Thematic Review of iCCM
Successes & Challenges with Access, Speed & Quality

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The Global Fund
Outline

1. Why did we do this study?
2. Key questions we wanted to address
3. Approach: what did we do?
4. Key findings: what did we find?
5. Conclusions & way forward
Why did we do this study?

Rationale

- The iCCM strategy was developed with the aim to ensure better access to through extending case management of key childhood killers (malaria, pneumonia, diarrhea and malnutrition) beyond health facilities to communities.
- Many countries in SSA have adopted iCCM as part of their national health sector strategies.
- The Global Fund has been supporting most of the essential ingredients of iCCM, such as training, costs for CHWs, malaria commodities, supportive supervision, supply chain, and health information systems.
- iCCM has proved to be an important strategy for reducing mortality, especially among children who otherwise have limited or no access to lifesaving treatments.
- However, there remain many gaps in our understanding of the optimal approaches to the implementation, scale-up, and sustainability of Global Fund-supported iCCM programs.
What did we want to achieve?

Goal
The goal of the review was to document the experiences of iCCM implementation in a subset of countries supported by the Global Fund to rollout iCCM in sub-Saharan Africa.

Objectives
1. To systematically assess replicable good practices in the delivery of iCCM as per nationally defined quality standards in programs supported by the Global Fund.
2. To assess key challenges in operationalization of iCCM both in countries in the early and expansion phases of implementation.
3. To document the relationship between iCCM and health facility-based services.
4. To conduct a systematic review of documented evidence of the outcomes and impact of iCCM scale up on child health outcomes as well as on community systems for health.
Key Questions we wanted to address

a) **Access and quality**: How have countries achieved reasonable coverage and quality in iCCM delivery?

b) **Policy & Coordination**: How is the iCCM service delivery coordinated at country level, and who are the key players?

c) **Integration**: What are regionally replicable good practices in ensuring integrated delivery of all key interventions that are part of the national iCCM service package?

d) **Service delivery & referral linkage**: How have countries ensured complementarity and synergy between community case management and facility-based services?

e) **Demand creation and BCC**: What can we learn from countries' experiences in improving uptake of iCCM services?

f) **Community health workers**: What are replicable good practices in deploying and retaining well-trained CHWs, in reducing their turnover, and improve their performance?

g) **Supply chain management**: Good practices in ensuring uninterrupted supply of iCCM commodities?

h) **M& E**: Good practices in reporting & monitoring implementation progress and success of iCCM?
Employed a mixed methods approach involving an in-depth analytical desk review from available documents, field level qualitative interviews and quantitative data collection covering 18 countries that have been implementing the program.
Approach: what did we do?

**Qualitative data:**  
Focus Groups and In-Depth Interviews

<table>
<thead>
<tr>
<th>Level</th>
<th>Who Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>GF Grant Management Teams, UNICEF, iCCM Financing Task Force</td>
</tr>
<tr>
<td>Country</td>
<td>Ministry of Health departments, Major NGOs and development organizations involved with implementation, in-country global partners</td>
</tr>
<tr>
<td>District</td>
<td>iCCM coordinators, health facility CHW supervisors</td>
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<tr>
<td>Primary Health Facility</td>
<td>Health care workers responsible for iCCM/IMCI, CHWs</td>
</tr>
<tr>
<td>Community: FGDs</td>
<td>CHWs, Community Members</td>
</tr>
</tbody>
</table>

**Quantitative data:**
- HMIS/DHIS 2
- Relevant offices for demographics
- CHW scope, spread, remuneration

**Desk Review:**
- Published literature and peer-reviewed studies National and International iCCM guidelines
- National Community Health Strategies
- Training and Supervision Materials
- Program Reports
- Assessments reports

*Review conducted in 2017 & 2018
Approach: where did we do the review?

18 Countries included in the iCCM review

<table>
<thead>
<tr>
<th>Western Africa</th>
<th>Eastern Africa</th>
<th>Central Africa</th>
<th>Southern Africa</th>
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<tbody>
<tr>
<td>5. Senegal</td>
<td>5. Kenya</td>
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<td>7. Mali</td>
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<td>8. Sierra Leone</td>
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In-country review: country-specific reports
Desk review: country specific reports
Desk review: no county-specific report
Findings: what did we find?

