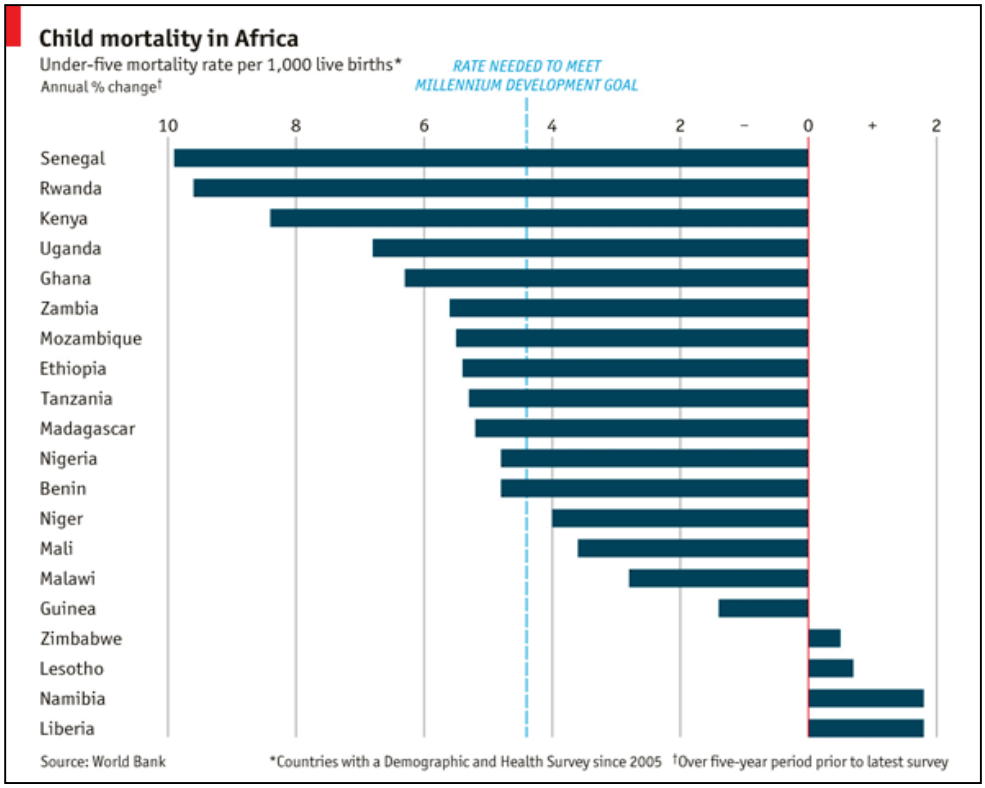
## Progress in Child Health

Dramatic improvements have been made in child health globally during the last decade. Between 1990 and 2010, the number of under-five deaths declined globally from more than 12 million to 7.6 million (UNICEF 2011). Since 1990, the global under-five mortality rate has dropped 35 percent: from 88 deaths per 1,000 live births in 1990 to 57 in 2010.

Improvements in child health can be attributed to a range of factors, including "the implementation and scale-up of a number of evidence-based basic health interventions such as early and exclusive breastfeeding; the use of insecticide-treated nets to prevent malaria; widespread vaccine access (i.e., measles, tetanus, and Haemophilus influenza type B2); vitamin A supplementation; and prevention and treatment of HIV/AIDS (World Health Organization ([WHO]) and UNICEF 2009, UNICEF 2008, WHO 2008). New funding mechanisms and increased political commitment have contributed to this positive trend" (Sjoblom et al. 2012).

Figure 1 shows decreasing child mortality rates in the past five years across a range of African countries.

**Figure 1. Decreasing Child Mortality in Africa**




Source: World Bank via The Economist.

Despite progress, serious gaps persist. In 2010, more than 6 million children under the age of five died, many from preventable illnesses such as pneumonia, diarrhea and malaria (Liu 2012). In sub-Saharan Africa, one in eight children dies before age five, more than 17 times the average for developed regions: 1 in 143 (UNICEF 2011).

Pneumonia, diarrhea, malaria, and inadequate nutrition continue to drive under-five deaths around the world. Under-nutrition is an underlying cause in almost half (45 percent) of under-five deaths, and malaria is still a major killer in sub-Saharan Africa, causing about 16 percent of under-five deaths. There is growing recognition of the need to refocus on two of the three most important childhood killers, pneumonia and diarrhea, which continue to cause nearly 40 percent of the 8.8 million under-five deaths (estimated in 2008) in developing countries annually (Wardlaw et al. 2009).

Moreover, in Africa "the majority of deaths (60 percent) occur at home without any contact with the health system" (Olayo 2014). Results from the 2014 Countdown Report clearly show the critical gaps that remain for case management of childhood illnesses. For example, median national coverage for care-seeking for symptoms of pneumonia was 52 percent; for antibiotic treatment for symptoms of pneumonia was 46 percent; and malaria treatment with first-line anti-malarials was 32 percent; and oral rehydration salts (ORS) 37 percent (although all these have improved since the first survey period of 2000-2007 versus 2008-2012). The message is clear: in many countries, the most critical decisions that drive health are made in communities and households. Improving child health thus requires meeting families where they are and providing services in the communities where they live.

## The Role of Integrated Community Case Management

In this context, iCCM is a strategy to extend case management of childhood illness beyond health facilities to communities so that more children have access to lifesaving treatments for the most common causes of mortality and morbidity.[3] iCCM is an important extension of Integrated Management of Childhood Illness (IMCI) to community level, which was developed by the World Health Organization (WHO) in the 1990s (Gove 1997). iCCM builds on progress made and lessons learned in the implementation of community IMCI and aims to augment health facility-based case management (Young et al. 2014).

In the iCCM model, community health workers (CHWs) are identified and trained in classification and treatment of key childhood illnesses, including identifying children in need of immediate referral.[4] iCCM is an important strategy for reducing mortality, especially among marginalized children who otherwise have limited or no access to lifesaving treatments.

Case management at the community level has been shown to increase access to case management for populations underserved by health facilities. [5]In the case of malaria, home-based management of fever, or community case management (CCM) of malaria in some countries, has contributed to a significant increase in access to effective malaria case management and reduced inequality of access between populations.[6] The goal is to provide prompt diagnosis and effective treatment as an alternative for self-management of fever cases (i.e., for persons with fever who would seek care outside of the traditional health care system from pharmacies or informal drug sellers or outlets). The case for tackling the main causes of child mortality *together* as part of a common community platform is compelling, for several reasons:

---

[3] Newborn health and malnutrition are also commonly included as a part of iCCM.

[4] To learn more, see CCM Central and Gove 1997. iCCM is typically delivered by CHWs at the community level and encompasses treatment for (i) childhood pneumonia with antibiotics, (ii) diarrhea with zinc and ORS and (iii) malaria with artemisinin combination therapy (ACT). The joint statement on iCCM also supports the identification (but not treatment) of severe acute malnutrition and home visits (but not treatment) for newborns (UNICEF 2012) (Bennett et al.).

[5] Haines A, Sanders D et al. 2007. Achieving child survival goals: potential contribution of community health workers. *The Lancet* 369: 2051-2132.

