Integrated Community Case Management of Childhood Malaria, Pneumonia and Diarrhoea

Implementation Guidelines

Kampala, Uganda
MAY 2010
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ACRONYMS AND ABBREVIATIONS

ACT  Artemisinin-based Combination Therapy
AL   Artemether/Lumefantrine
ICCM Community case management
CMD Community medicine distributor
DHMT District Health Management Team
DHO  District Health Officer
DHT  District Health Team
DMP Diarrhoea, Malaria & Pneumonia
HC   Health Centre
HF   Health Facility
HSD Health Sub-district
HW   Health Worker
IMCI Integrated Management of Childhood Illness
IPT  Intermittent Preventive Treatment
ITN  Insecticide Treated Net
LC   Local Council
LCD  Liquid Crystal Display
MoH Ministry of Health
NGO Non Governmental Organization
NMCP National Malaria Control Programme
ORS Oral Rehydration Solution
SC   Sub-county
SP   Sulfadoxine/Pyrimethamine (Fansidar)
TOT  Training of Trainers
UNICEF United Nations Children’s Fund
VHT  Village Health Team
WHO World Health Organization
> 5 Under 5 years
FOREWORD

In pursuit of the Ministry of Health mission, bringing services closer to the people in the community is a key component of the strategies to reduce inequities to health services, among others. Malaria, pneumonia and diarrhea are major causes of illness of children below the age of five leading not only to suffering and death but also to economic loss. Two or more of these diseases commonly occur together in the same patient and their clinical presentations overlap. To facilitate access to and reduce treatment gap for malaria, pneumonia and malaria, the Ministry of Health together with development partners developed a guideline for integrated community case management (ICCM) of these diseases. It should be appreciated that ICCM is part of the effort to operationalize the Village Health Team (VHT)1 concept which will be trained to provide appropriate safe and effective medicines to treat sick children as soon as symptoms develop.

These guidelines have been developed building on the rich experience of existing programs including the Home Based Management of Fever. The development of these guidelines entailed a review of this program and other related programs including an ICCM pilot held in Northern Uganda.

This document is to guide policy makers, managers, districts, health workers, communities, NGOs and all other stakeholders on how to implement integrated community case management (ICCM) of childhood malaria, pneumonia and diarrhea to reduce under mortality and take actions to introduce, implement, monitor and evaluate ICCM at all levels of health services delivery chain.

It describes activities for sensitization and advocacy, capacity building through training, medicines and commodity chain management, supervision, monitoring, evaluation and research.

I wish therefore to commend these implementation guidelines to all and it is my conviction that if they are implemented faithfully, the performance of the health sector will be transformed. In the spirit of continuous improvement, I would also like to invite all those who use these guidelines to let us know what can further be improved so that it can be included in future editions.

Dr Nathan Kenya-Mugisha
Ag. Director General of Health Services
Ministry of Health

1 Health Sector Strategic Plan II (HSSP II)
ACKNOWLEDGEMENTS

This guide has resulted from the efforts of many stakeholders and partners who have come together to jointly develop the different components of this guideline for integrated community case management. This process has taken several months and involved review of various materials and experiences in community treatment of childhood diseases in Uganda and elsewhere, and a series of consultative meetings, workshops by the integrated community case management task force, and person-to-person contacts. All this process would not have been possible without the support and direct involvement of a number of individuals and organizations. The Ministry of Health is therefore deeply indebted to the following that have made this process possible.

UNICEF, World Health Organization, USAID, Malaria Consortium, Save the Children’s fund, PACE and International Rescue Committee. UNICEF and WHO provided funding for the development and reviewing of this guide, printing and dissemination of this guide.

In addition to the organizations and partners listed above, a wide range of people have been involved in drafting and editing this guide. In particular David Marsh from SCF is acknowledged for his technical assistance. UNICEF Uganda child survival team: Dr. Claudia Hudspeth, Flavia Mpanga Kaggwa and Francine Kimanuka, Suzan Nassr from USAID James Tibenderana, Grace Nakanwagi and James Sekitoleko from Malaria consortium, Umaru Sekabira from IDI, Alex Ochono from IRC, Geoffrey Bisoborwa and Charles Katurebe from WHO, Eric Wobudeya from Mulago hospital, Ayebare Godfrey from FARST Africa and Mukasa Gelasius from IBFAN Uganda are recognized in a special way.

Ministry of Health technical program for their overall coordination and inputs from the district, in particular Jesca Nsungwa Sabiti, Fred Kato, Gran Eisha, Mukone G and Jeremiahs Twatwa. Special thanks go to Rita Mijumbi Epodoi and Sara Mawejejje for their excellent administrative and logistic support for this exercise.

The ICCM task force also wishes to than MOH maternal child health cluster, senior and top management for their valuable comments on this document

Prof Anthony Mbonye
Commissioner Community Health Services
CHAPTER ONE

1. INTRODUCTION

1. Background

Uganda has high under-five (137 deaths per 1000 live births), infant (76 deaths per 1000 live births), and newborn mortality (29 deaths per 1000 live births). The rate of decrease in under-five mortality from 1990 (160 per 1000 live births) to 2006 (137 per 1000 live births) is good, but insufficient to achieve the Millennium Development Goal of 56 per 1000 live births by 2015. More than three quarters (76%) of this mortality is due to preventable or treatable infections (malaria 23%, pneumonia 21%, diarrhea 17%, newborn sepsis 7%, and HIV/AIDS 8% - which usually kills by pneumonia or diarrhea). About 60% of the 9.7 million children who die globally every year could be spared if we just delivered the life-saving preventive and curative interventions that we already have to children and families that most need them. The participation of communities in mobilizing people and provision of health services can increase utilization of life saving curative interventions.

The government of Uganda recognizes the importance of community’s participation and emphasizes it in its 1995 constitution of the Republic of Uganda. In pursuance of this objective, the Health Sector Strategic Plan adopted the Village Health Team to promote the health and wellbeing of all village members and reduce the continuing gap in health service provision between the households and the health care providers. The Child Survival Strategy and the Road Map for Maternal and Neonatal Health have prioritized the use of VHTs to improve the health of mothers, newborns and children. The Integrated Community Case Management (ICCM) of malaria, pneumonia, diarrhea and other common child hood illnesses is aimed at operationalizing the child survival strategy. It compliments the IMCI facility-based strategy to treat sick children, regardless of severity and promotion of the 16 family and community preventive practices.

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2 Uganda Demographic Health Survey HS, 2006.
3 1995 Constitution of the Republic of Uganda
4 HSSP II
Table 1: ICCM Compared to Related Strategies

<table>
<thead>
<tr>
<th>Parameter</th>
<th>ICCM</th>
<th>HBMF</th>
<th>HBC</th>
<th>IMCI</th>
<th>C-IMCI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions treated</strong></td>
<td>Non-severe: malaria, pneumonia, diarrhea</td>
<td>Non-severe malaria</td>
<td>Non-severe: malaria, pneumonia, diarrhea, conjunctivitis, skin infection, minor injury</td>
<td>Non-severe and severe: malaria, pneumonia, diarrhea, malnutrition</td>
<td>None but promotes early recognition and care seeking practice</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>Community</td>
<td>Community</td>
<td>Community</td>
<td>Facility</td>
<td>Community</td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td>To be national</td>
<td>National</td>
<td>IDP camps</td>
<td>National</td>
<td>National</td>
</tr>
</tbody>
</table>

2. Treatment Gap

Currently the use of some life-saving preventive childhood interventions in Uganda is fairly high, for example, exclusive breastfeeding (60%), vitamin A supplementation (78%), and Hib-3 vaccine (80%)\(^5\). But the use of curative interventions is not as high, for example, ORT for diarrhea (29%), antimalarials for fever (62%), or care-seeking for pneumonia (73%) – only a fraction of which received (64% or 47% overall) and complied (not known) with correct treatment. The differences in use between preventive vs. curative interventions is not surprising since the former can be delivered through scheduled facility-based or outreach services. Curative interventions, on the other hand, must be available continuously as and when children fall sick; otherwise they can die rapidly. A “treatment gap” analysis (Table 2) can shed light on the levels of untreated, potentially fatal illness episodes. A total of 33 million cases of malaria, diarrhea and malaria go untreated every year in Uganda. It is therefore important that this large treatment gap is addressed with a combination of a high impact cost effective intervention such as ICCM working alongside the health system. This will reduce the high levels of avoidable death.