The key findings are summarized under the following 9 areas

1. Scale up speed, coverage & access & equity
2. Policy, integration, leadership & coordination
3. BCC & demand creation
4. Funding landscape
5. Human resources training, incentives and retention
6. Supportive supervision and quality assurance
7. Supply chain management
8. Service delivery and referral
9. Monitoring and evaluation
Scale up speed, coverage & access & equity

- All of the 18 countries were already expanding iCCM services during the time of assessment, but were at different stages of expansion/scale up.

- Countries had adopted specific eligibility criteria for areas to be prioritized for iCCM services, which differed across countries. Criteria applied include:
  
  * Villages located 5 kilometres away from a health facility: applied by majority of the countries for mapping communities/villages to be prioritized for iCCM.
  * “Hard to reach” areas: were prioritized by some countries, using criteria such as geographical, physical or seasonal inaccessibility.

Uganda & Zambia selected rural districts with highest U5 mortality rates; while others such as Ethiopia opted for a blanket coverage.
## Scale up speed, coverage, access & equity

<table>
<thead>
<tr>
<th>At Scale</th>
<th>Scaling</th>
<th>Scaling/ expansion</th>
<th>Expansion, will scale up</th>
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<tbody>
<tr>
<td>Cameroon</td>
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<td>Zambia</td>
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**Definitions**

- **iCCM National Scale up**: geographical scale up to all eligible districts
- **iCCM scale up**: all eligible population is covered by iCCM services, and services are implemented and functional
- **Expansion**: introduction of iCCM to new eligible districts.
The iCCM service package:

- 17 of the 18 iCCM country programs reviewed offered treatment for uncomplicated malaria, pneumonia and diarrhoea; and referred malnutrition & neonatal cases after assessment.

- Malawi included treatment of red eye in the package.

- Kenya offered treatment of malaria and diarrhoea through iCCM; and suspected pneumonia and malnutrition cases were referred.
Challenges with Scale up speed, coverage & access

Major Issues hampering scale up include:

- Lack of funds & lack of political commitment
- Lack of MOH incentives and/or non-uniform incentives for CHWs
- Lack of co-financing for diarrhea and pneumonia drugs
- Parallel streams of financing for different commodities
- Lack of simultaneity of arrival of funding for the full iCCM package even when co-financing was secured.
  - Misalignment of timing between when non-malaria (pneumonia and diarrhea) and malaria financing was available
- Weak national PSM coordination and supply chain systems
- Challenges with country grant implementation
Lessons Learnt: scale up speed, access & equity

✔ Countries with strong leadership, policy support and national partnership were more successful at facilitating iCCM scale up

✔ Use of evidence from pilots to guide the scale-up policy, facilitated iCCM scale up speed, e.g., in Niger, Ghana & Rwanda

✔ Successful Primary Health Care programs at the community level served as a platform for iCCM introduction and speedy scale up, e.g., in Uganda, Senegal, DRC

✔ An already existing and competent pool of CHWs, integrated into the MOH staff structure and salaried, facilitated recruitment and training of CHWs to provide iCCM at scale.

Best Practice: Use of Evidence
Zambia and Malawi did an evaluation of the national iCCM program and used results to develop a scale-up plan which was also used as a funding and resource mobilization tool
2 Policy, integration, leadership & coordination

✔ 80% of the countries have policy supporting CHW delivery of iCCM for U5 care for malaria, diarrhea, and pneumonia;

✔ Ethiopia, Malawi, Mali, Niger, and Rwanda attribute rapid scale-up of iCCM program to support from political leaders

✔ All 18 countries have established an iCCM taskforce, steering committee, TWGs - MOH, Donors, Implementing Partners, community health coordinators

✔ Countries who involved diverse stakeholders during policy development have been more successful – MOH HRD dept, MoF, Subnational admins, comm. reps.

✔ Countries with existing primary health care programs and community-based interventions were more welcoming of iCCM
Challenges: Policy, integration, leadership & coordination

Lack of an established structure in charge of iCCM coordination and hence, lack of visibility in MOH

Weaknesses in:
- Sustainable financing
- Integration of iCCM system into national health system

User Fees
- Some openly charge while in others, it is unofficial
- If certain commodities were scarce while others are regularly available, CHWs might charge patients differentially

Weak Integration:
- Malaria and MNCH programs with existing priority and resource streams are more developed
- Diarrhea and pneumonia remain less developed
Lessons: Policy, integration, leadership & coordination

✔ Whereas, high-level government leadership is important in driving policy changes necessary for program implementation, experience show that the most critical actors in driving iCCM policy development and implementation, are the technical officers within MOH, supported by Technical Working Groups composed of key development partners, such as WHO UNICEF

During policy development in a number of countries – Rwanda, Ethiopia, Malawi, Mali, Zambia and Niger – senior MoH officials initially resisted the idea of entrusting CHWs with treatment of “more complex” conditions, until they got assurances from their respective senior technical (clinical) officers.