[6] Yeboah-Antwi K, Pilingana P, Macleod WB, Semrau K, Siazeele K, Kalesha P, et al. 2010. Community Case Management of Fever Due to Malaria and Pneumonia in Children Under Five in Zambia: A Cluster Randomized Controlled Trial. *PLoS Med* 7: e1000340.

1. Co-infection (of malaria and pneumonia, for example) in children is common
2. Symptoms of fever, cough/fast breathing and loose stool can be a manifestation of malaria, pneumonia or diarrhea
3. Ability to manage non-malaria fever reduces the risk of using antimalarial treatment for non-malaria
4. Potentially fatal conditions, such as pneumonia, are often brought to the attention of CHWs first, as first-line caregivers. Caregivers sometimes resist referral to a health facility when a CHW cannot manage a condition, which can lead to delayed treatment and worsening conditions. Because of demand and pressure from a caregiver or because a CHW may need to show competence, a CHW will often give antimalarial treatment even if a malaria test is negative. Thus, sick children benefit when CHWs are able to detect and treat other conditions besides malaria.

Twenty-eight countries in sub-Saharan Africa are now implementing various forms of CCM of pneumonia, diarrhea and malaria, although coverage varies widely (Rasanathan 2014).

## iCCM Integration Supported through the 'New Funding Model'

One mechanism for financing iCCM is the Global Fund New Funding Model (NFM), approved in October 2013, which allows for the use of Global Fund money beyond CCM of malaria to also include support for costs associated with an iCCM platform. Countries with national iCCM policies justified by epidemiological evidence are eligible to include iCCM platform costs (i.e., training CHWs, strengthening supply chain systems, and monitoring and evaluation (M&E)[7] for the community case management of other childhood illness) in either their malaria or health system strengthening concept notes.

To support countries to take advantage of the NFM opportunity, members of the iCCM Task Force, an association of multilateral and bilateral agencies and nongovernmental organizations (NGOs) working to promote integrated community-level management of childhood illness, established the Financing Task Team (FTT) for iCCM. The FTT is led by the United Nations Children's Fund (UNICEF), and includes members from USAID, MCSP, the One Million Community Health Worker Campaign, Save the Children, the American Red Cross, the Clinton Health Access Initiative, and the Office of the UN Special Envoy for Financing of the Health Millennium Development Goals. The FTT worked to ensure that 18 countries (as of March 2014) received technical assistance to complete iCCM gap analyses and concept notes that included iCCM for the NFM.[8] USAID funded MCHIP/MCSP to support five countries of the 18 to develop Global Fund concept notes that included iCCM.

All stakeholders involved in this concept note design and Global Fund application process have an interest in understanding how this first attempt to integrate malaria and iCCM programming into the Global Fund application fared and how the process can be improved going forward. As such, USAID funded MCSP to conduct this synthesis analysis to explore the five country experiences with, and outcomes of, this process, specifically:

- The degree to which the process between malaria and child health stakeholders was/is collaborative (and how); what were the enabling and constraining factors;

[7] The Global Fund does not require inclusion of iCCM indicators in M&E plans for grant management purposes, however, the Global Fund will support strengthening a country's overall M&E, including operations research to learn more about iCCM implementation, and collecting iCCM indicators in Malaria Indicators Surveys for example.
[8] In two of the five countries, (Nigeria and Zambia), UNICEF and USAID co-funded the iCCM technical support.

- What was the outcome of the process and what are plans for joint implementation;
- What areas stakeholders would like to see improved in the future to support implementation of integrated programs (malaria/iCCM)?

## Research Methods

This synthesis report is based on five qualitative retrospective case studies that drew on document reviews and semi-structured interviews. The review of documents—malaria strategic plans, Global Fund concept notes, iCCM policies and implementation guides, among other things—helped to create a general timeline and initial picture of the status of iCCM implementation in the countries, as well as the process of developing the integrated Global Fund concept notes.

A range of stakeholders were interviewed in each country, including representatives from national malaria control programs; ministry of health child health and community health units; multilateral agencies, including UNICEF and WHO; donors, including USAID; implementing NGOs; and consultants hired to support concept note writing, including those hired specifically to assist with the iCCM component (Table 1). A research team was hired to conduct this piece of work, including developing a common interview guide which was refined during fieldwork in the first country (Kenya), and used to guide all interviews. Interviews were conducted in English and interview notes typed up in-country. Data were collected between January and February (2015) with follow-up interviews via Skype conducted in March–April (2015).

The research team used the definition of iCCM that appears in the WHO and UNICEF joint statement (WHO 2012) and encompasses treatment for childhood pneumonia (with antibiotics), treatment for diarrhea (with zinc and ORS) and testing with rapid diagnostic tests (RDTs) and treatment for malaria by community or lay health workers (CHWs) at the household and/or community levels. However, as described in this report, each country is implementing its own version of iCCM depending on national policies, availability of commodities and capacity of the community health workforce.

There are several limitations that warrant mentioning. Fieldwork in Ghana and Nigeria was hampered by the lack of on-the-ground support in planning. MCHIP/MCSP[9] had limited involved with the process of gap analysis and concept note development in Nigeria. The consultant hired to support the concept note process in Ghana unfortunately passed away and was not available to inform this assessment except for his trip reports. Therefore, the Ghana country review did not benefit from first-hand information from previously hired USAID consultant, and both Ghana and Nigeria had no on-the-ground support to identify stakeholders and arrange interviews. In Kenya, Uganda, Nigeria and Zambia, by contrast, the research team benefitted from support from the local consultants who had supported the concept note process and, in Kenya, from support from the MCSP country office. Additionally, iCCM is a highly political issue, which may have affected informants' willingness to be candid in interviews.

In Kenya, several of the key interviews were short (approximately 30 minutes) because of scheduling conflicts with informants. Difficulty obtaining interviews and the limited time with some informants may have been a factor of iCCM's non-inclusion in the malaria reprogramming request in Kenya, which meant that, among competing demand for informants' time, discussing the unsuccessful iCCM-malaria integration process from

[9] In Nigeria, USAID funded a consultant through Management Sciences for Health (MSH). MCHIP/MCSP were not directly involved in the gap analysis and concept note development in Nigeria. In the other four countries, MCHIP/MCSP hired consultants reported progress on a weekly basis to keep MCHIP/MCSP team informed about the full process of gap analysis and concept note writing. This helped to build relationships with local stakeholders in the three countries that benefited this assessment.

the prior year may not have seemed worthwhile. In short, the length and depth of interviews varied due to factors outside the control of MCSP. Because of gaps in the initial data collection for the Nigeria and Ghana cases, the lead consultant conducted additional follow-up interviews by Skype/phone. However, some gaps in information could still not be wholly made up for.

Finally, as with any retrospective qualitative study, in some instances, respondents had difficulty recalling details of the concept note development process, since it had begun in countries more than a year prior to data collection, and most respondents' involvement in the concept note process was either inconsistent and/or limited to aspects that directly concerned their program.

