

**Management Information System (MIS) of the Integrated
Community Case Management (iCCM) of common childhood
illnesses of the L10K Project**

The Last 10 Kilometers Project

JSI Research & Training, Inc.



Addis Ababa, Ethiopia

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The Last Ten Kilometers (L10K): What it takes to Improve Health Outcomes in Rural Ethiopia is implemented by JSI Research & Training Institute, Inc., with grants from the Bill & Melinda Gates Foundation, UNICEF and USAID. The program covers about 25 million peoples in 229 woredas (i.e., districts) in Amhara, Oromia, Tigray, and the Southern Nations, Nationalities and Peoples' (SNNP) regions. The program strengthens the bridge between households and the primary health care unit (PHCU)—the basic health service delivery structure of rural Ethiopia—with the aim to increase demand, access and utilization of high impact reproductive, maternal, newborn and child health interventions to contribute towards achieving child and maternal health related Millennium Development Goals 4 and 5. (i.e., decrease child and maternal mortality rates, respectively). The L10K platform supports 12 Civil Society Organizations (i.e., L10K grantees) to implement community-based strategies to enhance the interactions among frontline health workers (i.e., mainly health extension workers [HEWs] and the health development army [HDA] members), households, and communities to achieve more, better, cost-effective and equitable MNCH services provided by the PHCUs.

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Abstract: L10K is supporting the Government of Ethiopia's scale-up of integrated Community Case Management (iCCM) of common childhood illnesses by incorporating the strategy with the health extension program (HEP). To monitor and evaluate iCCM in terms of its access, availability, quality and performance, L10K established a management information system (MIS), designed by UNICEF. This document outlines the iCCM Monitoring & Evaluation (M&E) framework of L10K and its implementation.

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Acronyms

CSOs	Civil Society Organizations
FMoH	Federal Ministry of Health
GoE	Government of Ethiopia
HDA	Health Development Army
HEP	Health Extension Program
HEW	Health Extension Worker
HC	Health Center
HMIS	Health Management Information System
HP	Health Post
iCCM	Integrated Community Case Management
IMNCI	Integrated Management of Neonatal and Childhood Illness
IR	Intermediate Result
JSI	JSI Research & Training Institute, Inc.
L10K	Last 10 Kilometers
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MUAC	Mid-Upper Arm Circumference
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHCU	Primary Health Care Unit
PRCMM	Performance Review and Clinical Mentoring Meeting
RHB	Regional Health Bureau
RMNCH	Reproductive, Maternal, Newborn, and Child Health
SNNPR	Southern Nations, Nationalities, and Peoples' Region
SS	Supportive Supervision
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

Introduction

The 2011 Ethiopian Demographic and Health Survey (EDHS 2011) indicates that the under-five mortality rate (U5MR) has been reducing over the past decade and is currently 88 deaths per 1,000 live births. However, the target for country's Millennium Development Goal (MDG) 4 is to reduce U5MR to 67 deaths per 1,000 live births by 2015. To accelerate progress towards MDG 4, the Government of Ethiopia (GoE) incorporated the integrated community case management (iCCM) of common childhood illnesses with its health extension program (HEP) in Amhara, Oromia, Southern Nation, Nationalities, and Peoples' (SNNP) and Tigray Regions covering more than 600 woredas (i.e., administrative districts, each with about 100,000 peoples). This entailed training more than 12,000 health extension workers (HEWs) and 2,400 HEW supervisors on iCCM and monitoring and evaluating the quality and performance of HEWs implementing iCCM. Since 2010, L10K has been supporting the GoE to scale-up iCCM. With funds from UNICEF and USAID, L10K is now supporting the scale-up of iCCM in 198 woredas.

The iCCM program has several objectives, which are as follows:

- **Objective 1:** Build the skills of HEWs to correctly assess, classify and manage common childhood illnesses.
- **Objective 2:** Build the skills of HEW supervisors and Woreda Health Office experts to properly mentor, supervise and coach HEWs on the management of sick children.
- **Objective 3:** Support regular and continuous follow-up, progress reviews, refresher training and supportive supervision to ensure quality service for sick children as per the integrated management of childhood illness (IMNCI) guidelines.
- **Objective 4:** Ensure uninterrupted supply of essential drugs and supplies for iCCM at Health Posts (HPs).
- **Objective 5: Health development army (HDA) members** oriented about iCCM to conduct active surveillance of cases and refer for treatment.
- **Objective 6:** Establish a mechanism of regular and continuous monitoring & evaluation (M&E) of iCCM.