It took effort to convince them those officers. Once they consented to the policy reform, it sped-up everything.
A successful iCCM implementation requires both:

- Supply side interventions: trained CHWs, uninterrupted supply of commodities and effective supervision; and
- Demand-side interventions: Effective BCC, community mobilization & peer-support schemes.

The effect of BCC has so far not been systematically assessed, but overall, there appears to be a consensus that there is a lack of focus on demand creation towards achieving a shift in utilization of services.

- Low utilization drives cost per capita for iCCM program
- Scale up of iCCM services is not enough to drive up uptake in communities
- Demand creation using culturally-appropriate mobilization mechanisms is equally important.
Assessments in Niger and Mozambique provided some evidence of effect of BCC towards increased uptake of iCCM services.

Niger’s annual participatory village meetings to assess progress and to celebrate villages, families and individuals as ‘champions’, ‘agents of change’, ‘Model mothers’ and ‘model villages’ proved to be successful. The winners are awarded with soap, mosquito nets or a radio.

In Rwanda, introduction of CHWs’ Peer Support Groups (PSGs) - bringing together ~20 CHWs from neighbouring villages for monthly meeting – made a successful contribution to promoting community and household mobilization.
In all 18 countries, iCCM funding landscape was comprised of domestic allocations and contributions from development partners; and to some extent household of pocket expenditures.

Most of the study countries have made policy changes and financial reforms (e.g., training and remuneration of CHWs), that have enabled increased domestic funding for iCCM and other community health care services.

However, almost all study countries continue to struggle to secure funding for the implementation of iCCM program at scale.
Funding landscape - opportunities

During 2014-2017 major donors and development partners increased their funding and technical support for iCCM implementation in all 18 countries

✔ RAcE Project: Malawi, Mozambique, Niger, and Nigeria

✔ iCCM Financing Task Team established in October 2016 greatly improved funding allocations for iCCM – supporting countries in inclusion of iCCM into their Global Fund NFM grants and facilitating co-financing options.

✔ Global Fund Support for iCCM
  - Of the $3.4 billion in malaria grants from New Funding Mechanism, 14% allocated to CCM in 38 countries
Funding landscape: Lessons

**Ghana**: detailed gap analysis, including for non-malaria commodities ensured increased joint funding from GF ($3.5M) and UNICEF ($600K) during 2015-2017.

**Ethiopia**: Full domestic funding of HEW remuneration and training helped to free up significant funding from GF and partners to cover programmatic and commodity costs, ensuring implementation at full scale.

**South Sudan and Brundi**: flexible funding arrangements in the context of challenging operating environments has been key in securing uninterrupted supply of iCCM commodities.

**Uganda**: Innovative approaches such as RMNCH Trust Fund highlight the potential for increased domestic resources.

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* Nigeria, DRC, Zambia, Uganda, Ethiopia, Ghana, S. Sudan, Burkina Faso, Malawi and Cote D’Ivoire

Source: iCCM Financing Task Team Consultants
Key Human Resources for iCCM include:
- CHWs providing iCCM & BCC
- Supportive supervisors of CHWs at district offices and facilities
- iCCM focal points and M&E Staff at all levels

CHWs are rarely institutionalized as a formal part of the healthcare system
- Many countries have unpaid or volunteer CHWs
- Challenges with remuneration and incentives lead to poor retention
- Lack of uniformity in allowances given by various implementing partners led to CHW dissatisfaction

Given different titles in different countries.

Level of education ranges from mostly with no formal education (Ghana) to mostly secondary graduates (Ethiopia).
Human resources training, incentives and retention

Recruitment

- Most countries have recruitment guidelines, documentation procedures, and criteria to be followed.
- Reviews in Uganda, Zambia and South Sudan showed that community involvement in selection lead to increased iCCM utilization, more trust in and support for CHWs.
- In Uganda, caregivers refused to use iCCM services from VHTs they thought were imposed on their community.
- In Malawi, Communities rejected HSAs where there was a lack of community involvement.

iCCM Training

- Cascade training in place in all 18 countries: master trainers at national and regional levels, trainers at health facility, TOT using WHO iCCM training tools.
- Rwanda, Malawi, Ethiopia, and Uganda documented participatory and practical sessions, feedback that training was effective even for illiterate CHWs.
- In Uganda, Zambia, and South Sudan, CHWs requested additional time for training.
Human resources training, incentives and retention