**Table 1. Research Methods**

| | Ghana | Kenya | Nigeria | Uganda | Zambia |
|---|---|---|---|---|---|
| **# Documents reviewed** | 15 | 15 | 10 | 17 | 8 |
| # Interviews completed by category of respondent: | 12 | 18 | 17 | 16 | 16 |
| **Government** | 6 | 8 | 4 | 3 | 7 |
| Malaria | 4 | 3 | 2 | 1 | 5 |
| Child health or community health | 1 | 5 | 2 | 1 | 2 |
| Other (M&E and Pharmacy) | 1 | 0 | 0 | 1 | 0 |
| **Multilateral** | 3 | 2 | 6 | 4 | 3 |
| WHO | 0 | | 4 | 0 | 1 |
| UNICEF | 3 | 2 | 2 | 3 | 1 |
| Other (Global Fund representative) | 0 | 0 | 0 | 1 | 1 |
| **USAID** | 1 | 1 | 0 | 3 | 2 |
| **NGO** | 0 | 4 | 5 | 5 | 2 |
| **Consultants** | 0 | 3 | 2 | 1 | 2 |
| Malaria | 0 | 1 | 0 | 0 | 0 |
| iCCM | 0 | 1 | 2 | 1 | 2 |
| UNICEF | 0 | 1 | 0 | 0 | 0 |
| **Global Fund Country Coordinating Mechanism members** | 2 | 0 | 0 | 0 | 0 |

# What iCCM Elements Were Included in Country Concept Notes?

With the exception of Kenya, all other reviewed countries did submit concept notes that included iCCM in their malaria concept notes. In these four, besides malaria diagnostic tools (RDTs) and treatment like ACTs for use at the community level, NFM funds will support platform costs for iCCM implementation, including training of various cadres of CHWs, supervision and, in some cases, incentives; the costs of supporting iCCM governance bodies, such as support for meetings of various iCCM task forces and committees; and operations research.

Countries vary in terms of the magnitude of support. In Uganda, Global Fund will support scale-up of iCCM in 33 additional districts, effectively doubling the current geographic scope of implementation.[10] In Ghana, of 10 regions, scale-up is only assured in four regions where iCCM is already being implemented and in two additional regions with support from UNICEF. Similarly, in Nigeria, Global Fund support will be limited to scale-up in two states (of the eight initially proposed) where iCCM was already being implemented.[11] In both Ghana and Nigeria, commitment for non-malaria commodities has been the limiting factor to how many more regions and states can be covered respectively. In Zambia, iCCM has been implemented in select districts of all 10 provinces to date, although not at full coverage. With Global Fund support, iCCM will be scaled up to full coverage in four of the 10 provinces.

**Table 2. Summary of Requests for iCCM Funding in the Five Countries[12,13]**

| | Ghana | Kenya | Nigeria | Uganda | Zambia |
|---|---|---|---|---|---|
| Global Fund request-indicative | $5,114,307 | iCCM not included | $3,456,009 | $2,919,622 | $4,512,172 |
| Global Fund request-above allocation/HSS | $5,696,843 | iCCM not included | $16,523,926 | $2,919,622 | $41,457,947 |
| Global Fund approved (April 2014) | 4,378,452 | n/a | 2,796,651 | 5,839,244 | $4,512,172 |

In addition to mobilizing funding for iCCM platform costs, the concept note development process resulted in creation of gap analyses in each country, which can be used to generate additional support and financing for iCCM, including for non-malaria commodities.[14] For example, using the iCCM gap analysis report, Uganda will request funding from the RMNCH Trust Fund in the first quarter of 2015 to buy non-malaria

[10] Uganda was already implementing iCCM in 34 of the country's 112 districts. President's Malaria Initiative has also agreed to fund implementation in two districts, bringing the country total to 69.
[11] In Niger State, financing will support scale up in 16 of 25 Local Government Areas (iCCM is already in six). And in Kebbi State, UNICEF is currently supporting iCCM in 725/947 hard-to-reach settlements. Global Fund will support scale-up in the remaining settlements.
[12] Source: iCCM FTT Dashboard_May 16 2015 (4). Numbers are still being verified in some countries.
[13] "In the new funding model, there are two types of funding available; the allocation amount and above allocation funding. The country allocation is derived from an allocation formula for each country and is adjusted based on qualitative criteria. It should represent predictable funding to support countries' prioritized interventions and activities. Incentive funding is a separate reserve of funding that encourages ambitious requests for programs with a potential for increased, quantifiable impact. It is made available, on a competitive basis, to applicants in the same band whose requests are based on robust national strategic plans or a full expression of prioritized demand for strategic interventions, based on a program review." Source: Global Fund website: [provide URL] FAQs.
[14] To include iCCM within a Global Fund malaria concept note, country teams must first complete an iCCM gap analysis. USAID technical assistance supported the countries to conduct the costings.

commodities worth close to US$500,000. The process also improved coordination between child health and malaria units in ministries of health that do not always plan together. In addition, it created better understanding on the iCCM program and strengthened partnership among donors. For example, in Zambia, Global Fund and the President's Malaria Initiative will co-fund scale-up of iCCM services in three regions to reach saturation in all eligible districts.

Among the five countries, Nigeria, Uganda and Zambia have been approved and have funds awaiting disbursement in the first quarter of 2015. Ghana has reportedly been approved for indicative funding; and Kenya, whose concept note was submitted in January 2015, is pending approval.

Table 3 below provides an overview of iCCM programs in the five study countries addressing pre-NFM iCCM status in study countries (as of January 2014); iCCM governance or institutional arrangements, the nature of the CHW cadre, iCCM elements included in Global Fund Concept Note; and Global Fund principal recipients (PRs) and sub-recipients (SRs). The overview is by no means a comparison of the programs, but aims to provide the program status and context for the assessment in general and the synthesis report in particular.

**Table 3. Overview of iCCM in Study Countries**

| | Ghana | Kenya | Nigeria | Uganda | Zambia |
|---|---|---|---|---|---|
| **Pre-NFM iCCM status in study countries** *(as of January 2014)* | **Adopted**: First implemented in 2007 under the name "Home-based care of acute respiratory infection (ARI), diarrheal disease and malaria." | **Adopted limited package excluding treatment of pneumonia**: National iCCM policy introduced in February 2015; iCCM pilots introduced in 2011. | **Adopted**: Case management of pneumonia not yet approved except on pilot basis. Implementation began in two states (WHO) in 2013; and in two states (UNICEF) in 2013. iCCM Guidelines 2013. | **Adopted**: iCCM strategy adopted in 2010 and pilot launched. National iCCM Guidelines 2012. | **Adopted:** May 2010; iCCM part of Child Health Policy and IMCI strategy. |
| | **Package**: Identification and treatment of diarrhea (with ORS and zinc), pneumonia (with antibiotics), and malaria diagnosis with mRDTs and treatment with ACTs. | **Package**: Identification and treatment of diarrhea (with zinc and ORS) and malaria diagnosis (with mRDTs and treatment with ACTs); assessment and referral for suspected pneumonia; referral for malnutrition and newborn illness and health promotion. | **Package**: Treatment of diarrhea with zinc and ORS, pneumonia with amoxicillin. Testing and treatment for malaria diagnosis (with mRDTs) and treatment with ACTs by community health extension workers (CHEWs) and community-oriented resource persons. | **Package**: Diagnosis of pneumonia, malaria (RDTs), and malnutrition; treatment of diarrhea (with zinc and ORS), malaria diagnosis (with mRDTs and treatment with ACTs) and pneumonia (amoxicillin), newborn care and referrals. | **Package**: Identification and treatment of diarrhea (with ORS and zinc), pneumonia (with antibiotics), malaria diagnosis (with mRDTs and treatment with ACTs) and malnutrition. |
| | **Coverage**: Three northern regions, 51 out of 216 districts. | **Coverage**: Limited pilot programs with malaria CCM more widespread than diarrhea. | **Coverage**: Partial coverage in four states: Abia, Adamawa, Kebbi and Niger. | **Coverage**: 34 of 112 districts in the country | **Coverage**: All 10 provinces have some CHWs trained to provide iCCM; in 36 of the 105 districts as of September 2012. |

