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Maternal and Child Survival Program

The Global Fund New Funding Model:

Lessons from Uganda on Integrating the Integrated Community Case Management Model (iCCM)

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Abbreviations

CCM	Community case management
CHAI	Clinton Health Access Initiative
CHW	Community health worker
DFID	Department for International Development
DHMT	District health management teams
FTT	Financing Task Team
FY	Financial year
HMIS	Health management information system
iCCM	Integrated community case management
IMCI	Integrated management of childhood illness
IRC	International Rescue Committee
MCH	Maternal and child health
MCHIP	Maternal and Child Health Integrated Program
MCSP	Maternal and Child Survival Program
NFM	New Funding Model
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PACE	Program for Accessible Health, Communication and Education
PMI	U.S. President's Malaria Initiative
RBM	Roll Back Malaria
RDT	Rapid diagnostic test
RMNCH	Reproductive, maternal, newborn, and child health
TASO	The AIDS Support Organization
USAID	United States Agency for International Development
VHT	Village health team
WHO	World Health Organization

Abstract

This case study reviews Uganda's experience with integrating the integrated community case management (iCCM) into the Global Fund New Funding Model's (NFM) concept note for malaria. This case study explores some of the challenges experienced by, and lessons learned from, the Uganda experience, and discusses broader issues about developing a Global Fund NFM concept note that integrates iCCM. This case study is part of a series exploring iCCM integration in four other countries: Ghana; Kenya; Nigeria; and Zambia. Their experiences are synthesized in "*Leveraging the Global Fund New Funding Model for Integrated Community Case Management: A Synthesis of Lessons from Five Countries*."

1. Introduction: Ugandan Health Context

Progress on Child Health

Although Uganda has reported a reduction in the mortality rates of children under five years of age (under-five)—from 175 deaths per 1,000 live births in 1990 to 90 deaths per 1,000 live births in 2011—child mortality and morbidity rates remain unacceptably high.[1] Pneumonia, diarrhea, and malaria continue to be leading causes of mortality and morbidity among Ugandan children under-five, contributing to 40% of deaths in this age group.[2] According to the Uganda national iCCM guidelines, each year, 33 million cases of malaria, diarrhea, and pneumonia go untreated. Only half (47%) of the children with symptoms of acute respiratory infection receive antibiotics,[3] and only 35% of children with diarrhea receive oral rehydration salts (ORS).[4]

Moreover, rural and urban disparities in health outcomes and in access to health services persist. For example, the 2011 Demographic and Health Survey reported that children in rural areas were less likely than those in urban areas to receive antibiotics to alleviate their symptoms of acute respiratory infection —46% versus 60% percent, respectively.[3] Similarly, children in rural areas were less likely to seek advice and treatment for malaria than those in urban areas (79% and 87%, respectively).[3] Likewise, children in rural areas were less likely to receive oral rehydration therapy (ORT) than children in urban areas (47% versus 54%, respectively).[5] A shortage of health workers, especially in rural areas, contributes to this low access to child health services. Uganda's health worker to population ratio is 1.8 per 1,000 people, and most of these health workers are based in urban areas. This population ratio is below the 2.3 per 1,000 people ratio recommended by the World Health Organization (WHO).[6] Poor quality of services and the long distances many people need to travel to visit health facilities also hinder access to lifesaving treatment.[7]

Box 1. What are village health teams (VHT)?

- VHTs are chosen by their community, based on gender balance, and ability to read and write.
- Each VHT has five volunteers. Two volunteers work on integrated community case management (iCCM), and the others work on social mobilization and health education.
- VHTs identify danger signs and refer newborns; and treat malaria, pneumonia, and diarrhea.
- VHTs receive a basic health promotion training, which is five days in duration. They also receive an iCCM hands-on training, based on the VHT Register and Sick Child Job Aid. Teams also learn how to use respiratory timers and rapid diagnostic tests.
- VHTs receive non-monetary incentives, such as bicycles, T-shirts, and badges for their work.

Health System Organization

The Uganda health care system is organized into seven tiers: national referral hospitals; regional referral hospitals; general hospitals (district); health centers IV (health sub-district); health centers III (sub-county); health centers II (parish); and health center I (village level)) (Figure 1).

[1] Uganda Bureau of Statistics. 2011. Demographic and household Survey.
[2] Malaria Consortium Uganda Office. 2013. iCCM in Uganda: Background and process. Presentation in May; London, UK.
[3] Uganda Bureau of Statistics. 2011. Uganda demographic and health survey.
[4] RMNCH sharpened plan for Uganda. November 2013.
[5] Uganda Bureau of Statistics. 2011. Uganda demographic and health survey.
[6] Ministry of Health, Health Systems 20/20 & Makerere University School of Public Health. 2012. Uganda health system assessment 2011. Kampala, Uganda.
[7] Ibid. p. 44.

Figure 1. Uganda health care system

The Ministry of Health (MOH) of Uganda is organized into departments, which are further organized into units. The Child Health and the Health Education and Promotion Unit fall under the Community Health Services Department. As a technical strategy, iCCM is hosted by the Department of Child Health; the Health Education and Promotion Unit is responsible for coordinating all the village health team (VHT) activities. The Malaria Control Program is under the National Disease Control Department.

iCCM is implemented at the community level (health center I) by VHTs; each team comprises five volunteer health workers selected by the community (Box 1). Community leaders are responsible for coordination, oversight, and administrative (non-technical) supervision of VHT activities in their areas. All five members of a VHT receive basic training to conduct health promotion activities: mobilizing the community to improve health-seeking behavior and prevent disease; and promoting adherence to treatment. Since the adoption of the iCCM strategy in 2010, two of the five members in each VHT receive training on diagnosis, treatment, and referral of common childhood illnesses, including malaria, pneumonia, and diarrhea.

Uganda, like other countries using community volunteers, faces challenges in sustaining the motivation among VHTs. At the time of this assessment, there was no formal system for motivating VHTs to carry out their work, either through monetary or in-kind incentives. Interviews with the Malaria Consortium, one of the key players in the Uganda iCCM, indicated that the lack of incentives to motivate VHTs had resulted in high attrition rates.

The Role of iCCM

iCCM is a strategy to extend case management of childhood illness beyond health facilities so that more children can have access to lifesaving treatments for the most common causes of mortality and morbidity.[8] iCCM is an important component of integrated management of childhood illness (IMCI), which was developed by the WHO in the 1990s. iCCM builds on progress made and lessons learned in the implementation of community IMCI and aims to augment health facility-based case management. In the

[8] Newborn health and malnutrition are also commonly included in iCCM.

iCCM model, community health workers (CHWs) are identified and trained in classifying and treating key childhood illnesses, including identifying children in need of immediate referral.[9] iCCM is an important strategy for reducing mortality, especially among marginalized children who would otherwise have limited or no access to lifesaving treatments.