Workload

→ In all countries, iCCM was added to existing SOW for CHWs

→ In Ethiopia and Malawi, salaried CHWs reported high workload from iCCM and other tasks

→ In Malawi, iCCM services added prestige and status to HSAs

→ In Rwanda and Senegal where different cadres are assigned specific tasks (promotive, MNCH, iCCM) there were no workload issues raised
Human resources training, incentives and retention

Remuneration, incentives and motivation

- Varied incentives between countries, but also between MOH and other implementing partners - leading to high CHW dissatisfaction

- Countries with unpaid CHWs had issues with CHWs often abandoning iCCM tasks to engage in income generating activities

- Countries with salaried CHWs experienced low motivation for iCCM work

- iCCM program experienced attrition due to inconsistent payments, irregular payments, promotion to clinical positions, desire to work in urban areas, or high burden work for low compensation

- High turnover raises costs for iCCM due to costs for recruitment and training
Supportive supervision and quality assurance

- Supportive supervision by trained supervisors is a critical element of a successful iCCM program.

- CHW Supervisor’s roles include:
  - Routine clinical mentoring and monitoring of diagnosis & treatment
  - Assessing referrals & their criteria
  - Maintenance of iCCM records and reporting

- In all countries where we had field visits, the programs used standard checklists to monitor the performance of CHW and the quality of service.

Supervisors are expected to:

- Observe the program activities performed by trained CHWS
- Support the improved quality of services offered by CHWs
- Assess and address any difficulties encountered by CHWs in carrying out assigned tasks
- Ensure CHWs have sufficient technical support and adequate supplies to administer services to children seeking care
- Generate information for follow up based on agreed supervision checklists and national guidelines
Supportive supervision and quality assurance

- A number of countries have government policies that reflect the norms and expectations for iCCM supervision, while others relied on implementing partners.

- Managerial supervision mostly coordinated at MoH level in conjunction with implementing partners

- Clinical supervision and mentorship were coordinated by the IMCI focal points at the district level with some links to health facilities

- Variation between countries and adoption to local context:
  - E.g., South Sudan: CBD supervisors also from community and responsible for supervising 15-20 CBDs, NGOs assign their iCCM program officer to oversee the CBD supervisors
Supportive supervision: challenges

- Challenging to implement regular scheduled supervision: lapses due to lack of fund & transportation
- Unavailability of clinical supervisors due to poor staffing at health facilities, or attrition of supervisors
- Lack of standard checklists and tools for quality assessment, or no use of checklists at all
- Weak links between the CHW and the health facility
Supportive supervision and quality: Lessons

- Trained pools of supervisors to ensure optimal ratio of supervisor: CHW (e.g., Malawi)

- Adopt standard checklists to assess:
  - Individual CHW provision of the program package
  - CHW supply availability, logistics for supply/resupply
  - CHW data tracking- patient register, timeliness and accuracy of reports
  - CHW ability to provide high-quality iCCM, clinical skills
  - Accountability and recommendations or corrective actions

- Mobile technologies
  - Increase communication between CHW and supervisor
  - More accurate and timely information exchange about cases and needed supplies
Supply chain management

Uninterrupted supply of iCCM commodities

✔ Uninterrupted supply of iCCM commodities is arguably the rate limiting factor in the scale up of iCCM activities.

✔ This review shows that since 2014, increased funding was mirrored by improvement in availability of iCCM commodities and reduction in stock outs;

✔ All study countries have made significant progress in strengthening major areas of PSM such as procurement of sufficient commodities, warehousing and distribution.

✔ For example, the review in Uganda showed that caretakers were satisfied with iCCM services and availability of drugs.