| | Ghana | Kenya | Nigeria | Uganda | Zambia |
|---|---|---|---|---|---|
| **iCCM governance/ institutional arrangements** | iCCM/home-based care technical committee is chaired by the national Child Health Coordinator, who is part of the Maternal and Child Health unit, and supported financially by National Malaria Control Program. Committee comprised of government departments, donor partners, and implementing NGOs. | iCCM anchored in the Community Health Strategy (MOPHS, 2006); Child Health Unit has technical responsibility for iCCM. There is an iCCM Technical Working Group (TWG). | iCCM Task Force (est. Feb. 2014) is a subcommittee of the National Core Technical Committee coordinating MNCH activities. Co-chaired by National Primary Health Care Development Agency and National Malarial Elimination Programme. Includes three subcommittees: M&E; program implementation; resource mobilization and advocacy. | iCCM is hosted in Department of Child Health; Health Education & Promotion unit responsible for coordinating Village Health Teams.<br><br>An iCCM subcommittee (which is part of the Maternal and Child Health working group), co-chaired by Child Health and Malaria. UNICEF will support recruitment and salary for a full-time National iCCM Coordinator to be based at the Malaria Control Unit. | iCCM subcommittee within the Child Health TWG (no malaria representative in the subcommittee).<br><br>Malaria Control Center has TWG on case management—a representative from Child Health participates. |
| **Nature of CHW cadre** | iCCM implemented by volunteer Community-Based Agents (CBAs) supervised by zonal officers or community health officers. Unlike in the other countries, in Ghana, some CBAs collect user fees for iCCM services. The Ghana Health Service allows a small mark-up on drugs provided by CBAs. | iCCM implemented by community health volunteers. Government-salaried CHEWs supervise the community health volunteers (CHVs) (ratio 1:50). | iCCM is implemented mainly by volunteer community-oriented resource persons with CHEW (salaried) supervision. | Village health teams comprised of five volunteer health workers selected by the community. Two of the five are trained in diagnosis, treatment and referral of malaria, pneumonia and diarrhea. | iCCM mostly implemented by volunteer CHWs, who are supervised by government-paid community health assistants, a cadre established in 2011. |

| | Ghana | Kenya | Nigeria | Uganda | Zambia |
|---|---|---|---|---|---|
| **iCCM elements included in Global Fund CN** | Support for platform costs to scale up iCCM, specifically to support training, supervision, and iCCM committee meetings. | No support for iCCM platform costs.<br><br>Reprogramming request includes request for RDTs and ACTs as part of the case management component. | Support for scale-up in two states and for meetings of iCCM committee. Niger State: 16 additional LGAs. Kebbi State: 222 hard-to-reach settlements. | Support to scale up iCCM to an additional 33 districts from 2015 (16). | Support for platform costs to scale up iCCM in 4 of 10 provinces |
| **Global Fund Principal Recipients (PRs) & Sub-Recipients (SRs)** | 1. Ministry of Health (MOH)/Ghana Health Service<br>2. AngloGold Ashanti Malaria Control Program | 1. Ministry of Finance (PR)—National Malaria Control Unit (SR)<br>2. African Medical and Research Foundation (PR)—civil society organizations (SRs) | 1. National Malaria Elimination Programme (PR)—State malaria programs<br>2. Society for Family Health (PR)—NGOs not yet identified (SRs) | 1. Ministry of Finance (PR)—Ministry of Health and National Medical Stores (SRs)<br>2. The AIDS Support Organisation (PR)—5 or 7 NGOs (SRs) | 1. MOH (PR)—Ministry of Community Development Mother and Child Health (Zambia) and Medical Stores Limited (SRs)<br>2. Churches Health Association of Zambia (PR)—civil society organizations (SRs) |

# What Enabled Integration?

This review identified a number of factors that aligned to enable integration in the four countries where integration of iCCM into Global Fund concept notes was successful, including:

- technical consensus about the intervention itself;
- iCCM policy endorsement and coordinating structures;
- national champions;
- local evidence; and
- effectively framing the intervention as a good investment for malaria.

In countries where these factors were present, quality technical assistance was facilitative, and concerns were overcome—for example, malaria stakeholder reluctance to share funds with iCCM, and concerns around implementation capacity. In Kenya, by contrast, where these enabling factors were absent, integration was unsuccessful, despite quality technical assistance and donor advocacy.

## Technical Consensus Around iCCM

In countries that successfully integrated iCCM, there was first agreement among key stakeholders—including child health and malaria program managers—about the scope of iCCM. Three of the five countries (Ghana, Uganda and Zambia) were already implementing the "full" iCCM package (testing and treatment for diarrhea, pneumonia, and malaria), which was in some cases the result of gradually expanded implementation. For example, in Ghana, during the early years of the community health program, CHWs were only allowed to provide ORS for diarrhea. In 2007, approval was given to allow them to treat malaria cases with ACTs; and in 2010, national policy was changed to allow CHWs to treat pneumonia with antibiotics, and also to include treatment with zinc for diarrhea (UNICEF 2012). This gradual learning and expansion of iCCM helped to facilitate consensus around the intervention, such that, at the time of concept note development, stakeholders were already coalesced around the intervention itself.

In Kenya and Nigeria, by contrast, there remains disagreement about dispensing antibiotics by CHWs. In Kenya, for example, despite urging from donors and a UNICEF study testing the use of antibiotics, concerns persist that doing so will result in dispensing presumptively and will contribute to the problem of antibiotic resistance.[15] This lack of agreement on the technical parameters of the intervention itself made it easier for stakeholders in Kenya to dismiss the idea of integration (see Kenya country report: The Global Fund New Funding Model: Lessons from Kenya on iCCM Integration into the Malaria Concept Note).

## Policy Endorsement and Coordinating Structures

Countries that successfully integrated iCCM into their Global Fund concept notes had pre-existing policies endorsing iCCM and governance structures to coordinate implementation. For example, Uganda had strong national buy-in to iCCM when the concept note process began; the country had an iCCM strategy and implementation guidelines, iCCM training guidelines and a curriculum for village health teams, as well as reporting tools. An iCCM subcommittee, co-chaired by representatives from Child Health and Malaria Units, and comprised of donors and implementing NGOs, provides policy, technical guidance and coordination for

[15] The Homa Bay study, the results of which are forthcoming.

iCCM. In addition, Uganda Malaria Reduction Strategic Plan (2014–2020) recognizes iCCM as a key strategy for improving access to malaria diagnosis and treatment at the community level.