The community health platform exists to help reach children within their communities. The home management of malaria or community case management (CCM) for malaria, has used the community platform to increase access to effective management of fever. The case for tackling the main causes of child mortality *together*, as part of a common platform, is compelling, for several reasons:

1. Coinfection (of malaria and pneumonia, for example) in children is common.
2. Symptoms of fever, cough/fast breathing, and loose stool can be due to malaria, pneumonia, or diarrhea.
3. Ability to manage non-malarial fever reduces the use of antimalarial treatment for a non-malarial disease.
4. Potentially fatal conditions, such as pneumonia, are often brought to the attention of CHWs first, as they are first-line caregivers. Caregivers sometimes resist referral to a health facility when a CHW cannot manage a condition, which can lead to treatment delays and worsening conditions. Due to demand and pressure from a caregiver, or the 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 conditions in addition to malaria.

iCCM Integration Supported through The Global Fund New Funding Model

One mechanism for supporting iCCM integration is the Global Fund's New Funding Model (NFM), which was approved in October 2013. NFM allows for the use of Global Fund money to support activities beyond the CCM of malaria, such as training CHWs, strengthening supply chain systems, and monitoring and evaluating CCM of *other* childhood illness (such as diarrhea, pneumonia, malnutrition, etc.), as supported by national policies and epidemiological evidence.

To support countries that want to take advantage of the NFM opportunity, members of the iCCM Task Force, an association of multilateral and bilateral agencies and nongovernmental organizations working to promote integrated community level management of childhood illness, established the Financing Task Team (FTT). Members of the FTT include UNICEF, the United States Agency for International Development (USAID), One Million Community Health Worker Campaign, Save the Children, American Red Cross, Maternal and Child Health Integrated Program (MCHIP), Clinton Health Access Initiative (CHAI), and the Office of the United Nations Special Envoy for Financing of the Health Millennial Development Goals. The FTT ensures that countries receive technical assistance to complete iCCM gap analyses and NFM concept notes.

[9] To learn more, see: Gove S. 1997. Integrated management of childhood illness by outpatient health workers: technical basis and overview. The WHO working group on guidelines for integrated management of the sick child. *Bulletin of the World Health Organization* 75, no. Suppl 1:7.iCCM is typically delivered by community health workers at the community level and encompasses treatment for childhood pneumonia with antibiotics, diarrhoea with zinc and oral rehydration salts, and malaria with artemisinin combination therapy. 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) (see: Bennett S, George A, Rodriguez D, et al. 2014. Policy challenges facing integrated community case management in Sub-Saharan Africa. *Tropical Medicine & International Health* 19, no. 7:872-882.).

Due to low treatment coverage for children in rural areas, and high under-five mortality and morbidity rates, Uganda was one of five countries supported by the USAID to develop a Global Fund malaria—or health systems strengthening—concept note to include iCCM.[10] Of the five countries, Uganda was one of the first to have its concept note approved, and had funds awaiting disbursement in the first quarter of 2015. The USAID, country teams responsible for developing Global Fund NFM applications, and other agencies such as the Global Fund and UNICEF, seek to learn about Uganda's first attempt to integrate malaria and iCCM programming in the Global Fund concept note, and how this process could be improved. This report details Uganda's experience with this process, specifically:

- What was the nature of the collaboration between malaria stakeholders and proponents of iCCM, including stakeholders in the child health and community health units? What factors enabled and constrained this collaboration?
- What was the outcome of the process? How can stakeholders work together effectively once funds are awarded and programs begin to scale up?
- What process areas would Ugandan stakeholders like to see improved in the future to support implementation of integrated programs (malaria/iCCM)?
- Where will additional assistance be needed to strengthen applications submitted by other countries interested in applying for the Global Fund funding and other resource mobilization efforts, such as the Reproductive, Maternal, Newborn and Child Health (RMNCH) Trust Fund? This assessment focuses on country readiness (e.g., availability and status of malaria and maternal and child health or iCCM strategic plans, and whether they are costed) and government and partner funding commitments. This assessment also identifies whether the country-based process and assumptions used to create the financial and program gap analyses will meet the country's iCCM need.

[10] UNICEF also supported technical assistance in 14 countries.

Methods

This case study is based on 16 key informant interviews conducted in Kampala, Uganda on February 2–6, 2015, and a review of the national strategic and policy documents on child health, iCCM, and malaria. The case study references Global Fund application documents including the concept note, implementation plan, and gap analysis. The activity reports written by the USAID-supported consultants were also reviewed. Respondents included representatives from the MOH (Malaria and Child Health); UNICEF; CHAI; the U.S. President's Malaria Initiative (PMI); Program for Accessible Health, Communication and Education (PACE), which is an affiliate of Population Services International; Malaria Consortium; The AIDS Support Organization (TASO); and The Country Coordinating Mechanism (Appendix 1). Data from interviews were grouped and analyzed according to several themes: process of developing the Global Fund concept note, including the outcome; implementation, coordination, program management, procurement, and supply chain of non-malarial commodities; monitoring and evaluation; what worked well and what did not work well; and recommendations. A debrief meeting (poorly attended, as only five respondents participated) was held on the last day of the assessment.

Box 2. Quick facts about Uganda's integrated community case management (iCCM)

Year iCCM pilot program introduced: 2010

iCCM package:

- Diagnose pneumonia (respiratory timers), malaria (rapid diagnostic test), and malnutrition (mid-upper arm circumference)
- Treat diarrhea (with zinc and ORS), malaria (artemisinin-based combination therapy), and pneumonia (amoxicillin)
- Provide newborn care and referrals

Coverage:

- 34 out of a total of 112 districts in the country (as of December 2014);
- 35 more districts to be covered under Global Fund (33 districts) and President's Malaria Initiative (2 districts)

iCCM elements included in Global Fund concept note:

- Train village health teams (VHT) to diagnose and treat pneumonia, diarrhea, and malaria
- Supply VHTs with a kit of pre-packed malaria medicines, supplies, and diagnostic tools
- Provide quarterly supportive supervision to VHTs
- Conduct operational research