\(^5\) Countdown to 2015, 2008 Report.
Table 2: Treatment Gap by Cause of Death

<table>
<thead>
<tr>
<th>Diseases (Deaths)</th>
<th>Incidence Rate (e/c/y)</th>
<th>Total Episodes per year</th>
<th>Proportion accessing Treatment (%)</th>
<th>Untreated cases per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria (43,000)</td>
<td>3</td>
<td>17.5 M</td>
<td>62%</td>
<td>6.7 M</td>
</tr>
<tr>
<td>Pneumonia (39,000)</td>
<td>0.3</td>
<td>1.8 M</td>
<td>47%</td>
<td>0.95M</td>
</tr>
<tr>
<td>Diarrhea (33,000)</td>
<td>6</td>
<td>35M</td>
<td>29%</td>
<td>25M</td>
</tr>
</tbody>
</table>

e/c/y=episodes per child per year

3. Factors contributing to low coverage of treatment in Uganda

Combinations of factors are responsible for the low coverage of treatment for common killer diseases in Uganda. While 72% of the population lives within a five kilometer radius of a health facility, there is great variability in accessibility ranging from 7.1% in Kotido to 100% in Kampala. Another important factor is the shortage of human resources only 56% of the approved positions are filled with qualified health workers. Missed opportunities in health facilities also limit access to care, the service provision assessment 2007 shows that a full package of services including outpatient care for the sick child is available in only 50% of facilities. In addition providers seldom give caretakers essential information for taking care of the sick child at home: less than 20 percent of caretakers received recommendations on fluid intake, food intake, and symptoms for which the child must return immediately. Moreover many providers miss opportunities to promote preventive health interventions. For example less than a half assess the sick child’s immunization status, weight, and feeding habits. Visual aids to educate caretakers are available in only four of 10 facilities that offer sick child services, and are rarely used during consultations.

4. Lessons from Community Management of Common Childhood diseases

Experiences in community case management of childhood malaria, pneumonia and diarrhea in the context of Home Based Management of Fever (HBMF) and

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6 Annual Health Sector Performance report F/Y 08/09  
7 Uganda Service Provision Assessment Survey 2007
Home Based Care (HBC)\textsuperscript{8} in Northern Uganda has shown that communities valued and used the services provided in the community; that motivation of VHT members is very critical; caregivers are able to comply with treatment especially if pre-packaged drugs are used. For sustainability, programs should use government systems for medicine and commodity supply; community should be mobilized for this program and overloading VHTs with treatment of several diseases beyond their capacity should be avoided.

5. ICCM Goals and Objectives

ICCM is part of the VHT strategy for promoting health and preventing deaths. The VHT strategy aims to deploy about five volunteer health workers called VHT members in each village. The VHTs will be trained and supported to deliver or promote the use of preventive interventions, particularly immunization, hand washing, optimal complementary feeding, insecticide treated nets and intermittently preventive treatment of malaria during pregnancy. ICCM adds treatment to the VHT preventive platform. The preventive and the curative activities complement each other. For example, promoting the increased use of hand-washing will reduce diarrhea and pneumonia.

\textsuperscript{8} HBC Report 2008
2. GOAL OF ICCM

The goal of Uganda’s ICCM strategy is to reduce childhood morbidity and especially mortality by providing case management for malaria, pneumonia and diarrhea to sick children within their communities as well as identifying and referring sick newborn babies. The ICCM strategy aims to increase the correct use of life-saving treatments by making them available, assuring that their delivery is good quality, and mobilizing demand for them.

1. Objectives of ICCM

By the end of 2015:

1) To increase to at least 80% the proportion of children under-five years receiving appropriate treatment for malaria, pneumonia and diarrhea within 24 hours of onset of illness.

2) To increase to at least 80% the proportion of children with severe malaria, pneumonia and diarrhea and newborns with danger signs who are promptly referred by VHT members to health facilities.

3) To increase to at least 60% the proportion of VHT members trained on ICCM who have zero stock outs of first line treatment of drugs for malaria, pneumonia and diarrhea.

4) To increase to at least 80% the proportion of public and private not for profit health facilities providing standard case management for children with severe illness.

5) To increase to at least 80% the proportion of private health providers\(^\text{a}\) giving standard treatment for malaria, pneumonia and diarrhea.

6) To increase to at least 80% the proportion of trained VHT members with capacity to correctly manage simple cases of malaria, diarrhea and pneumonia.

\(^\text{a}\) Referred to as Private for Profit providers in HSSPII
2. Target group

ICCM targets the most vulnerable population, young children. The approach and recommendations given vary by age group, specifically:

0-28 days: identify danger signs and refer immediately to the health facility

1-59 months: management of malaria pneumonia and diarrhea at home?

3. Main components of ICCM Strategy

i. VHT supplied with a kit of pre-packaged medicines, commodities, and supplies, including diagnostic tools

ii. VHTs mobilizing communities to demand, support and use the ICCM program

iii. VHTs treating children under five with fever, cough and diarrhea and counseling mothers on home care and care seeking

iv. VHTs referring immediately newborns with danger signs and severely ill children and giving pre-referral rectal Artesunate

v. VHTs collecting ICCM data and reporting timely

vi. Peer supervision amongst the VHTs

vii. Trained health facility staff managing referred cases and supervising VHTs in their catchment area and monitoring program progress.

4. Contents of the VHT kit for ICCM

i. Pre-packaged medicines for malaria, pneumonia and diarrhea include:
   • Amoxicillin for non-severe pneumonia
   • ACTs for uncomplicated malaria
   • Low-osmolarity ORS for diarrhoea
   • Zinc for diarrhea

ii. Rectal Artesunate for pre-referral patients

iii. Diagnostic commodities e.g. respiratory timers, MUAC tape

iv. User items e.g. job aide cards
CHAPTER THREE: IMPLEMENTATION OF ICCM

3. OVERVIEW ICCM ACTIVITIES

The ICCM strategy relies on a participatory process to train and support VHTs to deliver curative interventions to sick children under five. The strategy will help communities develop their own capacities and empower mothers to manage illness. During implementation, activities will be conducted at different levels, including national, district/HSD, health facility and community.

National level activities

- Advocacy and mobilization of resources
- Sensitization and orientation of districts and other stakeholders
- Designing and overseeing ICCM rollout plans
- Building initial capacity for district training and supervision
- Monitoring, supervision and evaluation
- Research to guide implementation of the strategy
- Ensuring medicines and commodity security
- Pre-packing and color-coding the drugs for ICCM

District/HSD level activities

The district and the HSD represent an important level for planning and implementing the ICCM programme. The following are the key activities:

- Sensitizing and guiding communities in selecting VHTs for ICCM
- Training VHT trainers and supervisors
- Training public and private health facilities to manage referred cases
- Medicine and commodity procurement and supply
- Supervising and monitoring ICCM at lower levels
- Pharmacovigilance (monitoring safe of drugs or medicines)
**Health Facility level activities**

The health facility is the main level for ensuring successive implementation of ICCM by VHTs. The following are the key activities to be undertaken at the health facility level:

- Supporting communities to select VHTs for ICCM
- Managing referred patients referred including reorganizing services
- Training, supervising and replenishing medicines and supplies for VHTs
- Managing medicine supply chain (quantifying, ordering, stocking and distribution)
- Summarizing VHT records and reporting to the HSD and district level
- Advocating for ICCM and maintaining good linkage with communities
- Encouraging caregiver of newborns with danger signs to seek care from the health facility
- Report adverse drug reactions

**Community level activities**

- Mobilizing communities to participate in ICCM
- Selecting VHTs for ICCM
- Motivating VHTs distributing medicines for ICCM
- Monitoring distribution of medicines

**VHT level activities**

- Treating children and counseling mother
- Referring children to health facilities
- Following up children treated
- Home visits for mothers and newborns
- Keeping records of patients seen and reporting to the nearest health facility
- Keeping alert for and reporting adverse medicine reactions
1. Advocacy, sensitization and mobilization

Advocacy and mobilization for ICCM are core initial implementation activities at all levels. It is aimed at influencing relevant stakeholders to create an enabling environment including policies that would facilitate the effective implementation of ICCM. The primary target audiences are Political leaders, Policy makers, Ministry of Health, partners, district management, community leaders and health workers who play an important role in planning, implementation and monitoring of ICCM activities. The advocacy strategies will be determined by the nature of the target audience and desired results at every level.

National level
The National level mandate is to advocate for increased resources, partnerships and buy in for ICCM. The national level will therefore spearhead coordination, harmonization of ICCM advocacy activities including disseminating the policy guidelines within and outside the sector.