Ghana, Nigeria and Zambia also had supportive policy environments and governance arrangements. Although Zambia does not have a stand-alone iCCM policy, iCCM is clearly represented in child health and malaria policies and strongly supported by high-level country leaders. Moreover, a national iCCM subcommittee exists in Zambia and, at the time of concept note development, was in the process of developing an implementation/scale-up plan for iCCM.

## National Champions

In each of the four countries where integration was successful, high-level national leaders played an important role in advocating for iCCM. For example, in Zambia, there was consensus at the technical level, such that the country agreed early in the concept note development process to include iCCM in the Global Fund funding request.[16]

Similarly, in Ghana, an informant noted that "integration was pushed by the National Malaria Control Program Manager and the National Child Health Coordinator"—in other words, at high levels nationally. It was a similar situation in Nigeria, where strong high-level leadership among local stakeholders provided pressure to integrate. "Going in," said one Nigerian informant who participated in concept note negotiations, "I thought it was a given that iCCM would be included. It didn't occur to anyone that it wasn't an option. It was viewed positively as a good opportunity."

Often, national leadership combined with good personal relationships was what was needed to drive the process forward. Informants in Ghana, Nigeria, Uganda, and Zambia noted that working relationships between malaria and child health teams within the Ministries of Health were generally smooth. In countries where child health leadership was weaker than malaria leadership—Zambia and Uganda for example—and where child health stakeholders were minimally involved in the concept note writing process, the iCCM consultants played an important role in advocating for inclusion of iCCM in the concept note.

## Local Evidence and Credible Gap Analyses

Evidence was also important in countries that included iCCM in their malaria concept notes. Informants across countries noted that local evidence was viewed as more persuasive than global lessons, even if the role local evidence played was in providing implementation lessons, rather than evidence on outcomes.

For example, in Uganda, support for iCCM grew from prior country success with Home-Based Management of Malaria, which was identified as having been effective in reaching 60 percent of children under-five with fever.[17] This evidence spurred interest in integrating treatment of pneumonia and diarrhea in home care, and iCCM was subsequently piloted. A review of the pilot concluded that iCCM was accepted by communities, feasible and should be scaled up nationally.[18] Uganda also conducted a comprehensive review of iCCM in 2013, which included recommendations indicating that scale-up could help the country accelerate reductions in child deaths.

[16] Although no policy statement or strategy exists specifically for iCCM, respondents noted that iCCM was adequately covered under the Child Health Policy, and specifically in IMCI policies and strategies.
[17] Integrated community case management in Uganda: review of early implementing phase 2010–2012: MOH Dec 2013.
[18] Integrated community case management in Uganda: review of early implementing phase 2010–2012: MOH Dec 2013.

Similarly, in Zambia, a study conducted by the MOH and Boston University in 2008 provided evidence that iCCM was effective in increasing treatment coverage, and that CHWs could effectively treat malaria, pneumonia and diarrhea at the community level.[19] Based on these findings, the Malaria Consortium piloted iCCM in Luapula province, further confirming that iCCM was effective in ensuring access to treatment coverage for the three diseases. Local evidence was also cited as important in Ghana and Nigeria; in both countries, informants noted that lessons from pilots have been valuable in providing lessons that can inform future implementation.

Integration was also enabled in countries that provided solid data on the costs of the iCCM intervention. Consultants were generally given 2-3 weeks to support the gap analysis and concept note writing. The pressure to complete the gap analysis was high because it was needed to inform the concept note. East and Southern Africa countries began their gap analyses in 2013 with support from UNICEF's regional office. By the launch of the Global Fund NFM, most of the East and Southern Africa countries—including Uganda and Zambia—already had draft gap analyses. The West and Central Africa countries, by contrast, were only introduced to the gap analyses idea in a two-day workshop that followed the Ghana iCCM Evidence Symposium in March 2014. Although Nigeria and Ghana managed to produce credible gap analyses, informants suggested it would have been helpful for consultants to have more time to prepare gap analyses in advance of concept note kick-off, making it possible for more people to be involved in determining the assumptions used to develop the financing gaps.

## Framing iCCM as a Good Investment for Malaria

In countries successful in including iCCM in their Global Fund concept notes, actors were able to frame iCCM such that it appealed to stakeholders whose buy-in was necessary. Countries were enabled where malaria stakeholders could articulate a vision of iCCM as a means for improving their own programming. For example, in Nigeria, one informant said "integration is desirable because 60 percent of ACTs are going to unconfirmed malaria cases." Thus, malaria stakeholders saw value in iCCM both as a means by which to avoid wastage of ACTs and to reduce morbidity for children who are malaria negative but nonetheless in need of care/treatment. Similarly, in Ghana, one informant noted, "in Ghana, providers often treat each febrile case as malaria and this is not advisable. The opportunity for diagnosis, treatment and referrals is good practice."

## Quality Technical Assistance

This experience highlighted that even countries where national champions, iCCM policies, coordinating structures, and local evidence existed, high-quality and appropriate technical assistance still proved a facilitative factor, particularly when the consultants had prior knowledge of the issues and stakeholders. For example, in Uganda, the consultants had experience in both malaria and child health. One Kampala-based informant said, "We did not view him as a consultant but a resource on how things work in Uganda. He was once in National Medical Stores and in National Malaria Control Program, he is a strategic program person. All the people knew him, in most cases he was given more than iCCM, he had to look at all the issues. It was good to bring someone who knows more than iCCM, sometimes they bring someone who just knows one thing."

Similarly, in Zambia both iCCM consultants were conversant in both iCCM and malaria. Both were members of the Child Health TWG and iCCM subcommittee, and one had previously worked with the National Malaria Control Center and had experience both in writing Global Fund concept notes and

[19] Accessed from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3748509/ on March 15, 2015.

managing Global Fund programs. In Zambia, not only did the iCCM consultants support iCCM components of the concept note, one of the consultants was in charge of reviewing the overall concept note, as well. This worked well, as the consultants had an opportunity to adequately include iCCM objectives and strategies within the document.

In the four countries that successfully integrated iCCM into their malaria concept notes, the presence of the factors described above enabled country teams to overcome concerns raised during concept note development—for example, concerns about country capacity to implement iCCM and malaria stakeholder reluctance to share malaria resources with iCCM (discussed in the next section).

# What Constrained Integration? The Case of Kenya

Overall, two challenges stood out in all of the countries reviewed: malaria stakeholder reluctance to share limited financing with iCCM and concerns about the capacity to implement iCCM. A WHO official said this about collaboration between child health and malaria: "It's difficult everywhere." An informant in Uganda noted, "Bringing the Child Health and Malaria Units together was a challenge. They are used to doing things in their own way. There are power issues, for example, Child Health feeling that 'malaria program wants to swallow us since they have the money' and the reverse." Stakeholders in every country also raised concerns about country capacity to implement iCCM, specifically the availability of non-malaria commodities and the capacity and motivation of CHWs. This concern was seen as having the negative effect of potentially dragging down the achievements and visibility of the malaria program.