2. iCCM in Uganda

In Uganda, iCCM was introduced in July 2010 with the launch of the national iCCM strategy (Box 2). Support for iCCM in Uganda grew out of prior success with the Home Based Management of Malaria intervention, in which trained community volunteers treated children under-five who tested positive for malaria (RDTs) using a pre-packed, color-coded, and easily-administered combination of chloroquine and sulfadoxine-pyrimethamine. The Home Based Management of Malaria intervention was identified as having been effective in reaching 60% of children under-five with fever.[11] This success spurred interest in integrating treatment of other common childhood diseases (pneumonia and diarrhea) in home care, and iCCM was subsequently piloted in the post-conflict northern region of Uganda. A review of the pilot concluded that iCCM was accepted by communities, was feasible, and should be scaled up nationally.[12] The pilot's key achievements were: 80% of the VHTs received training in the targeted districts; and surpassed the set target on the proportion of VHTs with zero stock-out of iCCM medicines. These findings and others (several studies on the effectiveness of iCCM from several countries, including Uganda, were presented in March 2014 at the Evidence Symposium in Ghana) were critical in facilitating buy-in from stakeholders, which resulted in the inclusion of iCCM in the current Global Fund malaria concept note. Based on the positive findings from this pilot, Uganda officially launched an iCCM program in July 2010.

Box 3. Objectives of the national integrated community case management (iCCM) strategy

1. Eighty percent of children under-five receive appropriate treatment for malaria, pneumonia, and diarrhea within 24 hours of the onset of illness.
2. Eighty percent of children with severe malaria, pneumonia, and diarrhea, and newborns with danger signs are promptly referred by village health teams (VHT) to a health facility.
3. Sixty percent of VHT members trained on iCCM have zero stock-out of first-line drug treatments for malaria, pneumonia, and diarrhea.
4. Eighty percent of the public and private, not-for-profit health facilities provide standard case management for children with severe illness.
5. Eighty percent of public and private, not-for-profit health care providers give standard treatment for malaria, pneumonia, and diarrhea.
6. Eighty percent of trained VHT members have the capacity to correctly manage simple cases of malaria, pneumonia, and diarrhea.

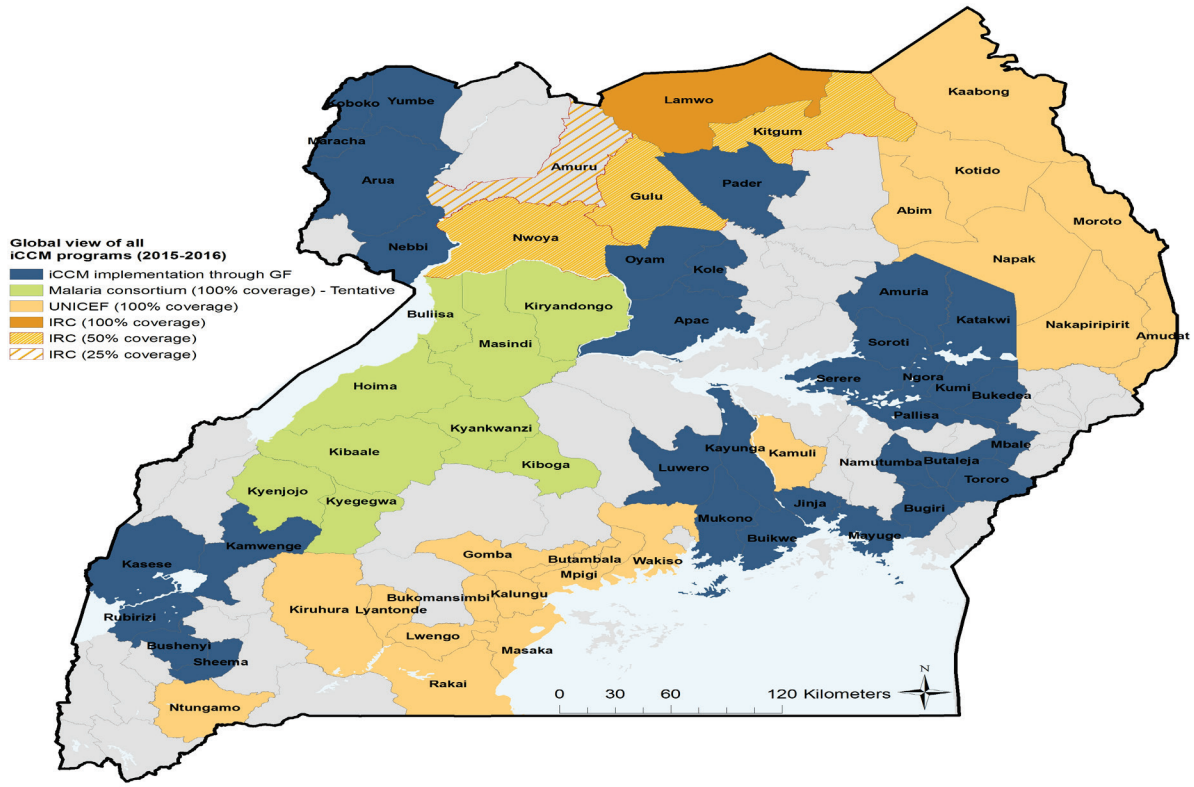
Major components of iCCM in Uganda include: i) supplying VHTs with kits of pre-packed medicines, supplies, and diagnostic tools; ii) having VHTs mobilize communities to demand, support and use the iCCM services; iii) having VHTs treat under-five children who have fever, cough, and diarrhea; iv) having VHTs counsel mothers on home care and care-seeking; v) having VHTs refer newborns with danger signs; vi) having VHTs refer severely ill children and giving pre-referral artesunate; vii) having VHTs collect iCCM data; viii) providing peer supervision to VHTs; and ix) having health facility staff trained to manage referred cases and supervise VHTs in their catchment area.[13]

At the time of this documentation, 34 out of 112 districts in Uganda were implementing iCCM, mainly with support from the United Kingdom Department for International Development (DFID), UNICEF, and WHO (Figure 2). DFID is the main financing agent for iCCM in the country, and it provides funds to

[11] Uganda Ministry of Health. 2013. Integrated community case management in Uganda: Review of early implementing phase 2010-2012. December.
[12] Uganda Ministry of Health. 2013. Integrated community case management in Uganda: Review of early implementing phase 2010-2012. December.
[13] iCCM implementation guidelines. 2010. May; Kampala, Uganda.

UNICEF (which implements through the Malaria Consortium, International Rescue Committee (IRC), and PACE) and to the districts (which implements through the local governments). The Global Fund, PMI, and DFID are the main funders of malaria work. In collaboration with UNICEF and WHO, the Child Health Department provides the technical and coordinating leadership to implement iCCM. Through the Global Fund NFM, Uganda proposed scaling up iCCM to an additional 33 districts in 2015–2016 (Figure 2).