Activities:

i. **Regular meetings of the national ICCM advisory task force:**

A 24 member multi-disciplinary and sectoral committee, chaired by the Ministry of Health will meet regularly to advocate for policy support, financial resources for capacity building and essential medicine supplies. The committee will comprise of technical programs (malaria control, CDD, IMCI, RH, nutrition, HEP, NDA, NMS), development partners (UNICEF, WHO, USAID), NGOs (Malaria Consortium, SCIUG, IRC), Private Sector (PACE, MSH) and other sectors (local government, education and gender).

ii. **Develop and disseminate advocacy materials for ICCM:**

This is aimed at advocating for local government, district health offices and the partners at this level to include ICCM in their work-plans and ensure adequate resources for its implementation. The national task force will develop and disseminate policy briefs, ICCM profiles, and messages for orienting and sensitizing key players at this level.
iii. **District pre-visit for sensitization:**

Before introducing the national task force will pre-visit districts to sensitize them on the ICCM policy, reach consensus on the plan to roll out ICCM in the districts including funding sources and the plan to phase out single disease community case management of diarrhea and malaria. The target group will be the extended district health team including partners involved in community mobilization activities. The following materials developed by the Ministry of Health will be used for the sensitization activities: handouts on ICCM strategy, VHT situation analysis reports and drug policies for pneumonia, malaria and diarrhea.

**Expected outcomes:**

i. The national advisory task force is established and becomes functional.

ii. Appropriate advocacy materials are developed and disseminated at national and district level.

iii. District ICCM entry points and coverage plans are developed.

**District level**

The district level mandate is to ensure hospitals, HCIV, lower level facilities, support communities to implement VHTs. HFIs will act as a support arm for the districts, to manage and monitor ICCM activities as well recognizing VHT activities as complimentary to their own services. Most HF in the country are poorly staffed, equipped and are poorly motivated. The district will therefore create awareness on the benefits / spill over effects of implementing ICCM to the health system, as well as lobbying for community support for the health systems.

**Activities**

i. **Sensitization of Health Unit management committees:**

District and HSD teams will organize sensitization workshops for HUMC to prioritize ICCM activities and respond to issues or problems raised by the community e.g. through the suggestion box. Community resources should be identified for supporting health units to implement ICCM.
ii. **Sensitization of Sub Counties:**

District and HSD teams will organize sensitization workshops for sub county leaders and technical planning committees to identify and mobilize existing resources to support ICCM including resources for supervision, procurement of drug boxes and referral of patients.

**Expected outcomes**

i. HUMC are sensitized and aware of the sick newborn, diarrhea, malaria and pneumonia at community level

ii. Sub Counties are sensitized

**Health Facility level**

The health facility mandate is to sensitize communities on availability, counsel on timely use, compliance with treatment and referral and guidelines. An activity level of 5-10 cases per month should maintain skills and not overly stress the VHT. Previous programs have noted low utilization of CMDs. Sensitization will be done through individual contacts with patients at the HF as well as through outreaches.

**Activities:**

i. **Sensitize and mobilize communities for ICCM:**

Liaising with VHTs, opinion leaders and other influential community members Health facilities will conduct health talks on the importance of ICCM and location of VHTs in the communities during outreach visits. Home visits will be done where appropriate. Activities like child days campaigns will be taken advantage of.

ii. **Mobilizing and counseling of caregivers:**

patient contacts during sick visits, well baby clinics and maternal health activities will be used to counsel mothers on illness symptoms, danger signs, referral and medicine use compliance.
iii. **Health Education in the clinics:**

Patients accessing health services will receive group health education on available ICCM services. MOH will supply HF and communities with appropriate education/ counseling charts for ICCM including prevention of these diseases.

**Expected Outcomes:**

i. Communities are mobilized and sensitized to demand and use ICCM

ii. Increased demand for ICCM services

**Community**

The community level mandate is to mobilize and sensitize community leaders, opinion and religious leaders, household members, community based organizations, and extension staff for community involvement and ownership of ICCM. Communities will be mobilized to create awareness about availability of medicine with VHTs, care seeking, providing support and motivating their VHTs. This will enhance adequate implementation and sustainability of the program.

**Activities**

i. **Mobilize communities for ICCM sensitization meetings:**

Community leaders will mobilize the community members for ICCM village meetings. Meetings will include those for selecting VHTs to distribute medicines, planning and review of ICCM. In these meetings the leaders together with the VHTs will advocate for the benefits of ICCM. Drafted talking points about ICCM will be used during these meetings to encourage uniformity.

ii. **Mobilize communities to select VHTs for ICCM:**

Community leaders will mobilize communities to identify 2 people among the 4 - 5 VHTs to be trained to provide ICCM drugs to treat malaria, diarrhea and pneumonia (eventually all 5 VHTs will be trained in ICCM).

iii. **Mobilize communities for participatory village planning and review of ICCM:**

On a biannual basis, communities will be expected to plan with the VHTs
for activities to support ICCM based on information on progress and performance of this program. VHTs will be trained to use participatory methods to ensure that communities participate fully.

**Expected outcomes**

i. Communities are mobilized and sensitized for ICCM

ii. VHTs to distribute medicines identified

iii. Communities participating in the planning of ICCM activities

2. Building capacity for ICCM implementation through training

Capacity building will involve building technical and managerial competences at all levels. The main aim is to effectively impart knowledge and skills for treating malaria, diarrhea and pneumonia including patient referral, records and drug supply management. The focus will be on competence building and adult-learning methods will be used. There will be four training packages including: trainers, supervisors, health worker and VHT training. The capacity building will be done through a cascade process as shown in Figure 1 below. Details of the specific activities at national, district, health facility and community are described below.

Figure 1: Training Cascade Process

### 3.3 CAPACITY BUILDING FOR ICCM THROUGH TRAINING

- **3.3.1** Train ICCM master and district supervisors of supervisors
  - 6-day facilitator and supervisor training course

- **3.3.2** Train health facility staff on case management
  - 3-day abridged IMCI training

- **3.3.3** Train facility level supervisors and facilitators for VHTs
  - 6-day facilitator course

- **3.3.4** Train VHTs
  - 6-day training course
National Level
It is a national level mandate to develop training guidelines and build district capacity for implementation of new guidelines. The national level will therefore support the districts to initiate training, monitor and evaluate the process of rolling out the training.

Activities:

i. Development and pre-testing training materials:

The national level team will adapt and pre-test WHO generic materials by reviewing national policies, clinical guidelines and drug supply systems to determine the relevant recommendations to include in the course materials for ICCM (the case management charts, modules and other materials). A session on supplies/medicines management has been developed and incorporated in the ICCM training for trainers, supervisors and VHTs. It covers quantification of commodity needs, re-ordering, distribution, storage, record keeping and tools for use, use at the various levels of the ICCM supply chain, adverse drug reaction monitoring and individual responsibilities. The following materials to support ICCM training in Uganda have been developed:

- Facilitators Guide
- ICCM video script
- Sick Child Job Aid
- VHT/ICCM Register
- Refresher IMCI course for facility staff
- Sample medicines for ICCM

ii. National level ICCM master trainers training:

Recognized international and national experts will train a team of 24 national level master trainers and supervisors, in a 6-day training course. These will be drawn from technical programs in the MoH and regional level, based on their experience in adult learning skills and availability to support scaling training. The training will cover content of the two ICCM training packages: VHT, facilitation and supervision skills course (see annex for sample training agenda). The trainings will be conducted immediately prior to a course in which trainees will serve as facilitators.

iii. Sensitization and planning for district training:

Before conducting district trainings a one-day meeting to sensitize district
health teams will be organized by the master trainers. The aim is to reach a consensus on who to train, where, when and the resources for training. Managers of the clinical training site will also be targeted so that they can provide the necessary support. The following materials will be used for the orientations:

- Handouts on ICCM strategy
- Brief on the training strategy for ICCM
- Status on VHT implementation in the district (establishment and training)

**iv. Train district trainers and supervisors for ICCM:**

Master trainers at national level will train district trainers in a 6-day course organized at the regional level. A total of 24 participants will be trained in each course by four facilitators (ratio of 1:6). One of the facilitators will act as the course director as well as the clinical instructor (see facilitator guide for instructions). The target is to train at least six trainers and supervisors per district constituting DHT and HSD level members based on their previous experience in training and deployment. The same training content and materials for master trainers will be used. Training supervisors of supervisors is competency-based and uses adult learning methods. The main competencies are to track a VHT supervisor’s competencies through role-playing and correct analysis of, interpretation of, and response. The district supervisor will also learn how to problem-solve with VHT supervisors who have too few contacts with their VHTs and monitor the content and quality of supervision.