In Kenya, the one country in the study that did not include iCCM in its malaria concept note, the enabling factors described above were absent. A National iCCM policy was only launched in February 2015, and excludes treatment of pneumonia with antibiotics. The prohibition against CHVs dispensing antibiotics reduced the appeal of integration as a means to combat inappropriate treatment, particularly when CHVs are pressured by caregivers to dispense some form of medicine to sick children.

Although donor partners advocated for iCCM, no strong national leaders emerged. Instead, the push for integration came from the consultants and technical officers within the donor agencies. A landscape analysis conducted by MCHIP concluded that: "the single most hindering factor to early iCCM policy change in Kenya was a lack of political support from key high-level policymakers within the MOH."[20] An informant in Nairobi agreed, "Malaria is used to huge investments that are all their own. In this case, people from the outside brought the Child Health people to the malaria people and said: 'Integrate!' The response was that we don't even have enough money for ACTs as it is. The major barrier is politics and ineffective leadership."

There was also a dearth of local evidence for iCCM and skepticism about the transferability of global lessons as the country awaits results of ongoing studies on feasibility of implementing iCCM in Kenya.[21] At the time of the gap analysis, Kenya was in the process of revisiting the community health strategy including determining the size of community units, number and type of community health workers. These decisions would have informed the number of CHWs required for the gap analysis, for example. Thus, the gap analysis and costing exercise was hampered by lack of availability of key data, and was ultimately not completed.

In this context, the influence of the consultants was limited. One informant said, "the consultants did a lot of work, but it didn't convince people."

Finally, as with any intervention, there were contextual factors in Kenya outside the control of iCCM actors that had an impact on the concept note development process. Following national and county general elections in March 2013, Kenya began the process of devolution, the transition to 47 counties from seven provinces as

[20] To learn more see MCHIP January 2015, which provides background on the iCCM policy space in Kenya.

[21] UNICEF is testing use of antibiotics (specifically oral Amoxicillin) by CHVs in Homa Bay, the results of which are forthcoming. MCSP is also studying CHV diagnosis and treatment of pneumonia Amoxicillin in Bondo District, the results of which are expected in the summer 2015. Kenya's global partners hope that positive results from these studies will encourage the government of Kenya to change its policy to allow for dispensing of antibiotics at the community level by CHVs, although skepticism and concerns persist that doing so will result in dispensing presumptively and will contribute to the problem of antibiotic resistance.

the primary administrative unit. Additionally, there is a new MOH, which is the result of a merger between the Ministry of Medical Services and the Ministry of Public Health and Sanitation. The process of devolution left technical officers based in ministries in Nairobi, some of whom were part of initial iCCM advocacy efforts, in professional limbo. Thus, staff changes within the Ministry diluted previous iCCM advocacy efforts—both the leadership in the Malaria and Child Health Units had changed between the development of the national iCCM implementation guidelines in 2012 and developing concept note in 2014. This environment of "shifting sands," as one informant called it, negatively affected the success of this process.

# Looking Ahead: What Are the Key Challenges?

Although four of the five reviewed countries were successful in integrating iCCM into their Global Fund concept notes, this is just a first step in a much longer process to end preventable child deaths. Each country, led by their principle and sub-recipients, will need to complete their Global Fund contract, implement scale-up of iCCM and monitor progress against targets. As an aspect of this review, stakeholders were asked to identify possible challenges in the months and years ahead as they implement iCCM and seek support for further scale-up. Several key issues emerged, including:

- availability of non-malaria commodities;
- how best to coordinate implementation and governance of the integrated iCCM-malaria programs;
- the varying capacity of community health workers to implement iCCM; and
- research priorities.

These issues are discussed in more detail below.

## Non-Malaria Commodities

In all countries, the issue of procurement of non-malaria commodities was raised. A 2012 UNICEF systematic review of iCCM notes that this has been an issue in other countries, as well—"drug shortages not only delayed implementation, but countries also reported that stock-outs affected demand for iCCM services, as well as morale and retention of CHWs" (UNICEF Ghana 2011; UNICEF 2010b).

Progress in securing commitments from the government and partners to procure non-malaria commodities varies. In Uganda, UNICEF has committed US$1.6 million to fund non-malaria iCCM commodities during the next two years, and the Government of Uganda will use its own resources to fund the procurement and distribution of other commodities such as gloves and safety boxes that are required to implement the iCCM program in the 33 Global Fund-supported districts.

In Zambia, there remains a lack of clarity on the procurement of non-malaria commodities. "It was not clear from the start who will purchase the non-malaria commodities, the question was asked so many times," said one informant. Although it was reported that the Government of Zambia and UNICEF will procure the non-malaria commodities, no specific commitments in terms of quantities and timelines have been made, a concern among respondents. It was noted that the country had experienced challenges wherein CHWs were trained, but commodities were not available for more than six months leading to high attrition rates and to CHWs forgetting what they had been taught because of lack of practice. "In the past we have trained CHWs who never practiced and the resources were wasted," said one informant.

In Nigeria, non-malaria iCCM commodities will be provided by WHO in Niger State, and EU-UNICEF in Kebbi State as well as by the State Ministries of Health in both states. Incentive funding was proposed for iCCM in eight additional states, but the issue of commodities limited the number of states put forward for iCCM support in the concept note to the two where these commodities were guaranteed. In Ghana, no commitments have thus been made to procure non-malaria commodities.

There may be opportunities for countries to leverage funds from other programs. For example, the Subsidy Reinvestment Program, in which Nigeria dedicates debt-relief funds to accelerate achievement of health-related MDGs, especially to reduce child and maternal mortality in states where iCCM has been prioritized, purchases commodities relevant to iCCM. Countries may also apply for funding with the RMNCH Trust Fund. At the time of this assessment, Uganda, for example, was developing a concept note for submission to the RMNCH Trust Fund to address the remaining iCCM gap for non-malaria commodities.

Respondents in all countries also stressed the need for a robust supply chain system for delivering commodities. Some of the concerns on procurement and supply management included whether funds will be available early enough to procure sufficient quantities of non-malaria commodities. Other fears included ensuring that the supplies reach CHWs in the right quantities and at the right time to avoid stock-outs. Many informants voiced concern that stock-outs would erode the confidence communities have in the CHWs, resulting in lower uptake of iCCM services at the community level. "Continuous flow of commodities will be very critical," said an informant in Uganda. "If communities come every time and miss treatment because of commodity challenges, then they will lose trust in the village health teams, and this will very negative impact to the whole iCCM approach."

In each country, it is hoped that supply-chain challenges and the availability of commodities will be addressed. One Zambia informant said, "I am not worried about availability of commodities at national level; my worry is the supplies reaching the last mile… will it reach community health workers in a timely manner?"