✔ International partners such as WHO, UNICEF, Global Fund, PMI/USAID and DFID have played a key role in initiating a pool funding for strengthening procurement and in-country distribution capacity, warehousing and transportation.
Supply chain management - challenges

- All 18 countries reported stock outs of iCCM commodities at one point during the past year.
- Stockouts lead to diminished community perception of quality
- In Ghana & Ethiopia, stock outs of iCCM drugs were found to have contributed to low iCCCM service utilization.
- In Uganda (2015), less than 10% of CHWs had all four iCCM drugs for treating malaria, pneumonia, and diarrhea, triggering a prompt response and better availability ever since.
- Non-integrated iCCM supply chain with MOH supply chain, and lack of accurate data on iCCM commodity consumption
- Inadequate funding for pneumonia and diarrhea commodities
- Insufficient or inadequate quantification for forecasting
Supply chain management - lessons

Our review highlights the need for:

✔ Funding for integration of iCCM and MOH supply chain including inclusion of iCCM drugs and supplies into the LMIS

✔ Advocacy and mobilization for adequate resources for iCCM commodities at global level

✔ Support for quantification and forecasting of needs at both community and health facility
Service delivery and referral

- CHWs have job aids in all 18 countries facilitate proper case management
- iCCM CHW are sufficiently trained using tools covering the following areas:
  - clinical assessment,
  - diagnosis,
  - management of the illness, and
  - referral/counter referral.
- All countries report using appropriate guidelines for clinical assessment, diagnosis, management, and referral by the CHWs
- Countries with better iCCM integration with the health system have CHWs better equipped to provide quality services
- CHWs use referral forms to record pre-referral, referral and counter-referral for a child with danger signs, although this does not happen uniformly in practice
Service delivery and referral: challenges

- Low CHW to population ratio in most of the countries
- Limited Time for iCCM service provision
  - Other equally demanding and competing priorities - FP, EPI, health promotion
- CHWs were absent on the days and times scheduled to provide iCCM services
  - Negative effect on accessibility and utilization of iCCM
    - Unpaid volunteer CHWs often absent to undertake income generating activities
- Distance, time & costs associated with reaching a health facility
- Suboptimal use of referral notes → resulted in children with danger signs not being referred.
- Referral for children without proper diagnosis or danger sign
Service delivery and referral: lessons

The findings of this review highlight the need for:

- Strengthening the referral link between CHWs and health facilities
  - Focus on refresher training and targeted supervision to address gaps in clinical skills among CHWs
  - MoH and Partners need to work to ensure receiving facility is well stocked and has sufficient staff trained to deal with severe cases
- Aligning the CHWs availability with the iCCM service delivery schedule
- Understanding & managing time and expectations when there are competing tasks
- Refresher trainings based on assessed gaps/ needs.
Monitoring and evaluation

- All 18 countries use routine monitoring indicators per the current iCCM indicator guide
  - Data available for HR, service delivery and referral, and M&E indicators
  - Data least available on supply chain management, supervision
- CHWs are trained to complete monthly registers which were submitted to supervisors, collated at health facility, and reported as part of HMIS data
- Many countries have initiated integration of iCCM data into HMIS, and some have moved into reporting the data in DHIS2
- mHealth innovation allowed for iterative implementation of activities, e.g., in Ethiopia, Rwanda, and Malawi
## Monitoring and evaluation

### Integration of iCCM indicators/data into HMIS

<table>
<thead>
<tr>
<th>Country</th>
<th>iCCM data reported in HMIS</th>
<th>DHIS2 Status</th>
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<tbody>
<tr>
<td>DRC</td>
<td>Partial</td>
<td>Partial roll-out</td>
</tr>
<tr>
<td>Ethiopia</td>
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<tr>
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<td>Sierra Leone</td>
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<td>Uganda</td>
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<tr>
<td>Zambia</td>
<td>No</td>
<td>Full roll-out</td>
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</tbody>
</table>
Monitoring and evaluation – challenges

- Parallel M&E systems between various iCCM partners
- iCCM is often consolidated with IMCI data and is not discernible within HMIS and DHIS2
- iCCM data are usually incomplete and not timely reported
- Delays in submission of community data due to:
  - Lack of transportation
  - Distance to health facilities- esp. during rainy season
  - Lack of available supervisors
  - CHW resistance to data reporting
Monitoring and evaluation – lessons learnt

● Implementation of M&E improvements for iCCM requires close discussion between implementing partners and MOH.
● mHealth strategies must be incorporated into MOH systems and strengthened
● Need for country agreement on what type of iCCM data is needed at what level.
● Need for iCCM incorporation into DHIS 2 reporting platform.
● iCCM data needs to be separately reported from IMCI to enable understanding and targeting for each program
● Regular evaluations and review are key for iCCM service quality
Conclusion and way forward

✔ iCCM scale up well on track in several countries

✔ Challenges exist, but are not new;

✔ Opportunities exist and are promising - governments increasing domestic resources, innovative financing mechanisms in some places, and development partners are more or less aligned.