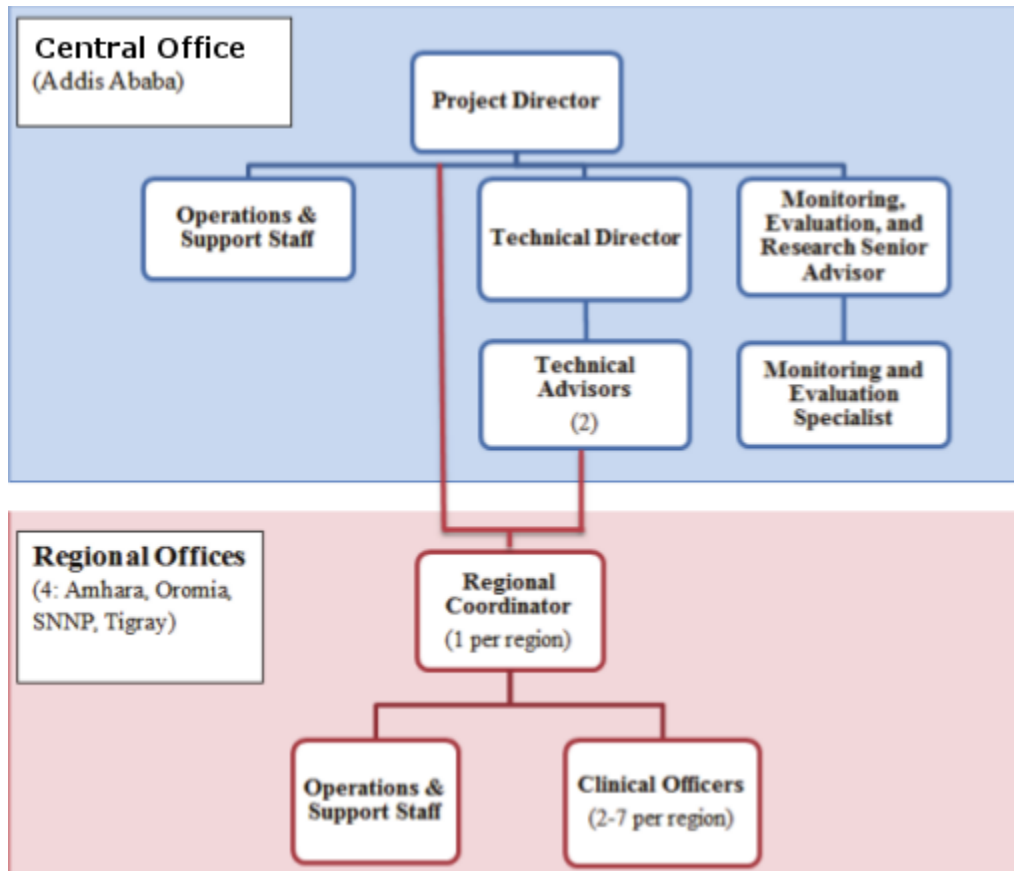
To achieve these objectives, the national iCCM activities included forums to develop implementation guidelines; training of trainers; orientation meetings; learning visits; and regular ongoing supportive supervision. To monitor and evaluate the scale-up of the iCCM, L10K established a management information system (MIS) that was designed by UNICEF. The MIS includes a database of all HEWs and their supervisors who were trained and the quality and performance of the HEWs on iCCM. For the latter, L10K staff members regularly perform supportive supervision, performance review meetings and clinical mentoring meetings during which time they extract data from the iCCM registers maintained by the HEWs. The data are then aggregated, analyzed and feedback is provided to the HEWs and reported to UNICEF and USAID. This document outlines the iCCM M&E framework of L10K and its implementation.