Figure 2. iCCM programs in Uganda



Notes: Integrated community case management (iCCM); International Rescue Committee (IRC)

PMI did not initially recognize iCCM as part of its malaria strategic approach, until the presentation of results from the 2013 review of the first phase of iCCM (2010-2012) implementation.[14] Now, USAID, through PMI, is also planning iCCM implementation in two additional districts, bringing the total number of districts implementing iCCM to 69.

The country has a supportive policy environment, including an iCCM strategy and implementation guidelines, iCCM training guidelines and a curriculum for training VHTs, and reporting tools. The 2012 National iCCM Guidelines provide the iCCM objectives (Box 3). An iCCM subcommittee, which is part of the maternal and child health (MCH) working group, provides policy, technical guidance, and coordination for iCCM in Uganda. This subcommittee is co-chaired by representatives from Child Health and Malaria, and includes representatives from UNICEF, WHO, CHAI, and the Malaria Consortium. The current Uganda Malaria Reduction Strategic Plan (UMRSP) for 2014–2020 recognizes iCCM as a key strategy for improving community-level access to malaria diagnosis and treatment.

[14] Uganda Ministry of Health. 2013. Integrated community case management in Uganda: Review of early implementing phase 2010-2012. December.

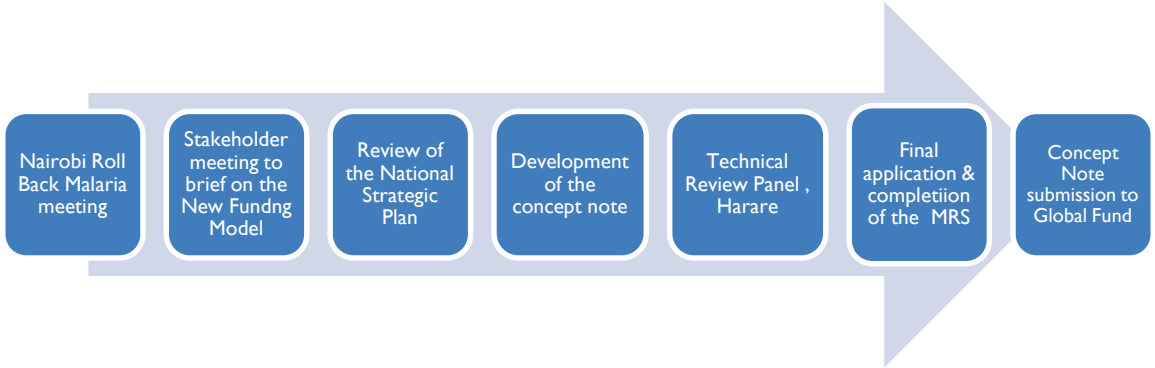
Uganda has experience integrating iCCM in previous Global Fund applications. In Global Fund Round 10, the country successfully applied for integrating iCCM in its Global Fund concept note. This was, however, not implemented in Uganda, according to a respondent, because of a policy decision to redirect the funds to procure commodities, which was considered a low audit risk if Uganda faced allegations of misappropriating Global Fund resources.

3. The Process of Developing the Global Fund NFM Concept Note that Integrated iCCM

Developing the malaria concept note for the Global Fund NFM financing began in March 2014, and concluded in December 2014, when the application was approved (Figure 3). The process began with participation from the Malaria Program Manager in a Roll Back Malaria (RBM) meeting in Nairobi. This meeting occurred in March 2014 and reviewed country malaria strategic plans. Following the RBM meeting, the Uganda Malaria Program Manager called a meeting in Kampala to initiate the concept note development and country-level malaria strategic plan review meetings. Participants included both malaria and iCCM stakeholders: Child Health Unit; UNICEF; Malaria Consortium; PACE; WHO; and CHAI. The expanded scope of Global Fund financing under the NFM to include iCCM was discussed in these meetings.

With support from the USAID (MCHIP), two consultants were recruited in April 2014 to work alongside the consultant hired by the RBM Harmonization Working Group to: ensure integration of iCCM in the malaria reduction strategy and Global Fund concept note; and undertake the iCCM gap analysis. To ensure submission deadlines would be met, two groups were convened: one to review and update the malaria reduction strategy; and the other to develop the concept note. As the process progressed, the groups realized that the review of the National Malaria Strategy needed more work and the participation of the iCCM consultant. Therefore, the iCCM consultant joined the team and worked with the National Malaria Program staff and other stakeholders to finalize the strategy, which included adding iCCM before refocusing on the concept note. This process resulted in a delay in meeting the initial concept note submission deadline of May 15. A version of the concept note was submitted on June 2, 2014. Based on comments from the mock Technical Review Panel (TRP), which was held in Harare in July 2014, Uganda did a final review of the final concept note and the National Malaria Reduction Strategy. This review process was completed in December 2014.

Figure 3. Process of developing the malaria Global Fund New Funding Model proposal



Note: Malaria Reduction Strategy (MRS)

In addition to the Child Health and Malaria Control Program, UNICEF, WHO, Malaria Consortium, PACE, TASO, and CHAI contributed to developing the concept note. Participation of most stakeholders, including the head of child health, was described as adequate; however, some informants noted that it would have been beneficial to have a child health representative participate in both the Nairobi RBM meeting and

the Harare mock TRP meetings. It was reported that this participation would have helped the Child Health Program appreciate the Global Fund application process and expectations.

The Health Promotion and Education Unit that coordinates VHT activities in Uganda did not participate in any of the concept note development meetings. While the unit was not invited to the concept note meetings, informants reported that the unit is experiencing a staffing shortage and rarely participates in most meeting. Additionally, the involvement and participation of PMI in the concept note development process, and by extension, in discussions around iCCM, was also described by informants as inadequate, despite PMI's expressed willingness to engage. Those interviewed reported that PMI attended only one concept note meeting due to a lack of coordination in ensuring that PMI was regularly invited to participate.

According to informants, there was overwhelming support and buy-in for integrating iCCM from both malaria stakeholders and the leadership of both Malaria Program and Child Health Unit within the MOH. As previously mentioned, there were many compelling reasons for this buy-in. However, some informants expressed concerns, not necessarily about integration, but about these aspects of iCCM:

- Possibility for misuse of antibiotics by VHTs;
- Overloading VHTs with case management responsibility;
- Whether iCCM could undermine the preventive and promotional role of VHTs by recruiting them to provide treatment services; and
- Cost of implementing iCCM and whether the government would be able to scale up the intervention to all targeted areas in the country.