**Expected outcomes:**

- Locally appropriate ICCM training materials are developed
- Twenty four national master trainers are trained
- A plan for rolling out district ICCM training is developed
- Six district trainers and supervisors are trained in each district

**District Level**

It is a district level mandate to prepare VHT trainers and supervisors who will be drawn from the health facilities. It is important that these supervisors and trainers are prepared to manage referred patients and support VHTs in their catchment. Two types of training are required for health facility staff; case management and trainer/supervisors training course.
Activities:

i. **Integrated clinical case management course:**

Health workers should have already had case management training, either through IMCI or other training. Those who have not had case management training need it quickly, especially if they are deployed in ICCM areas. Health workers who have already had case management training may need refresher training. Administering a sample of structured case scenarios (individualized written, individualized and computerized, or read by a trainer to a group) can assess competencies and identify trained health workers who need refresher training. 3-day refresher training for 24 health workers per course should be organized. Preferentially IMCI trainers in the district should conduct the refresher training, which will be organized in shifts and carried out at satellite sites at HSD level. Training will consist of classroom sessions, clinical training, and interactive sessions, including individual reading and feedback, video, photos, demonstrations, role-plays, and observation/participation in activities in the clinics. The course director in consultation with the DHO will select 3-5 health units with high out patient and inpatient load, which shall be designated as training sites. Transport should be organized for participants to move to the training sites. Courses will be organized in batches to ensure that the trainee numbers are small enough to allow hands-on experience during the clinical sessions. End of training assessment is critical in order to ascertain the level of competence in ICCM gained out the training. For each training the materials used will include:

- Facilitators and clinical (inpatient and outpatient) instruction guides
- Patient recording forms and course monitoring forms
- Video
- Sick Child Job Aid
- VHT/ICCM Register
- Sample medicines of ICCM

ii. **Training course for facilitators and supervisors:**

A follow on training will involve district trainers training facility staff as trainers and supervisors for VHTs in a 6-day course. The same training materials and course content for district trainers will be used. Two trainees will be selected from each health facility based on their ability to train and supervise VHTs, and these should be certified. These trainees should have already had case management training, either through IMCI or other training. Only these will then be trained as supervisor using adult learning methods. The trainings will be conducted immediately prior to a course in which trainees will serve as facilitators for VHT courses. The goal is for
all supervisor-trainees to “pass” and be certified at the end of training. Supervisor-trainees are generally certified outright or provisionally certified. Competency-based training means that VHT supervisors must be able to demonstrate these competencies. Competencies are assessed through demonstrations and role-plays according to checklists of competencies.

Certified health facility supervisors should be able to perform the following functions:

- Plan and implement monthly or quarterly supervision of VHT;
- Review VHT register and cross-check drug inventory to ensure that drugs are replenished regularly
- Observe case management, if possible or administer one or more case scenarios in proper sequence; provide performance feedback in a constructive way and provide extra coaching for those who need it
- Complete supervisory checklist and aggregate ICCM workers’ activities on the relevant form
- Liaise with community leadership to solve any problems

Expected Outcomes:

- All health facility staff trained/refreshed on how to manage sick children
- Selected health facility staff trained as VHT trainers and supervisors
- Selected health facility staff certified as VHT supervisors
- Staff trained on medicines and commodity supply chain management and pharmaco-vigilance

Health Facility level

Trained health facility staff will be responsible for training, supervising, keeping records, replenishing drugs and supplies for VHTs in their catchment areas. It is important that facilities are involved in selecting VHTs for training and maintain close link with communities to identify dropouts.
Activities:

i. **VHT training on ICCM:**

VHTs will be trained on ICCM in a 6-day course. Each training course will cover 30-35 participants with a trainer trainee ratio of 1:10. Training two VHTs in ICCM should suffice for most communities unless they are very dispersed or large, this will include private providers. The district drug inspector will map all private drug shops and clinics in the district. The training materials will be translated into local language where appropriate. Interactive and active learning methods must permeate VHT training to stimulate energy, enjoyment, and learning. Interactive methods will include ice-breakers, brainstorming, plenary discussion, small group discussion. Active methods will include practice, role-play, and games. The trained VHT members will be given certificates in a series of ceremonies overseen by the district leaders, equipped with the required drugs and supplies and immediately deployed in sensitized communities. For each training the materials used will include:

- Facilitators Guide
- Sick Child Job Aid
- VHT/ICCM Register
- Course monitoring forms
- Sample medicines of ICCM

ii. **Certification of trainee VHTs for ICCM:**

Working closely with communities, trained health facility staff will participate in certifying VHTs who will distribute medicines under ICCM. The goal is for all trainees to “pass” and be certified at the end of training. Trainees are generally certified outright or provisionally certified. Certified VHTs should be able to perform the following functions:

- Able to use ICCM job aid to manage sick children
- Complete VHT registers and report at the health facility
- Liaise and mobilize communities for ICCM

Expected Outcomes:

- VHTs trained to treat the three conditions, assess the health of newborn and refer appropriately, store drugs, keep records and report drug reactions
- Health facilities certifying VHTs who will distribute medicines
- Private drug shops trained to treat and refer malaria, pneumonia and diarrhea cases
Community level

It is important that communities own the ICCM program and support VHTs who have undergone training. Communities must decide who should distribute medicines and where they should be located. Communities should have close link with facilities and should notify them on problems in implementing ICCM e.g. attrition.

Activities:

i. VHT selection for ICCM:

Villages will apply selection criteria to propose VHT candidates for ICCM training. Issues to consider include: age, literacy levels, and gender since women might seem more reliable (more acceptable for conducting post natal home visits, more familiar children; more likely to be at home; less likely to pursue distant work). Different districts and sub-districts may however, choose different criteria for nominating VHTs for ICCM training.

ii. Incentives for VHTs:

ICCM workers must maintain a certain activity level to maintain skills and VHT need to be motivated to achieve this. ICCM workers will be volunteers (i.e. are not paid salaries). Regular supply of medicines and supplies for the VHTs and broadly spreading knowledge about managing childhood illness is generally motivating. Communities are expected to motivate the VHTs to deliver this program.

Expected Outcomes:

- VHTs selected by villages for ICCM according to specified criteria
- VHTs motivated by communities to perform

3. Medicine and Commodity Supply Management for ICCM

Improving supply chain for ICCM drugs and commodities constitutes one of the most critical aspects for performance and sustainability of the program. The medicines for ICCM include: Artemether/Lumefantrine(20mg/120mg tablet strength), Amoxicillin 125mg dispersible tablet, Low osmolarity ORS, Zinc 20mg tablet and rectal artesunate (50mg). Other commodities include respiratory timers, rapid diagnostic tests, registers, medicine storage boxes and job aids. The main aim is to institutionalize supply chain management practices that
improve the availability and use of these essential health products for ICCM. The previous programs for community case management have identified supply constraints for the availability of the right medicine, in the right quantity and condition, in the right place for the right patient, at the right time and for the right costs, which need to be addressed as we roll out ICCM. These constraints will be addressed through various mechanisms at different levels, supported by training, communication and advocacy, as described below.

National Level
It is the responsibility of the national level to mobilize resources, procure, stock and supply districts with ICCM medicines and commodities through the National Medical Stores. ICCM medicines and commodities will be procured alongside essential medicines and health supplies for use at the health facility and community. The routine medicine supply chain from the central to the community will be used.

Activities

i. **Reclassification, branding, pre-packaging and colour coding ICCM medicines:**

The MOH national level team will work closely with the National Drug Authority to reclassify ICCM medicines including ACTs and Amoxicillin, from prescription only (Class B) to over-the-counter medicines. Except for ACTs which are already pre-packaged, medicines for ICCM will be pre-packaged locally according to the age bands and dosing regimens (no. of days for full course): Amoxicillin 2-11 months 2 tablets twice a day for 5 days (RED); 12-59 months 3 tablets twice a day for 5 days (GREEN). The prepackaged ICCM medicines will bear the MOH logo and the NOT FOR SALE label to differentiate them from those in the private sector. Prepackaged color coded products facilitate compliance to dosage regimens.

ii. **Financing, procurement and storage of medicines and commodities:**

Essential medicines and health supplies, procurement is strictly a pull process through application of the credit line extended by GOU to national medical stores under vote 116. In situations where donor/partners decide to contribute to the drug requirements efforts will be made to streamline the procurement with the national system. Through this system districts are expected to pull the medicines. The national level will establish the quantities of medicines and commodities needed based on population, the number of episodes, utilization rates and VHT coverage. ICCM commodities quantified will be procured alongside the essential medicines and health supplies for use at the health facility. The drugs will be shared in the percentage of 40:60 for health facility and community. Subsequently medicine needs will be calculated based on their actual consumption rates.
(to be collected through use of good record keeping practices) at district level. The national team will provide guidance to the national medical stores on buffer stocks in case of epidemics or other unanticipated situations. All ICCM commodities will be monitored to ensure that they meet the quality standards as per the NDA resolutions.