✔ Excellent examples of best practices in countries hence, an opportunity to learn from what has worked well and build on those successes!
Thank You

Questions?
Backup Slides
# Funding landscape & costing

<table>
<thead>
<tr>
<th>Country</th>
<th>iCCM External Funders</th>
<th>Implementing partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>GF; USAID; UNICEF</td>
<td>USAID/BASICS Project; USAID/ARM3 project; Africare</td>
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<td>Burkina Faso</td>
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## Funding landscape & costing

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<tr>
<td>Sierra Leone</td>
<td>GF, UNICEF; GSK; ADB</td>
<td>IRC; SCF; WHI; DIP</td>
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<tr>
<td>South Sudan</td>
<td>GF, DFID, UNICEF, CIDA</td>
<td>UNICEF, PSI, AMREF, Malaria Consortium, Health Link South Sudan, CCM, ARC, SC-I, Africa Health Africa (AHA), WVI, John Dau Foundation (JDF), Nile Hope (NH) IRC, BRAC, SCF, Diocese of Torit</td>
</tr>
<tr>
<td>Uganda</td>
<td>UNICEF; GF; WHO; USAID; DFID; Global Financing Facility;</td>
<td>UNICEF, MC; WV; CHAI; Shines Children Foundation; IRC; MSH; PACE; ICCM Financial Task Team; JSI/MCSP; IFRC; MSH/SIAPS.</td>
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<tr>
<td>Zambia</td>
<td>GF; PMI; UNICEF; WHO; DFID; USAID; American Red Cross Society</td>
<td>MOH Units; CHAZ; CHAI; SCF; USAID/JSI; WV; MC;</td>
</tr>
</tbody>
</table>
Approach: where did we do the review?

Desk Review in 18 Countries

**East Africa:** Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Uganda

**Southern Africa:** Malawi, Zambia

**West and Central Africa:** Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria, Senegal, Sierra Leone, Cameroon, Democratic Republic of Congo

**Field Visits:** Nigeria, Burkina Faso, Cameroon, Zambia, Malawi, and South Sudan
**Approach: where did we do the review?**

### 18 Countries included in the iCCM review

<table>
<thead>
<tr>
<th>Western Africa</th>
<th>Eastern Africa</th>
<th>Central Africa</th>
<th>Southern Africa</th>
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<tbody>
<tr>
<td>5. Senegal</td>
<td>5. Kenya</td>
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<tr>
<td>7. Mali</td>
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<tr>
<td>8. Sierra Leone</td>
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- In-country review: country-specific reports
- Desk review: country specific reports
- Desk review: no county-specific report
# Overview mHealth Initiatives

<table>
<thead>
<tr>
<th>Country</th>
<th>Other electronic Platforms/mHealth initiatives</th>
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</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>A small number of health service assistants were using smart phones with the CommCare app; service data are transmitted back to servers maintained by D-tree, but they are not integrated with DHIS 2 and presently only available to D-tree staff. A C-stock electronic data application for supply chain management was widespread. Plans were underway with UNICEF to integrate C-stock data into DHIS 2.</td>
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<td>Rwanda</td>
<td>The MOH’s vision was to strengthen the existing system. Rwanda had developed and scaled up a system called Rapid SMS that is designed to track referral and counter referrals between CHWs and health centers but is being expanded and could include ICCM reporting. The Rapid SMS is not yet linked to DHIS 2.</td>
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<td>South Sudan</td>
<td>mHealth had been piloted in the country by different partners implementing health system strengthening projects. Save the Children used mHealth applications for ICCM data collection in the past but is not currently doing so.</td>
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<tr>
<td>Uganda</td>
<td>In Uganda, a number of attempts had been made to deploy mobile reporting for VHTs. Challenges included the usability of the platforms due to low literacy levels among CHWs, phone connectivity, and poor infrastructure, i.e. power shortages. UNICEF/Uganda was using SMS-based reporting in one district, but reporting has also been low. DHIS 2 SMS-based reporting had also been deployed in four districts in Uganda but only on two maternal and perinatal indicators. The MOH of Uganda had been piloting an Android app but requires further funding to fully implement it.</td>
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<tr>
<td>Zambia</td>
<td>No mHealth system captures information related to IMCI or ICCM. There had been efforts and initiatives by some partners to capture a number of child health indicators. For instance, there is “Program Mwana,” supported by UNICEF, which helps in the management of HIV-exposed infants. Also, partners like Better Immunization Data are trying to pilot the electronic capture of immunization data.</td>
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*(Informal Scoping Paper, 2016)*