Despite those concerns, there was overwhelming buy-in for iCCM and stakeholders decided to review those concerns as part of operations research rather than have them derail the scale-up (based on the results from the iCCM first phase (2010–2012) review findings).

iCCM was included in both the UMRSP and the Malaria Global Fund application. In both, iCCM is identified as a key strategy for malaria response under the iCCM's Objective 2, which calls for Uganda, "by 2018 [to] achieve and sustain at least 90% malaria cases in the public and private sectors and [that the] community level receive prompt treatment according to national guidelines."

The main iCCM activities approved within the Global Fund implementation arrangement include:

- training of VHTs so that they can treat children under-five with fever, cough, and diarrhea, and counseling mothers on home care and care-seeking;
- supplying VHTs with a kit of pre-packed malaria-only medicines, supplies, and diagnostic tools;
- providing quarterly, supportive supervision to VHTs to ensure the quality of services, data collection, and regular reporting; and
- conducting operational research.

The national iCCM subcommittee is charged with providing guidance on operations research and coordinating research activities. Proposed research areas include exploration of: rational use of medicines; the type of training and supervision needed to accurately diagnose and manage childhood diseases; the nature of behavior change communication and mobilization that can lead to improved demand and utilization of VHT services, and the best way to sustain iCCM; and the value for money of iCCM.

Out of the total cost of implementing iCCM in the selected 33 districts, Uganda was able to secure 63% from the Global Fund, representing 44% ($4,611,146) and 19% ($2,004,026) from the Malaria and Health Systems Strengthening concept notes, respectively (Table 1).

Table 1. Allocation of Global Fund (GF) monies

Budget per source of funding				
	2015	2016	Total	% of total
GF Malaria	$ 2,843,781	$ 1,767,365	**$ 4,611,146**	*44%*
GF HSS	$ -	$ 2,004,026	**$ 2,004,026**	*19%*
UNICEF	$ 835,157	$ 803,116	**$ 1,638,273**	*16%*
GOU	$ 76,855	$ 1,619,832	**$ 1,696,687**	*16%*
TBD	$ 149,451	$ 338,979	**$ 488,430**	*5%*
Total budget	**$ 3,905,243**	**$ 6,533,318**	**$ 10,438,562**	***100%***

Notes: Health Systems Strengthening (HSS); Government of Uganda (GOU); To be determined (TBD)

Other outcomes from this process included development of an iCCM gap analysis report. Using this report, Uganda will request funding from the RMNCH Trust Fund in the first quarter of 2015 to buy non-malarial commodities that cost about $500,000. The process also helped to create buy-in for iCCM integration with malaria from other players in the country, specifically PMI. An interview with USAID staff and review of the PMI Uganda Malaria Operational Plan for financial year (FY) 2015 revealed that USAID recognizes iCCM as one of the key strategies for malaria response in Uganda, and plans to implement iCCM in two of its 43 malaria intervention districts in 2015, as per the PMI Uganda Malaria Operational Plan for FY 2015: "PMI will also support integrated community case management (iCCM) in two districts through training, supervision, and commodities procurement."[15]

At the MOH level, respondents noted that the process helped to strengthen working relationships between the Child Health Unit and Malaria Program. Before these engagements, malaria used to operate as a vertical program, with weak linkages to other units in the MOH. Those interviewed reported that the process had created interest among child health players in the malaria program. This interest is attributed to the possibility of integrating other top killers of children under-five, such as pneumonia and diarrhea, and hence, increased benefits from collaboration. Said one respondent: "Malaria used to be a one-person project, people did not know what was happening, and this process has opened up the malaria program and created interest among many people."

[15] Uganda PMI Malaria Operational plan for FY 2015; 6.

4. Looking Ahead: How Will iCCM Be Implemented?

In December 2014, Uganda developed a detailed iCCM implementation plan for the 33 additional districts supported by the NFM, covering the period of 2015–2016.[16] To coordinate implementation of iCCM in the 33 districts, the iCCM subcommittee will meet quarterly, provide overall guidance, and ensure that implementers adhere to the recommended standards. The subcommittee is co-chaired by the division of Child and the Malaria Control Program, and also includes other players: WHO; UNICEF; Malaria Consortium; and CHAI.

Informants identified co-chairing as a good practice for ensuring that concerns about malaria, pneumonia, and diarrhea are addressed. It was further noted that co-chairing is critical for enhancing the spirit of integration. As one respondent noted: "We cannot just have one of them chairing, we need a broader context, not just child health; we need an integrated leadership to make this a success."

UNICEF will support recruitment and salary for a full-time national iCCM coordinator for the Global Fund-supported districts; this person will be based in the Malaria Control Program. Additionally, UNICEF will procure a vehicle for the iCCM coordinator to facilitate his or her movement to the implementation districts, which is part of the coordination role.

For successful implementation, informants noted the need for strong leadership, commitment, and ownership by both Malaria Control Program and Child Health division. Those interviewed noted that there is a need for the leadership of both the Malaria Control Program and Child Health division to focus on the overarching goals they all share—a healthy child—and not their narrow program or division interests. Said one informant: "Strong governance and leadership is required to make this a success. Child health may ask: put money in my basket to implement iCCM. But the Global Fund funds diseases (malaria) not programs (child health)…we need to look at the results and not the departments."

Some informants expressed concern about competing interests from the malaria and child health unit. For example: "Our worry is…what happens at the implementation stage. We envision some tension, but for now it is well." Said another: "When you call child health, they have their priorities [and] putting them on the table to discuss is not easy. We are worried about implementation. Who will own it?" These concerns highlight the need for the country to "keep guard" and ensure the proposed program coordination mechanisms work well, as planned.

Phased Implementation and Questions about Capacity

Uganda will implement iCCM activities supported by the Global Fund in phases. In phase one, which began in January 2015, iCCM was rolled out in 15 districts. Phase two will begin in July 2016, when the first tranche of funding for the Health Systems Strengthening component will be disbursed. In phase two, an 18 additional districts begin to implement iCCM. The phased approach, while a result of availability of funds, is also an opportunity for the country to learn lessons and refine iCCM implementation.

[16] Implementation of iCCM in 33 additional districts 2015-2016. 2014. Implementation plan submitted to Global Fund to fight AIDS, TB and Malaria; December.