### Sustainability of commodity supply:

Prior to the implementation of the ICCM strategy, there is need to plan for institutionalization and sustainability of ICCM. ICCM medicines will be incorporated into the credit line so that districts access them together with other medicines. The current medicine budget is inadequate and the long term plan should be developed including reducing inefficiencies in the drug supply and the pilferages, over use for treatment through supervision and monitoring.

### Expected Outcomes:

1. ICCM medicines reclassified, branded, pre-packaged and color coded
2. Availability of funds for ICCM medicines and commodities
3. ICCM medicines incorporated in the credit line

### District Level

Local governments/districts retain the mandate and responsibility to prepare medicines and supplies plans, originate orders, follow up with national medical stores and monitor utilization (health systems). Local government procurement plans for medicines and supplies will be prepared through aggregation of HSD plans which should be annexed to the district operational plans. It is important that stores management is explicitly planned for in the operational plans as it continues to be a weakness in many local governments and the districts verifies medical supplies from the national medical stores before distribution to the lower level units bi-monthly. Inventory management, monitoring procurement lead time and delivery schedules are central measures in ensuring successful district engagement with NMS. In addition districts are responsible for pharmaco-vigilance (keeping alert and reporting adverse drug reactions) and drug inspection in the private sector.

### Activities

1. **Ordering and Distribution of ICCM commodity needs:**

   Orders of ICCM commodities will be made alongside the other HF credit line
order for EMHS and incorporated in the district procurement plan submitted to national medical stores. It is this plan or order that will be honoured by National Medical Stores. Medicine needs will be calculated based on their consumption rates (to be collected through use of good record keeping practices) at the health facility level. Districts will be responsible for forecasting and keeping buffer stocks for epidemics or increases in cases. Once mechanisms for drug subsidies have been made for private facilities the district will oversee the quantification and supply of drugs to these facilities. Once commodities are delivered by NMS to the districts, they will be distributed to the HF alongside the EMHS using existing systems.

**ii. Pharmaco-vigilance and medicine inspection:**

Standard adverse drug forms will be used to track adverse reaction reported by VHTs. The VHT follows up sick children per protocol, including identifying possible adverse medicine reactions and requests HF staff for investigation. The HF staff investigates possible adverse medicine reactions and document on standard Adverse Drug Reaction Forms which is reported to the DHO office and NDA Pharmaco-vigilance centre situated in regional referral hospitals.

**Expected Outcomes:**

i. District procurement plan submitted to NMS

ii. Adverse medicine reactions identified and referred to the health facility from where is reported to NDA and investigated.

**Health facility level**

The mandate of the Health Facility is to quantify medicine needs for their catchment population, receive, store and distribute ICCM medicines to the VHTs. It is important that drug quantification and forecasting is done appropriately and a timely manner to avoid medicine stock outs or expiry. Health facilities will also be responsible for ensuring that VHTs account for the drugs used and over prescription avoided.

**Activities**

i. **Quantification, Ordering and Storage for ICCM commodity needs:**

Orders for ICCM commodities will be made by the supervising HF and will be based on the consumption records of the VHTs reporting to them. They will then be incorporated in the HF medicine order that will be forwarded to the HSD/district. HFs will receive the ICCM commodities alongside their EMHS
from the district/HSD. HFs will store these commodities alongside their facility stock on behalf of the VHTs following proper storage procedures.

**ii. Distribution and replenishing of ICCM Medicines and supplies:**

Initial distribution of ICCM commodities to the VHTs will be done immediately after the training on ICCM. Subsequently, VHTs will be supplied with commodities based on their consumption rate. Proper inventory management procedures will be followed by the health facilities to replenish medicine stocks to VHTs including cross checking VHT registers to ensure proper accountability of the medicines. HFs will also ensure the availability of second line medicines to handle cases referred by VHTs.

**Expected Outcomes**

i. Orders based on consumption records submitted to the district

ii. ICCM medicines replenished timely

**Community level Activities**

**i. Rational use of commodities:**

Irrational use of medicines by the VHTs can result in incomplete recovery, development of resistance and adverse medicine reactions and overall failure of the program. VHTs will be provided with training on the rational use of ICCM commodities. This will include case definition/diagnosis, dispensing, record keeping, patient counseling, referral, patient follow up, adverse drug reaction monitoring (Pharmaco-vigilance) and inventory management including re-ordering system to avoid stock-outs. This will be reinforced by use of appropriate guidelines, job aids and support supervision. A record of medicines dispensed to the community will be kept in the VHT register. A component of improved diagnosis (use of RDTs) will be introduced later on in ICCM as a means of reducing irrational use of medicine.

**ii. Collection and Storage of medicines:**

VHTs will collect medicines regularly from their supervising health facility within their vicinity. VHTs will be provided with medicine kits for proper storage of their medicines to ensure that quality medicines are dispensed to the community.
Expected Outcomes

i. Rational use of ICCM commodities

ii. Medicines collected and stored in good conditions

4. SUPERVISION FOR ICCM

Supervision is an integral part of the implementation phase of ICCM. The main aim of supervision is to provide ongoing support, identify best practices, challenges and coping mechanisms, and generating information for monitoring and evaluation process. For supervision to be effective and sustainable it must be an integral component of ongoing district supervision activities and it should be competence based. Details of the specific activities at national, district, health facility and community are described below.

National Level
The national level mandate is to develop supervision guidelines and build district capacity to implement the guidelines. The national level will therefore prepare districts to conduct their own supervision for lower levels and thereafter continue monitoring districts.

Activities

i. Update the national supervision guidelines to include ICCM:

The national task force will update the quality assurance and area team supervision guidelines and yellow star programme to include ICCM component.

ii. Review national supervision plans and integrate ICCM:

The plan will incorporate key activities, frequency of supervision, responsible persons, reporting mechanism, modes of supervision and logistical requirements.

iii. Conduct ICCM technical supervision:

The ICCM national team will carry out technical supervision bi-annually to
establish ICCM coverage in the districts and if ICCM activities are integrated in district plans and the progress made. The supervision will last two days and will be spent field visiting a sample of at least 2 health facilities and 2 VHTs in the HF catchment area.

**Expected outcomes**

i. National Supervision guidelines updated and disseminated

ii. ICCM integrated into the national supervision plans

iii. ICCM technical supervision conducted

**District Level**

The district mandate will be to supervise supervisors of VHTs based at the HF. Both public and private clinics have the responsibility to oversee VHT implementation in their catchment areas. Private clinics will be assigned trained VHTs who will be implementing ICCM.

**Activities**

**i. Review patient care:**

A member of the DHT visiting a HF shall hold a meeting with the VHT supervisor to share reports including referral records, management of referred cases, attrition rate of VHTs, medicine and commodities records.

**ii. Assess frequency of supervision:**

The DHT also reviews the ICCM Worker Supervision Coverage Chart to verify the frequency of supervision and if it has occurred often enough, either at the health facility or in the community.

**iii. Assessing Supervisor’s competencies:**

The DHTs will occasionally (once or twice a year) monitor the content and quality of supervision. Through directly observing the supervisor supervise a VHT, the supervisor will use the checklist entitled Supervising Supervisor of VHTs providing ICCM.
iv. **Conduct ICCM supervision:**

The DHT will carry out technical supervision quarterly. This supervision will be integrated into the existing supervision arrangements. The supervision will cover all health facilities and 2 sampled VHTs in the HF catchment area.

**Expected Outcomes**

i. Supervisors of VHTs supervised at least quarterly.

ii. Supervisor’s competencies assessed

iii. ICCM supervision conducted and report prepared

**Health Facility Level**

The HF mandate is to reinforce competencies, especially case management, drug storage, and record-keeping; problem-solve; identify and control possible malpractice or misdirection of drugs; provide technical update, as relevant; plan together and promote community participation in the ICCM strategy. For ICCM there will be two methods of supervision namely health facility supervision and home visit supervision.