## Coordinating Implementation and Governance of Integrated Programs

In each of the four countries where the Global Fund will support iCCM, there are supportive bodies who are responsible, at the national level, for managing implementation. However, informants in all countries voiced concern about the degree to which these bodies had sufficient capacity, both in terms of the number of people staffing these bodies and their technical clout, at the national level itself. In addition, there were concerns about whether they could ensure accountability and coordination, between PRs and SRs, and between the various MOH departments—at lower levels of the health system. This is compounded by Global Fund implementation structures, wherein SRs are responsible to PRs and then to the Global Fund for reporting. Respondents expressed concern that implementation will still be done through parallel programs. In addition, although the Global Fund supports program M&E costs, unlike the malaria program, it does not require PRs to report on iCCM indicators specifically, which means that PRs have the option not to monitor implementation of the integrated program. Although MOHs are expected to monitor iCCM, they might have problems compelling PRs, who see themselves as primarily accountable to the Global Fund, to report on iCCM indicators. The iCCM FTT is supporting countries to identify specific iCCM indicators to include in the iCCM implementation framework, however, without Global Fund mandated reporting, there is potentially, weak accountability for performance of the integrated program.

Some countries are making provision for stronger coordination of the iCCM program. In Uganda the iCCM subcommittee will meet quarterly and provide overall guidance and ensure that implementers adhere to the recommended standards. UNICEF will also support recruitment and payment of salary for a full-time National iCCM Coordinator for the 33 Global Fund-supported districts to be based at the Malaria Control Unit. But questions remain about the capacity of the iCCM subcommittee, timeliness of appointing a National iCCM Coordinator, and role of the Community Health Unit, which has purview over village health teams, and did not participate in the process of developing the concept note.

Similarly, in Zambia, informants expressed the concern that more capacity is needed to coordinate country-wide iCCM activities. Respondents noted critical gaps in staffing at both the national and district levels to manage the implementation of iCCM. Implementation will be coordinated through the iCCM sub-committee of the Child Health TWG within the Ministry of Community Development Mother and Child Health. A full-time iCCM Coordinator based in the Ministry of Community Development Mother and Child Health is the Secretariat of the iCCM subcommittee. The iCCM subcommittee does not include a representative from the National Malaria Control Center, something some malaria stakeholders identified as a gap, and hope will be addressed to strengthen integration of the programs.

In Nigeria, both the iCCM program and the National iCCM Task Force are relatively new, and, as one informant noted, there is no iCCM focal person who is truly integrated in both malaria and child health in the sense of having technical capacity and, therefore, the legitimacy to bring the two units together.

Moreover, as noted above, in all countries reviewed, malaria and child health are separate units within the MOH, often under different directorates. In addition, some have either community health desk or units responsible for community services adding to the coordination challenge. This means different reporting lines and accountability arrangements, which may, in the absence of robust interdepartmental coordinating units, make coordinating implementation challenging. Strengthening iCCM committees and taskforces—not only at the national, but also (and especially) at the sub-national level—is a critical task for the coming months.

## Capacity of Community Health Workers

Finally, there is the issue of the capacity and motivation of the workforce primarily responsible for implementing iCCM in these four countries: volunteer CHWs. Each program discussed here is attempting to bring detection and treatment of key child killers to communities by way of CHWs of various stripes—often cadres of volunteer CHWs who are supervised by leaner cadres of government-salaried nurses or more qualified CHWs (this is the model in Ghana, Nigeria, Uganda, and Zambia). Yet, because of the informality of volunteer CHWs in the health system, their training and capacity is often insufficient or highly variable, depending on the enthusiasm of whomever manages them. Yet, iCCM scale-up with the additional workload depends on them.

Furthermore, current iCCM programs in these countries are relatively small in scale and managed by implementing partners and NGOs with capacity for training, supplying and supervising a discrete number of CHWs. As programs expand and local government bodies assume these responsibilities, it will be critical to ensure that capacity exists to carry out these tasks of training, supplying, monitoring and supervision, both to ensure that CHWs meet minimum quality standards of care, and that they are motivated to exert the effort needed to reach the most vulnerable.

Some countries are exploring the use of financial and in-kind incentives to motivate CHWs, as well as systems for supervision, to ensure quality of care. Nonetheless, each country reported concerns about the adequacy of training and attrition of CHWs.

## Research

Finally, as countries continue to build support for integration, there will be a need to build the evidence base around implementing iCCM at scale, both in terms of the effectiveness of the intervention itself and generating lessons on effective implementation. Uganda and Zambia included operations research in their Global Fund proposals but did not include specific research questions or indications of who will conduct the research. Given

that research requires specific skills, research runs the risk of being forgotten in the midst of the immediate challenges of getting programs up and running. As programs are scaled up, countries must invest in operations research from the start and build into their programs' M&E approaches that can shed light on important questions such as the effectiveness of integration, approaches to solving implementation challenges, mechanisms for strengthening coordination of national scale of programs and mechanisms for motivating CHWs, among other things. The research findings will address the need for local or country-specific evidence and provide promising practices that can be adapted in other countries to implement iCCM at scale.

# Conclusion and Recommendations

iCCM is increasingly recognized as an important strategy for extending case management of childhood illness beyond health facilities so that more children have access to lifesaving treatments for the most common causes of mortality and morbidity. In the countries reviewed, four of the five included iCCM in their malaria concept notes, and NFM funds will support malaria diagnostic tools (RDTs) and treatment (ACTs) for use at the community (and facility) level; platform costs for iCCM implementation, including training of various cadres of CHWs, supervision and, in some cases, incentives for CHWs; costs of supporting iCCM governance bodies, such as support for meetings of various iCCM taskforces and committees; and operations research.

Lessons about how to leverage financing from mechanisms such as the Global Fund New Funding Model are important to enable scale-up of iCCM. Our review reveals several factors that can either enable or constrain the ability of iCCM stakeholders to effectively advocate for iCCM inclusion:

- The power of actors, including the existence of local leaders and coordinating structures
- The ideas they use to portray iCCM, particularly the ability to frame iCCM as an important strategy to increase the efficiency of malaria investments
- A global and local political context supportive of iCCM, including supportive national policies and guidelines
- Characteristics of iCCM itself: evidence of the effectiveness of the intervention; data on the costs of implementation; and the perception that the intervention can be implemented, both in the sense of the capacity of the health workforce and availability of commodities.

Even in the countries where iCCM was included in Global Fund financing requests, these factors are likely to play a significant role in the degree to which, going forward, countries are able to effectively advocate for non-malaria commodities to support scale up with Global Fund financing, and for additional resources to scale up the approach beyond the Global Fund.

Young et al. 2014 noted, "engaging 'champions' of iCCM (at policy and technical levels) has been difficult in many countries in sub–Saharan Africa. Similarly, the collection and use of routine data for programming as well as collection of financing data on iCCM programs, ensuring continuous medicine and supplies, and retention and motivation of trained and remunerated community–based health workers have been challenging."