The principal recipients for the implementation of this grant are the Ministry of Finance and TASO. The Ministry of Finance will also support MOH activities related to the procurement of malarial commodities through the National Medical Stores. Most iCCM activities will be undertaken by the leadership of TASO and implemented through seven sub-recipients (Box 4), in collaboration with district health management teams (DHMTs). According to the implementation plan, responsibilities of the DHMT include:

- Working with other departments to ensure iCCM is included in the district plans and budget;
- Coordinating the sensitization of district and lower-level leaderships;
- Conducting training activities; and
- Liaising with the communities in selecting VHTs.

DHMTs will also conduct quarterly monitoring and supervisory visits to health facilities, send iCCM implementation reports to the national level, and provide feedback to the lower levels. The implementation plan does not clearly specify the role of sub-recipients in implementing iCCM beyond the statement "the 7 sub-recipients were selected by principal recipient 2 (TASO) and will work closely [with] the DHMTs to implement iCCM activities." A description of the clear role of the sub-recipients would be useful in defining the capacity that is needed by the sub-recipients.

Box 4. Global Fund sub-recipients

1. PILGRIM: A Ugandan Christian nongovernmental organization that is currently implementing Round 10 activities in the 15 districts of Teso and Karamoja regions.
2. Program for Accessible Health, Communication and Education (PACE): Nongovernmental organization that is implementing Round 10 activities in 31 districts. PACE was formerly known as the Population Services International (PSI)/Uganda.
3. Kagumu Development Organization (KADO): A nongovernment organization that is operating in Eastern Uganda. KADO is currently implementing Round 10 activities in 11 districts.
4. International Health Network (IHN): IHN is Implementing Round 10 Global Fund activities in 8 districts of the parks and game reserves in Uganda.
5. Church of Uganda (CoU): An organization founded by the province of the Anglican Church of Uganda, CoU is implementing Round 10 activities in 23 districts.
6. Uganda Health Marketing Group (UHMG): An indigenous organization that was founded by reputable public health and social marketing Ugandan professionals. UHMG is implementing Round 10 activities in 16 districts.
7. Crane Health Services (CHS): CHS is an indigenous organization that has been implementing Global Fund activities since Round 7. It is currently working in the 8 districts of the Lango region (North), and has its headquarters in Lira.

Moreover, many informants noted that most of the sub-recipients, with the exception of PACE, do not have experience supporting iCCM implementation. While this concern was noted among stakeholders during the concept note development meetings, it was reported that the time that was available before the submission of the concept note did not allow for the selection of new sub-recipients. Based on this, a decision was made to work with the sub-recipients that were already implementing Global Fund activities in Round 10. Stakeholders noted that the lack of experience among TASO and other sub-recipients presents a risk. As one respondent observed: "This is our challenge…TASO has no experience in iCCM and even most of the sub-recipients have no experience. We are likely to experience challenges. Our receipt of the 2nd phase is dependent on the first. If Global Fund is not satisfied then that is risky. We are watching how the sub-recipients perform." Some informants noted that sub-recipients will work as "conduits" of funds, but that the actual implementation will be done by the district-level iCCM trainers. The DHMT will be responsible for ensuring that training standards are followed. And the iCCM coordinator will address the capacity

challenge by providing technical iCCM support to the sub-recipients. Although the implementation plan does not highlight how the country will use the existing iCCM districts to transfer knowledge to the new 33 Global Fund iCCM districts, using existing districts as learning sites and mentoring partners holds promise as a strategy.

Unconfirmed reports at the time of this assessment indicated that the Global Fund had requested clarifications around the capacity of the proposed sub-recipients to implement iCCM. While the country has put in measures to address this challenge—as was recognized by informants that the sub-recipients will not be direct implementers but rather conduits of funds—the selection of sub-recipients who have some basic capacity to implement iCCM interventions is critical to the successful roll-out of iCCM. As one respondent noted: "iCCM is not easy. It is about case management; it requires sub-recipients with experience to ensure effective support to the VHTs and the district teams."

Procurement, Supply Chain and Non-Malarial Commodities

Review the implementation plan and discuss with identified stakeholders that UNICEF has committed $1.6 million to fund non-malarial iCCM commodities (ORS/zinc, amoxicillin, and respiratory timers) over the next the years. The government of Uganda will use its own resources to fund the procurement and distribution of other commodities, such as gloves and safety boxes required to implement the iCCM program in the 33 Global Fund districts. Additionally, at the time of this assessment, the country was developing a concept note for submission to the RMNCH Trust Fund to address the remaining iCCM gap for non-malarial commodities.

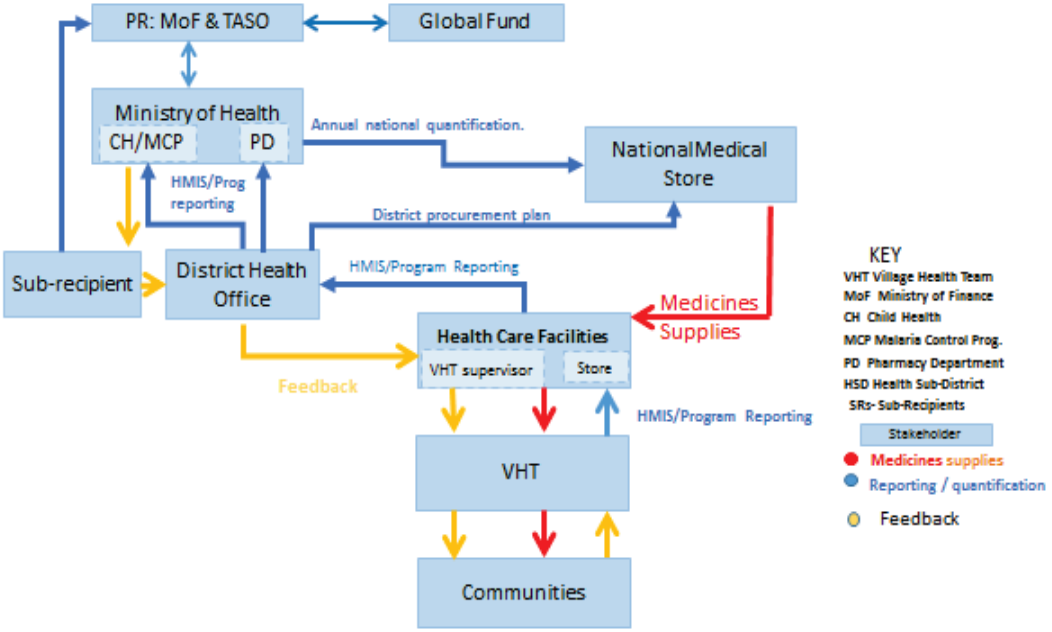
The National Medical Stores will be responsible for distributing commodities to the VHTs who provide iCCM services through the VHT link facility. Respondents stressed the need for a robust supply chain system to implement the iCCM component of Global Fund activities. Some of the concerns about procurement and supply management included the availability of funding early enough to procure sufficient quantities of non-malarial commodities; and ensuring that the supplies reach the VHTs in the right quantities, and at the right time to avoid stock-outs. It was reported that stock-outs would erode any confidence the communities have in the VHTs, resulting in a lower uptake of iCCM services at the community level. These concerns show the need for the country to plan and troubleshoot supply chain challenges that may arise during implementation. Said one informant: "Even when we were writing the concept note, we anticipated supply chain challenges. We already have challenges: there is no amoxicillin; CHAI is working on it. Zinc is another issue. The Global Fund will support iCCM trainings and provide malaria commodities, but on the non-malaria commodities supply side we anticipate challenges. Even with malaria commodities alone, we still have challenges. The supply chain is still not perfect; the supply chain is likely to be our failure." Another informant echoes these concerns: "Continuous flow of commodities will be very critical; this will ensure reliability and [sustain] community confidence on the VHTs. If communities come every time and miss treatment because of commodity challenges, then they will lose trust in the VHTs and this will [have a] very negative impact to the whole iCCM approach."