**Activities**

i. **Conduct quarterly VHT meetings:**

Meetings will be organized at the nearest health facility (or other agreed place, e.g. at parish headquarters) for all VHTs in the catchment area and with support from DHT/HSD. It is highly recommended that an LC representative is invited to these meetings. Health workers should try to hold group VHT meetings as close to the VHTs’ communities as possible. Long distances will discourage attendance. VHTs should receive transport refund and safari allowances. During a quarterly group meeting, the following minimum standard will be followed:

- Report on progress by individual VHTs
- Review individual VHT registers for completeness, accuracy etc
- Identify key constraints, challenges faced and solutions applied by VHTs
- Ascertain knowledge gap and reinforce one or two competencies e.g. knowledge of danger signs, how to complete register
• Introduce additional or new information, e.g., mobilizing communities to use insecticide treated nets
• Agree upon key action points for follow up at the next meeting
• Replenish medicine and commodity stocks if needed
• Sign the VHT Register during the meeting

ii. **Supervise VHTs in their communities:**

Health workers should supplement group meetings at health facilities with monthly community visits to VHTs for at least the first three months after training to identify problems quickly and to coach those with difficulties. During these visits the supervisors should:

a. Observe:
   • the actual environment where the VHT operates, e.g. how they store medicines
   • the VHT actually providing ICCM or use a case scenario, but remember that this can be stressful to the VHT – especially if others are watching and give direct verbal feedback to the VHT throughout the supervision process.
   • and acknowledge what was done well. In a friendly way point out any errors and agree on areas of improvement.

b. Sign the VHT Register during the visit

c. Complete the supervisor’s Check-list by indicating the problems/constraints identified, actions taken, and recommendations

d. Liaise with the caretakers and local council leaders as needed.

e. Complete the supervisor’s summary form and submit it and the check-list for submission to the district/HSD.

f. Replenish medicine and commodity stocks if needed

**Expected Outcomes:**

i. Quarterly VHT meetings conducted

ii. VHTs supervised in their communities
4. Monitoring, Evaluation and Research

As efforts to roll out ICCM increase, the need for monitoring, evaluation and research to improve implementation also grows. The aim of these activities is to allow Uganda and its partners to assess the extent to which ICCM is being implemented and is achieving the intended objectives. Despite similarities, monitoring and evaluation differs in the extent to which findings at each level of service delivery can be attributed to ICCM. Monitoring will aggregate information across districts tracks performance against plans and serve to highlight which ICCM activities may need strengthening or modified to reach specific objectives. On the other hand evaluation will assess the worth or value of this program and the collaboration between multiple players overtime through more detailed analysis of the outcomes, impacts and processes.

Monitoring at National level
The national level mandate will be to monitor districts and partner implementation of ICCM program. This will include developing monitoring guidelines, developing initial capacity of district to monitor ICCM activities and ensuring dataflow and a database is established. This should be as much as possible mainstreamed into the existing system for monitoring.

Activities

i. Selection of ICCM Indicators:

The national team will develop performance indicators for ICCM through a consultative process. The indicators will be selected based on the needs of the HSSP, WHO reporting requirements and the technical program process indicators. Indicators are grouped into core and optional indicators. The core indicators are mandatory for reporting by all partners and districts. The 10 core indicators will include:

1. Proportion of villages with at least two VHTs distributing ICCM medicines
2. Proportion of facilities with no stock outs of ICCM drugs during the last 3 months
3. Proportion of VHTs with no stock outs of ICCM drugs during the last 1 month
4. Proportion of VHTs who fail to submit ICCM reports for a period of 6 months
5. Proportion of VHTs who receive supervision for ICCM in the last 3 months

6. Proportion of under five cases of diarrhea, malaria and pneumonia seen by the VHT

7. Proportion of under five cases of diarrhea, malaria and pneumonia seen by the VHT and appropriately treated within 24 hours of illness onset

8. Proportion of under five children seen by the VHT and referred

9. Proportion of newborns visited by the VHT at least 3 times in the first week of life

10. Proportion of children under five years dying

**ii. Conduct a baseline study:**

To inform the progress and performance of the ICCM program a national baseline in sampled districts will be conducted. Prior to this, the national task force working closely with implementing partners will harmonize tools for the baseline based on agreed indicators. The same baseline tools will be used for periodic assessment every two years on selected input, process and outcome indicators. The findings will be disseminated at national, regional level and study districts. Policy briefs will be developed and disseminated based on the findings.

**iii. Conduct bi-annual monitoring visits to districts:**

The ICCM national team will carry out monitoring visits to districts to establish district capacity for ICCM implementation, integration into the district plans and the progress made. The monitoring and supervision visits will be combined and will last two days. The national level monitoring will cover mainly issues of level of capacity for districts to implement including training and supervision, the planning and resources for implementation, monitor partner activities and VHT coverage.

**Expected outcomes**

i. ICCM performance indicators selected and disseminated

ii. ICCM baseline study in selected districts conducted and report disseminated

iii. Bi-annual monitoring visits to districts conducted
Monitoring at District level

The district mandate will be to monitor activities at the HF including the support given to VHTs. Both public and private clinics will be monitored at least quarterly using the supervisor of supervisor’s checklist. Monitoring at the district level will mainly focus on training and supervision of VHTs, supply and distribution of commodities to VHTs and management of referred cases. The district monitoring team will summarize reports in duplicates (one copy to be left at HF), and provide immediate feedback for corrective action. (See flow of monitoring information in annex 4.6)

Activities

i. **Develop a costed plan for monitoring:**

   The district will develop a plan and cost it to monitor all ICCM activities. The plan will entail frequency of monitoring visits, funds allocated, and responsible persons.

ii. **Monitor ICCM HF activities:**

   The DHT, on a quarterly basis, will monitor ICCM HF activities. The activities to monitor will include the VHT training on ICCM, supply and distribution of ICCM commodities, management of referred cases and record keeping.

iii. **Update the VHT situation analysis mapping:**

   The districts will update the VHT coverage map on a quarterly basis. The updates will include new sub counties with new VHTs trained to implement ICCM. The updates will also aid in tracking the attrition of ICCM VHTs.

Expected Outcomes:

i. An ICCM costed plan for monitoring developed

ii. ICCM HF activities monitored

iii. VHT mapping updated
Monitoring at Health Facility level
Monitoring at the HF for ICCM constitutes one of the most important activities. It is important that ICCM monitoring at this level is adequately supported. The HF will monitor not only referred patients but also all activities concerning ICCM in the village to inform indicators of use, access and quality of ICCM services, aggregate, analyze, integrate, interpret and use the information at the HF, HSD and district levels. The HF supervisors will be expected to display relevant indicators concerning VHT ICCM activities to track performance.

Activities:

i. **Charting and posting the performance of VHT activities:**

   During a one-on-one supervision of a VHT, a supervisor will use a checklist to tally and to indicate if a locally-defined “pass” has been achieved: the availability of drug and the availability of supplies and equipment. Five rows are completed, one for each of the last five episodes seen, to record the classification-treatment consistency as recorded in the Register. A single row is completed for the directly observed skill of counting the respiratory rate. The bottom of the checklist, Summary Thoughts, tracks Supervisor’s success in re-stocking drugs and supplies, accompanying the VHT on a home visit, liaising with the community, overall impression of the VHT’s ability to perform according to standard, the support the supervisor provided and what remains to be done.

ii. **Supervisor transfers and summarizes data from the VHT Registers:**

   To bring together data on episode treated the supervisors completes one row for each VHT, transcribes totals from the Register and results from the supervisory Checklist.

iii. **Charting and posting the deployment of VHTs:**

   A chart modification from HMIS forms 109 and 122 will be used to chart all the names of the VHTs providing ICCM in each village, to indicate whether the VHT is actively providing ICCM during the given quarter. This chart should be analyzed annually, informs availability of ICCM and VHT annual attrition.

iv. **Reporting and dissemination of monitoring information:**

   After the monitoring visits the HF will give feedback immediately and during the quarterly review meetings
Expected Outcomes:

i. Regular tracking of VHT performance

ii. Completed HF VHT register

iii. VHT deployment tracked

iv. Reports and monitoring information disseminated

Monitoring at community level

i. VHTs keeping records of patients: This critical document will be used to record important details for each episode of illness treated. The VHT starts a new row for every new illness – even if the child has been seen before. Each row has columns for, Date, Patient name, Age, Sex, Respiratory rate, Classification (Within 24 hours of illness, After 24 hours of illness), Treatment, Referral, Outcome (recovered, died, adverse drug reaction). Most columns require only tick marks. The VHT supervisor aggregates important columns in the bottom row of the Register to summarize the experience over the time interval. This information is transferred to a summary form at the health facility and the information is linked to HMIS data which is sent to the district.

ii. Documenting home visits for newborn: The VHT will visit a mother during pregnancy and at least 3 times (at birth, 3rd day, and 7th day) within the first week of birth.

iii. Reporting to the nearest health facility: The VHT will refer any newborn or sick child with danger signs to the nearest health facility.

iv. Reporting drug reactions: The VHT will follow up any sick child with adverse reaction and document it in the VHT register and notify HF staff to investigate further.