Overview of L10K/iCCM management structure

The organizational structure of the L10K/iCCM is diagrammed in **Figure 1**. The strategic planning, coordination, implementation, and M&E of iCCM is done by the technical staff at central office located in

Addis Ababa and the four regional offices. Approximately 17 Clinical Officers, each responsible for providing supportive supervision to the HEWs in 10 to 15 woredas, assess the quality of iCCM of childhood illnesses, collect performance reports, and provide clinical mentoring and feedback.

Figure 1. iCCM Organizational Structure



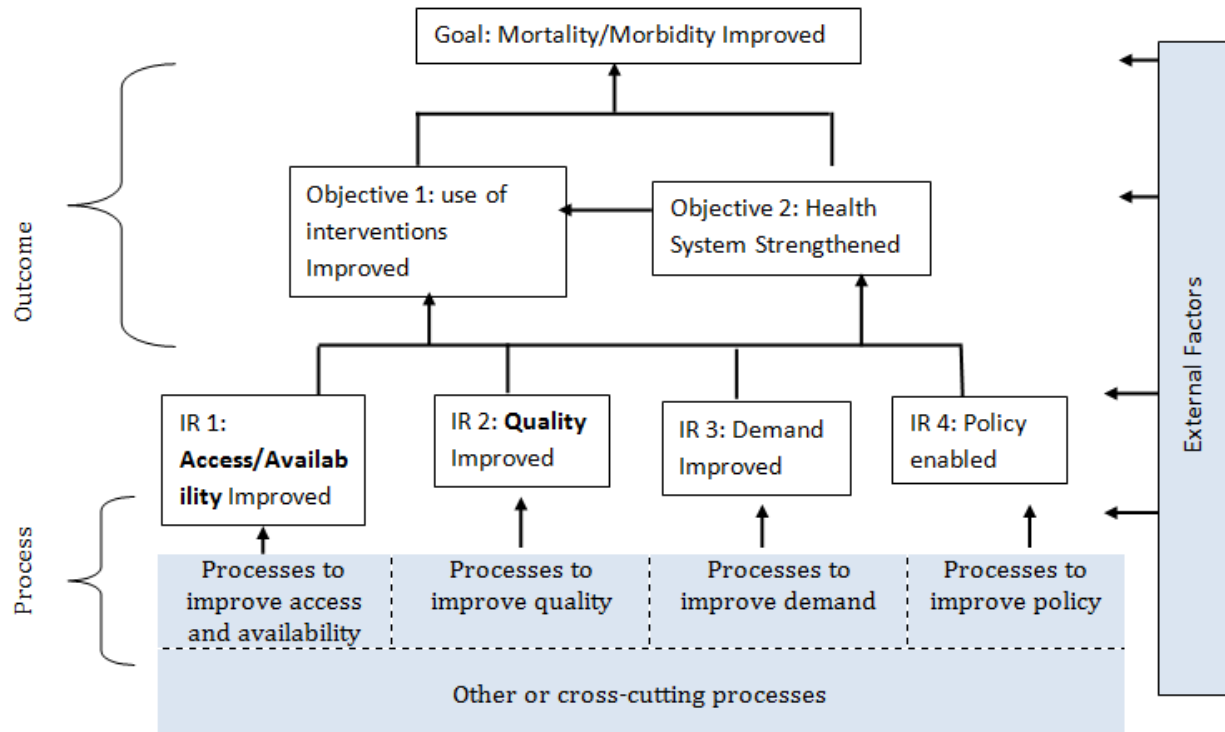
Monitoring and evaluation framework

The M&E system for the 113 woredas where L10K is implementing iCCM follows the applicable sections of the national framework described by UNICEF in its iCCM monitoring and evaluation plan¹. The M&E framework is outlined in **Figure 2**. **Figure 2** first lists the processes involved in iCCM, including those that improve access and availability, quality, demand, and policy, along with other and cross-cutting process. These processes in turn affect the intermediate results (IRs): 1) improved access/availability; 2) improved quality; 3) improved demand; and 4) enabled policy. These IRs together help achieve the two objectives: 1) use of interventions improved, and 2) health system strengthened (health management information system [HMIS], logistics, and supportive supervision). The strengthening of the health system also helps improve the use of interventions. Together the improved use of interventions and the strengthening of the health system result in the ultimate goal of improving mortality and morbidity. A variety of external factors (e.g., national policies, donor commitments) may affect this framework at all levels, i.e. the processes, intermediate results, objectives, and goals.