Monitoring and Evaluation

TASO and the Ministry of Finance are responsible for reporting to the Global Fund. Monitoring and reporting iCCM interventions will be integrated into the national health management information system (HMIS). Specifically, VHTs will report their activities via the VHT iCCM Register and the VHT iCCM Quarterly Report. Each quarter, this information will be compiled and summarized at the health facility level, and subsequently fed into the national HMIS. The MOH will then share this information with key partners, including the two principal recipients and the Global Fund. The sub-recipients can also obtain data for reporting to TASO directly from the district health offices (Figure 4). The iCCM coordinator will also support the flow of information.

Information on commodity requirements will be reported by the VHTs and the VHT link facility. The combined and quantified VHT and VHT link facility drug and commodity needs will be forwarded to the district. The district will then transmit this need to the National Medical Stores using the electronic Logistics Management Information System. National Medical Stores will then supply the drugs and commodities as requested.

Figure 4. Reporting and commodities management[17]



Notes: Child health (CH); Health management information system (HMIS); Malaria Control Program (MCP); Ministry of Finance (MoF); Pharmacy department (PD); The AIDS Support Organization (TASO); Village health team (VHT)

Areas Where Additional Support Is Needed

Respondents identified several areas where further support is required, including strengthening monitoring and evaluation, and reporting. Although the country planned to integrate community health information into the District Health Information Software, this integration has not been made final. Based on this, stakeholders noted the need for technical assistance to ensure the community health information, including iCCM from the 33 districts, is integrated into the national HMIS.

[17] Adopted from the Ministry of Health iCCM implementation plan in the additional 33 districts (December 2014)

Informants also noted the need for support to conduct operations research for documenting lessons learned and identifying emerging best practices. Operations research is included as one of the activities for support under the Global Fund Malaria concept note; however, informants reported that the funds were insufficient to address all desired research areas. It was, therefore, noted that technical assistance is needed to define and implement a research agenda for iCCM, including documentation and dissemination of emerging best practices and identifying mechanisms for sharing lessons with other countries. Said one respondent: "USAID should have a team involved in tracking the progress on the implementation of iCCM in the participating countries and ensure sharing of experiences amongst the countries."

Respondents also noted the need to strengthen the supply chain, including conducting a supply chain assessment, and to prepare for future applications and scale-up of the iCCM, to conduct a comprehensive national gap analysis (rather than waiting to do this at the time of new application).

Finally, a key challenge identified with the VHT system was attrition of trained VHTs. Stakeholders reported the need to develop a sustainable system that motivates VHTs to carry out their work.

5. Analysis—What Worked and What Didn't?

What Worked Well?

The successful integration of iCCM into the Uganda Global Fund for Malaria concept note can be attributed to a number of enabling factors (Box 5): stakeholder commitment; quality technical assistance and country commitment; and goodwill.

The *timing* of the Global Fund NFM, which followed the Uganda national review of the iCCM program, was a key factor that facilitated the inclusion of iCCM in the concept note. With financial support from DFID, UNICEF, through the Malaria Consortium and the MOH, has implemented iCCM in 34 districts since 2010. In 2013, the MOH and the Malaria Consortium undertook a review of the program to document emerging findings for 2010–2012. The findings from this review were shared with malaria and child health stakeholders, including the Global Fund Country Coordinating Mechanism. This review provided evidence suggesting that "iCCM works," and that this success was a key facilitating factor that enabled buy-in from stakeholders for integrating iCCM into the malaria concept note. This evidence was also useful in convincing the Global Fund of Uganda's ability to implement iCCM, and possibly contributed to the country's concept note being approved. It was further noted that the Accra iCCM Conference in 2014, held just before the start of the concept note development process, strengthened advocacy for iCCM, and to some extent, influenced the drive and successful inclusion of iCCM in the malaria Global Fund NFM.

A *supportive policy environment* also enabled iCCM integration. Uganda has developed an iCCM strategy document, as well as implementation guidelines. Other supportive documents include iCCM training curriculum, as well as information, education, and communication materials and reporting tools for use by VHTs. The RMNCH-sharpened plan, the national newborn and child survival strategy, and the VHT strategy document are also supportive of iCCM; all three documents highlight iCCM as a key strategy for increasing treatment coverage for the main causes of child mortality.

Moreover, *structures exist in Uganda for providing national leadership and technical guidance* for the implementation of the iCCM strategy. These structures include the MCH working group and, more specifically, an iCCM subcommittee.

Other facilitating factors included *a good working relationship between child health and the malaria control program*. During the period of the first iCCM implementation phase (2010-2012), the two were members of the iCCM subcommittee. Making an observation on the improved working relationship, one respondent noted: "There were territorial issues before. In 2010, we agreed that there is no reason to fight, we have had good working relationship…we have the power to mobilize resources; every unit has its own strengths."

Stakeholder involvement and commitment was noted as a major enabling factor for integrating iCCM into the Global Fund Malaria concept note. iCCM stakeholders (CHAI, Malaria Consortium, and PACE), led by UNICEF, actively participated in all meetings and provided technical assistance and, critically, advocated for the inclusion of iCCM. In addition, UNICEF demonstrated commitment by committing funds to support provision of non-malarial commodities.