Evaluation of ICCM

Evaluation will be done to ascertain the achievement of the set objectives, through analysis of outcomes, impacts and program process. The following activities are planned for this evaluation
Activities

i. Develop an evaluation framework:

A results framework is a useful model to explain the objectives and evaluation questions for this programme (see figure 2 below). ICCM is a strategy to save lives (goal) through improved use of treatments (objective) by: making treatment more accessible (intermediate result 1), and of good quality (intermediate result 2), and demanded by appropriate, timely care-seeking and/or home care as well as compliance with recommended treatment and/or referral (intermediate result 3) and supported by community structures, partnerships and national policies (intermediate result 4). We will measure progress towards these results by varying methods: mortality by Uganda Demographic and Health Surveys (UDHS) every 5 years; use by household surveys and service statistics access; quality and environment by service statistics; and demand by household surveys. Evaluation of results will be complimented with assessment of program processes right from the national to the implementation level in the community.

Figure 2: Results Framework

Results Framework

**GOAL**: Child mortality decreased

**Objective**: Use of Interventions Improved

**Intermediate Result 1**: Access to and Availability of Interventions Increased

**Intermediate Result 2**: Quality of Services Increased

**Intermediate Result 3**: Knowledge and Acceptance of Interventions Increased

**Intermediate Result 4**: Social and Policy Environment Enabled

ii. Development of the evaluation tools:

Collecting data for evaluation will require collaboration at all levels and the cooperation of national and international partners. The Ministry of health will oversee the development of the evaluation tools. Efforts will be made to make indicators and methods for evaluation as applicable as possible to diverse setting to enable all partners to use them.

iii. Conduct the evaluation:

Two evaluations are planned and evaluation of the early implementation will be conducted after two years of introducing ICCM. This evaluation will be used to inform the scale up of ICCM. This will be followed by a national evaluation after four years of introducing ICCM in Uganda. The evaluation
Implementation Guidelines

will be both internal and external and will cover programmatic processes, outcomes and impact indicators including effect on mortality. It will be jointly supported and funded by government and development partners.

**iv. Reporting and dissemination of evaluation findings:**

To inform the direction of the program it is important that relevant people access and use of evaluation findings. Dissemination meetings will be held at all levels and policy briefs will be used to communicate the findings to the users and managers.

**v. Develop a scaling and sustainability plan for ICCM:**

A scale-up to sustain ICCM will be developed after the initial implementation and evaluation. ICCM is intended as a medium-term strategy for the bulk of the population while the health system becomes stronger and more accessible. A long-term strategy for addressing some health needs and access to formal facility-based health system is however required. The most important factor for sustaining ICCM is political will. Partnerships will be explored with civil society to expand the reach and capacity of the existing GoU health system. A critical component of the introduction and scale-up of ICCM I Uganda is to document impact. This will require modest additional resources but will be critical to sustaining commitment by all parties and securing the additional financial resources required.

**Operational research**

Operational research or rigorous evaluation will be used to generate evidence on the policy development, program implementation, effectiveness and efficiency. It is particularly important to compare program approaches in ICCM including the way this policy is designed, participation and its delivery. Research will focus on aspects of program that are under the control of program a managers or policy makers, such as approaches to training and supervision; the location, integration and distribution of services; or selecting health communication messages, commodity management etc. Variable models of implementing ICCM may be applicable in different settings and will need to be understood. The cost effectiveness of implementing ICCM is important given the limited resources in countries. The feasibility of some of the technologies for ICCM implementation also need more local evidence base.
Activities

i. **Set up a national ICCM research task force:**

For coordination purposes a 15-member operational research committee will be established by the Ministry of Health. The committee will comprise of policy makers, academia, development partners, research institutes and representatives of the communities chaired by Ministry of Health. The main tasks for this committee will be to set priorities for research, collate available research and disseminate it and ensure that research is done in a coordinated manner.

ii. **Develop a national ICCM research agenda:**

Operational research can answer many questions but prioritizing research that is relevant to improving the delivery of ICCM in Uganda for better results is critical. Operational research for ICCM should answer questions such as: kind of training and supervision required to most accurately diagnose and treat disease; kind of behavior change communication and mobilization that leads to the greatest levels of utilization and compliance with ICCM treatment; models of linking communities and facilities and; systems that are most effective for and sustainable for scaled-up ICCM etc. The task force will organize a national stakeholder research meeting within the first 3 months of launching this program. Local and international research experiences will be shared and used to inform the development of the priority list of research areas/themes. In addition available tools and methods for research will be harmonized across partners to maximize on available resources and pool results.

iii. **Coordinate and mobilize resources:**

To ensure that research is done in a coordinated manner, the ICCM operational research committee will set priorities for research, collate available research and disseminate it on a biannual basis or as it may be necessary.
4. **ANNEXES**

4.1 **References**


7. Ministry of Health, *Home Based Care Report 2008*
4.2 National Advisory Task Force will comprise of:

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<th>Ministry of Health Programmes</th>
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</table>
### 4.3 Village Health Team training agenda

#### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Registration</td>
</tr>
<tr>
<td>09.00 – 10.30</td>
<td>Session 1: Introductions 1.5</td>
</tr>
<tr>
<td>10.30 – 11.00</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11.00 – 11.30</td>
<td>Session 2: Role of the VHT 0.5</td>
</tr>
<tr>
<td>11.30 – 12.00</td>
<td>Session 3: SCJA 0.5</td>
</tr>
<tr>
<td>12.00 – 01.00</td>
<td>Session 4: Ask the Child’s problems 2.0</td>
</tr>
<tr>
<td>01.00 – 02.00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>02.00 – 03.00</td>
<td>Session 4: Ask the Child’s problems 2</td>
</tr>
<tr>
<td>03.00 – 05.00</td>
<td>Session 5: Identify fast breathing 2</td>
</tr>
</tbody>
</table>

#### Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Feedback day 1</td>
</tr>
<tr>
<td>09.00 – 09.30</td>
<td>Session 6: Identify danger signs 2h</td>
</tr>
<tr>
<td>09.30 – 01.00</td>
<td>Clinical practice fast breathing and danger signs</td>
</tr>
<tr>
<td>01.00 – 02.00</td>
<td>Lunch</td>
</tr>
<tr>
<td>02.00 – 03.30</td>
<td>Session 6: Identify danger signs cont’d</td>
</tr>
<tr>
<td>03.30 – 05.00</td>
<td>Session 7: Treat child with no danger signs 1hrs</td>
</tr>
<tr>
<td>04.00 – 05.00</td>
<td>Session 8: Treat cough 1hrs</td>
</tr>
</tbody>
</table>

#### Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Feedback day 1</td>
</tr>
<tr>
<td>09.00 – 09.30</td>
<td>Session 8: Treat child with no danger signs 1h</td>
</tr>
<tr>
<td>09.00 – 01.00</td>
<td>Clinical practice child’s problems and decide referral</td>
</tr>
<tr>
<td>01.00 – 02.00</td>
<td>Lunch</td>
</tr>
<tr>
<td>02:00 – 02:30</td>
<td>Session 8: Treat child with no danger signs cont’d</td>
</tr>
<tr>
<td>02:30 – 05:00</td>
<td>Session 9: Treat Diarrhea 2h</td>
</tr>
</tbody>
</table>

#### Day 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Feedback day 1</td>
</tr>
<tr>
<td>09.00 – 09.30</td>
<td>Session 10: Treat fever 1h</td>
</tr>
<tr>
<td>09.00 – 01.00</td>
<td>Clinical practice child’s problems and decide referral</td>
</tr>
<tr>
<td>01.00 – 02.00</td>
<td>Lunch</td>
</tr>
<tr>
<td>02:00 – 02:30</td>
<td>Session 10: Treat fever cont’d</td>
</tr>
<tr>
<td>02:30 – 05:00</td>
<td>Session 11: Pre-referral treatment 2h</td>
</tr>
</tbody>
</table>