¹ UNICEF's "iCCM monitoring and evaluation plan." June 7, 2011

The iCCM monitoring system is especially concerned with measuring progress on the first three IRs, specifically, 1) improved access and availability, 2) improved quality, and 3) improved demand. Measuring these intermediate results is important because improvements in them will result in improvements in the two strategic objectives (use of iCCM interventions and strengthening of the health system), which in turn will result in improvements in child mortality and morbidity, the ultimate goal of iCCM.

Figure 2. UNICEF iCCM Monitoring and Evaluation Framework²



Sources of data

The major data sources of the iCCM MIS are training reports, and the iCCM registers maintained by the HEWs.

Training reports

The initial training for HEWs was a six day course led by specially trained implementers. HEW supervisors receive a seven day initial training course, which contains the material covered in the HEW training, plus additional training on supportive supervision. Trainings are documented using Forms A1, A2, and B, described below.

Data from the HEW trainings and HEW supervisor trainings is collected using the following forms:

² From UNICEF's "iCCM monitoring and evaluation plan." June 7, 2011.

- **Form A1: iCCM training report for HEWs.** One copy of this form is completed for each training session for HEWs. Data elements recorded include the date, location, and other identifying information about the training, a list of facilitators, a list of HEWs trained, the number of cases seen in clinical session, the clinical signs and classifications seen during the course, scores for pre-tests and post-tests, course evaluations, a list of HEWs and health posts that received a kit of iCCM materials, and feedback from training coordinators.
- **Form A2: iCCM training for HEW supervisors.** One copy of this form is completed for each training session for HEW supervisors. Data recorded includes all of the elements described above for Form A1, except for the list of HEWs and HPs that received a kit of iCCM materials.
- **Form B: Checklist for iCCM training quality assessment.** This checklist is completed after each training for HEWs and HEW supervisors by the training supervisors. It includes ratings for the quality of planning and preparation, the implementation of the training, and the overall quality of the training.

Copies of forms A1, A2, and B are included in the appendices.

HEW registers

HEWs keep two health registers at the health post: one for children aged 2-59 months and one for children aged 0-2 months. The registers serve as a tool for appropriately managing childhood illness cases; and provide data for program monitoring. The HEWs complete these registration books as they see patients. For each child the register records the following data: name, age, sex, weight, temperature, child's problems, and an assessment of symptoms (including cough, diarrhea, fever, ear problems, malnutrition, anemia, HIV status, immunization and vitamin A status, and feeding habits). Based on the recorded symptoms the HEW classifies the child's illness and records it. Based on the classification the treatment and advice is given to the child's caretaker and recorded. After conducting the recommended follow-up of the cases by the HEW the findings are also recorded. The data from these hard-copy registers is examined and data are extracted through two processes; supportive supervision and performance review and clinical mentoring meetings.

Supportive supervision

Health center staff and iCCM Clinical Officers regularly visit rural health posts to provide supportive supervision (SS) to the HEWs. These visits focus on documenting the quality of treatment, availability of supplies, and knowledge of HEWs. The data collected from iCCM registers during SS is recorded on Form C/Cb, described in more detail below. These forms are then inputted into a database and analyzed by regional and national iCCM offices on a quarterly basis.

A single SS visit typically takes a full work day, due to the need to travel to a HP and spend two to three hours at the health post talking with the HEW. Travel to remote health posts can be challenging for iCCM staff, especially during rainy season. While some woredas are very close the regional offices, others are extremely remote: for example, in Tigray some woredas are more than 1,000 km from the regional capital, and one health post is 300 kilometers away from the center of its woreda. Most SS activities are conducted by the iCCM Clinical Officers, whereas in a few remote areas, some staff

members of Bill & Melinda Gates Foundation funded L10K grantee organizations were trained to conduct SS visits as well; this is the case in 60 out of a total of 276 health posts in Tigray.

The criteria for accurately treating patients are strict: for instance, in one case observed in the preparation of this document a child with severe pneumonia was appropriately referred to the health center for severe pneumonia; the child subsequently received antibiotics at the health center and recovered fully. However, since the HEW did not also give the child the required pre-referral dose of antibiotic at the health post level this case was counted as being improperly treated.