"Our iCCM stakeholders are very strong and committed," said one informant. "If you find a member of our iCCM stakeholder in a meeting, you may think it is the government speaking." Another informant agreed: "The biggest enabler is the stakeholder drive, especially UNICEF. The malaria people were not greedy; they were open to bringing iCCM on board."

Box 5. Enablers for successful integration of the integrated community case management (iCCM) strategy with the malaria concept note

- Timing of Global Fund New Funding Model at the time of national iCCM review
- Existing coordination structures, such as the iCCM Task Force
- Existing policy frameworks
- Evidence, such as the iCCM review report
- Strong stakeholder involvement
- Support for Global Fund success, despite negative history with appropriating these funds
- Inclusion of all relevant stakeholders, including academia
- Quality technical assistance
- Partners willing to support on non-malarial commodities
- Effective leadership from the Malaria Control Program

Technical assistance for iCCM integration provided by UNICEF and USAID/MCHIP was also noted as a key facilitative factor in integrating iCCM. Most of those interviewed noted that the support provided to facilitate programmatic integration of iCCM in the malaria reduction strategy, as well in the concept note, as having been effective and engaging. It was noted that the selection of consultants who knew the Uganda health system, both within malaria and child health, and who had the ability to work with different players, was useful. The consultants were also reported to have been able to engage with the malaria consultant, who was supported by the RBM/Harmonization Working Group, to ensure acceptance of iCCM.

Appreciation for one consultant included this statement: "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 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. How I wish we can get such an integrated person as the focal point person."

Some respondents observed that technical assistance support began later than desired in the process. Although USAID/MCHIP and UNICEF were ready to provide technical assistance, the country was late in requesting the consultant in relation to the concept note submission date. Nonetheless, technical assistance was cited again and again as a key enabling factor: "The consultants were very committed and even started work before their contracts were ready. The people we hired were people who understand iCCM, one had worked in iCCM before. They were of great help because, due to staffing challenges, we were not able to participate in all the meetings but the consultants represented us."

Finally, it was reported that *Uganda's past Global Fund performance*, including allegations of possible misappropriation of Global Fund monies, may have contributed to the success of the process. Making this

observation, a respondent noted: "In Uganda everyone wants Global Fund to work well. The big people want things to work having learned from our previous experience."

What Did Not Work Well?

Although the process, including participation of the Child Health Unit, generally worked well, some respondents expressed a desire for the Child Health Unit to participate in additional key meetings. These meetings included: the RBM Harmonization Working Group's strategic review meeting, which was held in Nairobi, Kenya in March 2014; and the Mock TRP meeting held in Harare, Zimbabwe in July 2014. Although it was explained that the decision about who would attend those meetings is made by the Global Fund, this assessment notes that with the integration of iCCM in malaria, it would have been useful for representatives of the Child Health Unit to participate in the two meetings.

The *structure of the MOH,* with the Malaria and the Child Health Units located in different departments, was noted by some respondents as a constraining factor hindering decision making. It was further reported that hierarchy of the programs contributed to challenges in decision-making; the Malaria Control Program, led by a program manager is lower in hierarchy than the Child Health Unit, which is led by an assistant commissioner. Moreover, while most stakeholders described a good working relationship between the Malaria Control Program and the Child Health Unit, some respondents noted that there were still some "territorial" challenges between the two units. For example: "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." Says another: "The problem has been about territorialism. The concept note…remains malaria's game. Malaria wanted to drive everything. The problem is the structure: malaria reports to communicable diseases; we report to another program; we sit in different units. This presents a hindrance."

6. Conclusion and Recommendations

Uganda was able to successfully integrate iCCM into its Global Fund NFM malaria concept note. The main enablers were the availability of evidence that iCCM works; timing of the NFM opportunity, occurring just at the time of the national iCCM review; a supportive policy environment; stakeholder commitment; and the quality technical assistance. Moving forward, the country has developed a clear implementation strategy detailing the coordination, procurement and supply of commodities, and monitoring and reporting. Despite this elaborate plan there are fears among stakeholders on how best to coordinate the implementation and how to ensure sub-recipients have the capacity to support implementation.

To ensure effective implementation, areas for additional support include: technical assistance to integrate data from the community level into the national HMIS; development of an innovative but sustainable VHT motivation strategy; financial assistance to meet the remaining gap for procuring non-malarial commodities; and support for conducting operations research, and ensuring documentation and dissemination of best practices. Based on this assessment, several recommendations emerge both for the country, as well as the global partners involved in supporting the integration of iCCM into the Global Fund NFM concept note for malaria.

Recommendations for Uganda

1. Ensure that implementation of iCCM activities is coordinated as described in the implementation plan, and guard against sector-specific interests (either iCCM or Malaria).
2. Build the capacity of sub-recipients to implement iCCM. This can be done through mentorship by sub-recipients who have the capacity and experience in implementing iCCM; and by using districts as learning sites to mentor the new 33 Global Fund iCCM districts.
3. Ensure that non-malarial commodities are supplied and available to the VHTs to ensure full implementation of iCCM, as well as to instill and sustain confidence in iCCM and VHTs.
4. Ensure coordination and participation of other players outside the Global Fund, especially collaborations with PMI.
5. Ensure emerging best practices are documented to improve implementation, and disseminated to create buy-in among stakeholders.

Recommendations to Global Partners

1. Ensure the right selection of consultants to support iCCM implementation. These are consultants with adequate country experience and who are respected both by child health and malaria programs.
2. Invest in building a solid evidence-base for iCCM to ensure buy-in from stakeholders. Uganda's 2010–2012 iCCM program review, which brought child health and malaria stakeholders together to review country-specific evidence, facilitated buy in and collaboration.
3. Promote country's ownership of iCCM, and ensure the Child Health Unit and Malaria Control Program managers, not the donors, drive the process. Examples of ensuring ownership would be to invite both the Child Health Unit and Malaria Control Program to participate in key strategic and planning meetings (e.g., mock TRP) during the concept note development.

4. Encourage active participation of global stakeholders in advocating and creating buy-in for iCCM's integration. Participation of key United Nations agencies, especially UNICEF, in advocating for iCCM is critical.
5. Ensure that a capacity assessment of both the principal and the sub-recipients is conducted to gauge readiness to implement iCCM. Ensure this assessment is done well in advance to ensure successful iCCM implementation.
6. Identify and secure commitments from partners on the procurement of non-malarial commodities and supplies to ensure implementation of the full iCCM package.

Appendix 1: Persons Interviewed

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