#### Day 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.45</td>
<td>Feedback day 1</td>
</tr>
<tr>
<td>08.45 – 09.30</td>
<td>Session 12: Home care advice 2h</td>
</tr>
<tr>
<td>09.30 – 01.00</td>
<td>Clinical practice child’s problems and decide referral</td>
</tr>
<tr>
<td>01.00 – 02.00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>02.00 – 03.30</td>
<td>Session 12: Home care advice</td>
</tr>
</tbody>
</table>
03.30 – 05.00  Session 13: Routine newborn care 1hrs

Day 6
08.30 – 09.45  Feedback day 1
08.45 – 09.30  Session 13: Routine newborn care cont’d
09.30 – 01.00  Clinical practice child’s problems, refer, treat
01.00 – 02.00  Tea Break
02.00 – 02.30  Session 14: Medicine management
02.30 – 04.00  Session 10: Way forward
04.00 – 05.00  Closure
4.4 Criteria for selection of VHTs

- Every 25-30 households one member of the VHT is selected through a popular vote.
- VHTs must be selected by the community itself and not imposed by political structures.
- The number should on average be five members per team.
- Gender sensitive
- Political leaders such as the LC I chairperson, vice chairperson and secretary are not be eligible
- Potential VHT members may already be Community Health Workers, Traditional Birth Attendants, Drug distributors or similar if acceptable to the community.
### 4.5 List of Materials, Equipment and Supplies needed for ICCM Training

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video / DVD exercises</td>
<td>1 set / room</td>
<td>Parts 1 &amp; 2</td>
</tr>
<tr>
<td>VCR equipment, video tape or DVD</td>
<td>1 set/room</td>
<td></td>
</tr>
<tr>
<td>Flip chart</td>
<td>1 set / room</td>
<td></td>
</tr>
<tr>
<td>Masking tape</td>
<td>2</td>
<td>For classroom &amp; clinic</td>
</tr>
<tr>
<td>Markers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Pens</td>
<td>1 person</td>
<td>Provide extras</td>
</tr>
<tr>
<td>Measuring containers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 litre (e.g. 500ml water bottle), spoons, cups</td>
<td>1 set per room</td>
<td></td>
</tr>
<tr>
<td>Dolls</td>
<td>1 per room</td>
<td></td>
</tr>
<tr>
<td>Medicine and supplies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORS sachets</td>
<td>3 / participant</td>
<td>Provide extra for dispensing</td>
</tr>
<tr>
<td>Zinc tablets</td>
<td>2 packs / person</td>
<td>Provide extra for dispensing</td>
</tr>
<tr>
<td>ACTs tablets (blue and yellow)</td>
<td>24 tabs/ person</td>
<td>Provide extra for dispensing</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>3 doses/person</td>
<td>Provide extra for dispensing</td>
</tr>
<tr>
<td>Rectal Artesunate</td>
<td>1 pack/person</td>
<td>Provide extra for dispensing</td>
</tr>
<tr>
<td>Medicine containers (ACT, zinc, antibiotic)</td>
<td>6-12 / room</td>
<td>Sufficient demonstrate checking for expiration date</td>
</tr>
<tr>
<td>Cup and spoons for preparing medicine</td>
<td>1/person</td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop Agenda</td>
<td>1 per participant</td>
<td></td>
</tr>
<tr>
<td>Registration Form(s)</td>
<td>1 per day</td>
<td>Participants should sign daily</td>
</tr>
<tr>
<td>Sick Child Job Aid; VHT Register; Referral Forms</td>
<td>20 photocopies for practice</td>
<td></td>
</tr>
<tr>
<td>Large Sick child job aid – Wall Chart</td>
<td>1 set per room</td>
<td></td>
</tr>
<tr>
<td>Facilitator Guide, Photo Book, Timers</td>
<td>1 set / facilitator</td>
<td></td>
</tr>
<tr>
<td>Post-Tests</td>
<td>1 per participant</td>
<td></td>
</tr>
<tr>
<td>Certificates</td>
<td>1 per person</td>
<td></td>
</tr>
<tr>
<td>Referral note</td>
<td>20 copies</td>
<td></td>
</tr>
<tr>
<td>Additional Logistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity source</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tables and chairs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.6 MONITORING INFORMATION FLOW CHART

NATIONAL LEVEL

DISTRICT LEVEL

HEALTH SUB DISTRICT LEVEL

HEALTH FACILITY LEVEL (HCII, HCIII)

LOCAL COUNCIL LEVEL

VHT
### Annex 4.7: ICCM Indicators by Result Level, Methods, and Application

<table>
<thead>
<tr>
<th>#</th>
<th>Result Type</th>
<th>Indicator</th>
<th>Definition</th>
<th>Measurement Method</th>
<th>Application</th>
<th>Comment (M=monitoring, E=evaluation, 1=first priority, 2 = second priority)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goal</td>
<td>All cause child mortality</td>
<td><strong>Numerator:</strong> number of children &lt;5 who died from all causes in a given period in a defined area. <strong>Denominator:</strong> Total number of children &lt;5 in the same period in the same defined area.</td>
<td>VHT vital event recording; DHS</td>
<td>Annually (VHT); every 5 years (DHS)</td>
<td>Program Track progress to MDG4 E1.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Timeliness of Treatment</td>
<td><strong>Numerator:</strong> number of children treated by VHTs with the recommended medicine within 24 hours of onset of symptoms in a given period. <strong>Denominator:</strong> Total number of children treated by VHTs in the same period. As %.</td>
<td>VHT Register -&gt; Supervisor Checklist</td>
<td>Quarterly</td>
<td>Program, Dist, County, Sub-County, Parish If low: explore M1. Incomplete measure of use, but useful. Actual onset of illness may not be always obvious.</td>
</tr>
<tr>
<td>3</td>
<td>Use</td>
<td>VHT Activity Level (cases/VHT)</td>
<td>Numerator: number of children treated in a month in a defined area.</td>
<td>VHT Register -&gt; Supervisor Checklist</td>
<td>Quarterly</td>
<td>Parish</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Coverage</td>
<td>Availability of ICCM</td>
<td>Numerator: number of LC 1 (village) in a defined area with two or more VHTs distributing medicines.</td>
<td>ICCM Deployment Chart at HF</td>
<td>Quarterly</td>
<td>Program, Dist, County, Sub-County, Parish</td>
</tr>
<tr>
<td>4</td>
<td>VHT (with ICCM) Annual Attrition</td>
<td>Numerator: number of VHTs lost (stopped working) during the year.</td>
<td>ICCM Deployment Chart at HF</td>
<td>Annually</td>
<td>Program, Dist, County, Sub-County, Parish</td>
<td>Investigate high and low to identify transferable retention ideas</td>
</tr>
<tr>
<td>6</td>
<td>Availability</td>
<td>Drug availability at health facilities</td>
<td>Numerator: number of health facilities which had no stock out of recommended medicine in a given period.</td>
<td>?</td>
<td>Quarterly</td>
<td>Sub-County, Parish</td>
</tr>
<tr>
<td>No.</td>
<td>Indicator</td>
<td>Description</td>
<td>Numerator</td>
<td>Denominator</td>
<td>Supervision</td>
<td>Frequency</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>-------------</td>
<td>-----------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>7</td>
<td>Drug availability among VHTs</td>
<td>Number of VHTs in defined area who had no stock-out of recommended medicine in a given period.</td>
<td>Supervision checklist</td>
<td>Quarterly</td>
<td>Program, Dist, County, Sub-County, Parish</td>
<td>If low: explore</td>
</tr>
<tr>
<td>8</td>
<td>Supervision coverage</td>
<td>Number of VHTs in defined area who were supervised in a given period.</td>
<td>Supervision Coverage Chart at HF</td>
<td>Quarterly</td>
<td>Program, Dist, County, Sub-County, Parish</td>
<td>If low: explore</td>
</tr>
<tr>
<td>9</td>
<td>Referral ratio</td>
<td>Number of new born referred by VHTs in the defined area in a given period.</td>
<td>VHT Register -&gt; Supervisor Checklist</td>
<td>Quarterly</td>
<td>Program, Dist, County, Sub-County, Parish</td>
<td>Compare with case mix and if inappropriate investigate</td>
</tr>
<tr>
<td>10</td>
<td>ii) Numerator: number of under 5 (not new born) children referred by VHTs in the defined area in a given period.</td>
<td>Denominator: total number of under 5 (not new born) children seen by VHTs in the defined area in the same period. As %.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>