Selection for SS visits

The first follow-up visit was completed six weeks after the initial training. After the initial follow-up visit, health center staff members visit each health post at least once per quarter, whereas the target for iCCM staff is to visit 25% of health posts in their region per quarter.

The Regional Coordinators prioritize which health posts to visit using prior monitoring data, prioritizing first the posts that have gone the longest without an SS visit, and then prioritizing by HEW performance during the last SS. Regional Coordinators generally do not have difficulty prioritizing health posts, as problems often became apparent due to difficulties in the training sessions, poor participation in the review meetings, or poor performance at prior supportive supervision visits.

The iCCM Clinical Officers conducting SS visits examine the previous SS forms before visiting the health post to identify past problem areas; these are transferred to the new form and addressed as possible.

Forms for SS data collection

Form C is completed during the first follow-up supportive supervision visit to a HEW at their HP. Form Cb collects the same information, but is used for subsequent follow-up supportive supervision visits. Both forms include identifying information for the HEW and health post/kebele, key issues from the previous visit (if applicable), the HEW quality review, data review, supply review, and knowledge review, and key findings/weaknesses that need to be improved. The review section of Forms C/Cb are described further below:

- **HEW quality review:** This section of Form C/Cb requires the supervisor to select the two most recent cases for each classification – pneumonia, severe pneumonia malaria, very severe febrile diseases or complicated measles, diarrhea with no or some dehydration, severe dehydration or dysentery, severe uncomplicated malnutrition, and severe complicated malnutrition – from each of the two HEW registration books: one for children aged two months to five years and one for infants aged zero to two months. The supervisor conducting the SS visit records whether the data in the HEW register support the assessment, treatment, and follow-up recorded in the register. The forms also include information about the outcomes of the recorded cases, and whether there were children checked for well child care during the reporting period. If clients visit the health posts during a supportive supervision visit, the supervisors conducting the visit then directly observe the care the clients receive, offering praise and critical feedback as necessary.
- **Data review:** This section of Form C/Cb includes a count of the number of children managed and reported by the HEW in the last calendar month, obtained by examining the HMIS reporting form.

- **Supply review:** This section of Form C/Cb includes a checklist of essential job aids in place on the day of the visit (e.g., chart booklet, registration book for children 2-59 months, registration book for children 0-2 months, and family health cards) and a checklist of essential functional equipment on the day of visit (e.g., watch, scale, MUAC tape, thermometers, and newborn Ambu-bag). This section also includes a checklist of oral drugs and supplies, including their current availability and stock-outs in the last month, as well as proper drug and supply storage. The presence of a functional oral rehydration therapy (ORT) corner is also recorded. Current availability of all supplies on the day of the SS visit is recorded, as well as stock-outs in the last 30 days; if supplies are stocked out for more than seven days, the health post is defined as having had a stock-out.
- **Knowledge of HEWs:** This section of Form C/Cb includes an assessment of HEW knowledge, answered while referring to job aids. Questions cover cough, diarrhea, ORS, danger signs, and essential newborn care actions. While answering the knowledge questions, HEWs are encouraged to consult their chart and not to memorize things while answering; this tests whether they can apply the knowledge in practice as they are expected to use the book as they work.

A copy of Form C is included in the appendices.

Feedback during SS

The thorough and representative data collected through SS is the backbone of the iCCM monitoring process. In addition to being a source of monitoring data, SS visits are an opportunity for HC and iCCM staff to analyze the performance of HEWs and give both encouragement and critical feedback.

When giving feedback, the iCCM officers try to help the HEW realize the solution for themselves, rather than lecturing them. For example, if the HEW has a low caseload, the iCCM staff conducting the supportive supervision would help the HEWs realize that they may need to work with the HDA more intensively to mobilize the community and stimulate demand. Likewise, with a drug stock-out the HEWs may want to simply refer clients to the health center to be treated there, whereas they should call the health center for an updated supply of drugs so as to be able to treat clients closer to home.

The iCCM staff try to promote a friendly, productive relationship with HEWs during health post visits – this is in fact one of the main tactics of supportive supervision. Punitive measures (such as firing) and other incentives are not an option, so iCCM staff must strive to motivate HEWs through strong interpersonal relationships.