**Table 4. Overview of Findings**

| Factors that enabled integration | Factors that constrained integration | Key Issues/concerns ahead |
|---|---|---|
| Technical consensus about the intervention itself | Malaria stakeholder reluctance to share limited financing with iCCM | Availability of non-malaria commodities |
| iCCM policy endorsement and coordinating structures | Country stakeholder concerns about country capacity to implement iCCM | How best to coordinate implementation and governance of the integrated iCCM-malaria programs |
| National champions | Lack of enabling factors | The varying capacity of community health workers to implement iCCM |

| Factors that enabled integration | Factors that constrained integration | Key Issues/concerns ahead |
|---|---|---|
| Local evidence | | Importance of investing in research |
| Effectively framing the intervention as a good investment for malaria | | |

These points are certainly echoed in our findings. Global partners perceived that the "promise of money" through this process would speed up the policy process around iCCM in countries where it was perceived to be lagging, but in Kenya, for example, it clearly did not. The outcome may have been different if the money promised had been additional and did not require changing how malaria and child health programs engage with one another.

Bennett et al. in a six-country review of iCCM policy development, echoed this point, "iCCM policy change has been promoted by international agencies, but national governments have struggled to align iCCM with country health systems. Greater investment is needed in tailoring global policy initiatives to match country needs. High-level, political ownership of iCCM policies could facilitate policy change, as could clearer strategies for ensuring the long-term sustainability of such policies…By and large iCCM has been disseminated internationally as a standardized package of services, and little systematic thought has been given to how to accommodate differences across countries in existing institutional and system structures. This lack of consideration for local institutional features and the fit of new programs have previously been noted as a barrier to scaling up."

Fundamentally, given that major funding of national health programs comes from donors, integration must begin at the global financing level. If global funders are in favor of integration, they need to reduce the number of programs they fund vertically and begin to finance integrated interventions (i.e., not with money dedicated to a single disease that is required to "share" with other interventions, but with money dedicated to the integrated approached in the first place). The global community should also learn lessons from previous efforts to integrate services for children, for example, under the health reforms and the integration of immunization and the IMCI strategy. Available evidence suggests that the main driver of successful program integration is a strong health system.[22,23] Additionally, implementing integrated services, while leveraging resources from vertical initiatives, requires strong management to yield results, which is difficult in countries that are chronically understaffed and under the competing demands of dozens—if not hundreds—of funding streams and donor requirements.

Overall, the Global Fund NFM and the resulting support to eligible countries, especially the five countries included in this analysis, was successful in getting Global Fund support for iCCM programs approved in concept notes. The efforts by both global and local stakeholders, including ministries of health, should be lauded in mobilizing these unprecedented resources for iCCM scale-up. For the countries whose concept notes have been approved, work has just begun. Moving forward, support should focus on implementation to ensure that countries deliver on an integrated package of lifesaving services, but also because good results will be the strongest advocate for integration.

[22] Integration of health care delivery. Report of a WHO Study Group. WHO Technical Report Series 861. World Health Organization, Geneva, http://www.who.int/bookorders/anglais/detart1.jsp?sesslan=1codlan=1codcol=10codcch=861; 1996 [viewed 12 December 2007].
[23] Bossert, Thomas, et al, December 2000. Decentralization of the Health System in Zambia. Major Applied Research 6,Technical Paper No. 2. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.

This study should be taken as an initial exploration of the complex question of what factors mattered most/least for integration and more importantly, what is needed to maximize the benefits for underserved children who are victims of preventable deaths. More research, and systematic program monitoring, will be necessary to establish which factors are critical to successful integration and to document and learn from how different countries address the challenges identified through this review.

## Recommendations

**For donors interested in supporting integrated funding opportunities:**

- Provide countries with enough time to put together proposals in a participatory way that represent a wide group of stakeholders. Countries are not one cohesive body, and in most cases, dozens of divisions and units should be involved. When deadlines are so tight that countries need to respond quickly, it becomes more difficult, even with good intentions, to include all necessary parties.
- Make integrated funding available to support the structural costs of integration, for example, invest in capacity building for more staff to do coordination between programs and stakeholders.
- If external consultants are necessary, it is essential to choose individuals already familiar with the country context and technical content area, ideally from the country with pre-existing relationships with relevant stakeholders. Consultancies should be as long term as possible.

**For donors and country stakeholders:**

- Support development of iCCM policies, guidelines and governance structures to implement iCCM.
    - Strengthen collaboration between Child Health and Malaria Units through joint participation in Global Fund-organized malaria review meetings and vice versa.
    - Invest in capacity development of child health/iCCM program managers in order to support coordinated implementation and build trust among the iCCM program stakeholders--PRs, SRs, district health management teams and development partners.
    - Create a community of practice for countries supported by the Global Fund to continuously share lessons, celebrate successes and to do joint problem-solving.
    - The Global Fund malaria M&E framework should include iCCM indicators and make it a requirement for PRs to report on these indicators so that investments in iCCM are adequately monitored.
- Support effective implementation by:
    - Funding proposals for iCCM should include signed Memoranda of Understanding between MOH and donors to assure availability of non-malaria commodities. Sources of funding can include domestic resources, integrated commodity procurement in vertical programs, etc.
    - Developing iCCM scale up-plans that are costed to inform both domestic and international resource mobilization efforts.
    - Sharing the iCCM gap analyses more widely with stakeholders so that they can understand the full costs of implementing the program.
    - Building the capacity of and sustaining community health workers and supervisors
- Invest in research.

- Support research to demonstrate the effectiveness of CHW treatment of pneumonia with antibiotics along with diarrhea and malaria.
- Produce authoritative brief synthesizing evidence on iCCM, targeted to country audiences, including details of delivery and implementation strategies, and sustainability issues.

Track implementation and outcomes in these successful countries to demonstrate the efficiencies created with integration, including improved care-seeking overall and potential savings on reduced use of ACTs.

# Bibliography

Bennett S. 2014. Policy challenges facing integrated community case management in Sub-Saharan Africa. *Tropical Medicine and International Health*. 19: 872–882.

Global Fund. 2014. Standard Concept Note for Malaria, January 2015–December 2107. Ghana.

Liu L, et al. 2012. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. *Lancet* 379: 2151-61.

MCSP 2015. Kenya country report.

Olayo R et al. 2014. A quasi-experimental assessment of the effectiveness of the Community Health Strategy on health outcomes in Kenya. *BMC Health Services Research* 14(Suppl 1):S3.

Rasanathan K et al. 2014. Where to from here? Policy and financing of integrated community case management (iCCM) of childhood illness in sub-Saharan Africa. *Journal of Global Health* 4: 020304.

Shiffman J, Smith S. 2007. Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *Lancet* 370: 1370–79.

Sjoblom M, Beith A, Eichler R. 2012. Performance-Based Incentives for Child Health: Taking Stock of Current Programs and Future Potentials. Bethesda, MD: Health Systems 20/20, Abt Associates.

United Nations Children's Fund (UNICEF). 2011. Levels and Trends in Child Mortality, Report 2011, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation. New York: UNICEF.

Wardlaw T, Salama P, Brocklehurst C, Chopra M, Mason E. 2009. Diarrhoea: why children are still dying and what can be done. *Lancet* 375: 870-872.

World Health Organization, UNICEF. 2012. Joint statement: integrated community case management (iCCM). An equity–focused strategy to improve access to essential treatment services for children. New York: UNICEF.

Young M et al. 2014. The way forward for integrated community case management programmes: A summary of lessons learned to date and future priorities. *Journal of Global Health*. 4: 020303.