Performance Review and Clinical Mentoring Meetings

Performance review and clinical mentoring meetings (PRCMM) are three-day meetings conducted every six months at the woreda level. PRCMMs have been conducted in all 113 woredas and the second phase of review meetings is currently under way. These meetings are an important opportunity to both encourage the HEWs and to identify potential problems. In contrast to the supportive supervision visits, where the focus is on the quality of care for a limited number of cases for the selected posts that are visited, the PRCMM is an opportunity to collect data on all cases managed by HEWs in the woreda during a specific time period. The PRCMMs are thus essential for monitoring the overall performance of iCCM.

At the review meetings, Regional Coordinators and Clinical Officers examine HEW registration books for sick child (SC) and sick young infant (SYI) to extract and aggregate data program performance monitoring. For each of common childhood illnesses covered by iCCM the major program performance indicators that were captured were caseload, consistency in classification, treatment, and follow-up within cases against the protocol.

The program performance monitoring based on PRCMMs provide information on which health posts and woredas are doing better or worse, and these qualitative impressions are some of the most valuable monitoring tools for the regional office staff because they help them quickly assess which areas need more assistance.

Some PRCMMs have been delayed because of other priorities at the woreda level (i.e., the regional health bureaus [RHBs] were not prioritizing the scheduling of iCCM review meetings over other activities). The regional manager must thus works closely with the RHBs and woreda health officials to schedule the review meetings.

Other routine monitoring systems

In addition to the iCCM reporting system, HEWs also report cases through the GoE's Health Management Information System (HMIS). HEWs also report specific notifiable diseases that might cause local epidemics through a separate disease surveillance system (via phone).

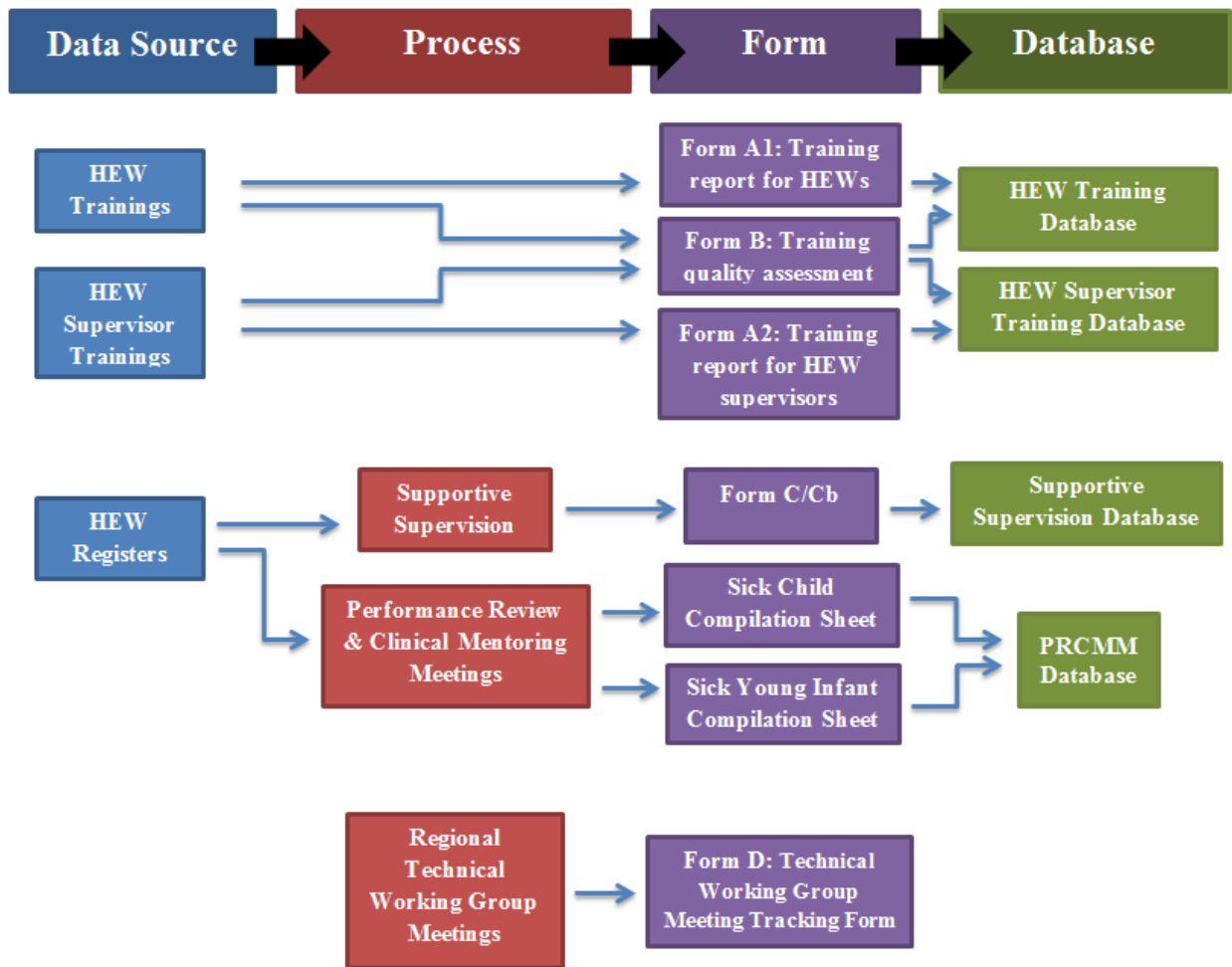
Data compilation and use

The HP/kebele-level data are kept using paper tally sheets and register books. These data are then aggregated according to the process shown in **Figure 3**.

The Clinical Officers input each of the forms collected (Forms C and Cb) using a custom-designed EpiInfo interface. Inputting the forms using EpiInfo improves data quality by taking advantage of the program's sophisticated skip patterns and checks for internal consistency.

The regional manager then checks to ensure that all woredas that have had supportive supervision during that quarter are included in the data. The regional manager then sends this combined quarterly database to the L10K Monitoring and Evaluation and Research (M&E&R) Specialist in Addis Ababa. The M&E&R Specialist checks the data for completeness, and then conducts initial data analysis, sometimes with the assistance of the M&E&R Senior Advisor for L10K and iCCM. After two to three weeks, feedback is sent back to the four Regional Coordinators, who then communicate the findings and recommendations to the Clinical Officers.

Figure 3. iCCM data collection and storage



Quarterly progress report to UNICEF

The M&E&R Specialist writes a quarterly progress report that is sent to UNICEF. This report typically includes data in the form of a number of tables (represented by dummy tables 1-5 below), along with narrative text describing iCCM accomplishments and challenges during the quarter. The quarterly progress report focuses on regional and national analysis and does not break results down to the health post or woreda level. The following tables are included in the quarterly progress report:

Table 1: Total number of health workers who received IMCI training during this quarter, by region

Region	No. of sessions	Total No. of Health Workers targeted	No. of Health Workers trained this quarter	% covered
Amhara				
Oromia				
SNNP				
Tigray				
Total				

Table 2: Total number of health posts visited for start-up and 2nd round supportive supervision visits during this quarter, by region

Region	No. of HPs visited for follow-up this quarter		No. of Health Workers trained this quarter			Coverage (%) achieved in targeted HPs	
	Start-up	2nd round	Start-up	2nd round	3rd round	Start-up	2nd round
Amhara							
Oromia							
SNNP							
Tigray							
Total							

Table 3: Total number of woredas and health posts that received a 1st and 2nd round PRCMM during this quarter, by region

Region	1st round PRCMM		2nd round PRCMM	
	No. Woredas covered for reporting period	No. of woredas covered to date	No. of Woredas covered for reporting period	No. of woredas covered to date
Amhara				
Oromia				
SNNP				
Tigray				
Total				

Table 4: Total number of woredas and health posts covered with a 2nd round PRCMM and number of sick children under the age of five years managed by HEWs, by sex and age

Region	No of Woredas	No of HPs	Total number of cases (age 2-59 months)			Total number of cases (age 0-2 months)		
			Male	Female	Total	Male	Female	Total
Amhara								
Oromia								
SNNP								
Tigray								
Total								

Table 5: Total number and type of cases (among sick children 2-59 months of age) assessed and treated by HEWs (data collected during PRCMM), by region

Description of data	SC cases (2-59 months)				
	Amhara	Oromia	SNNP	Tigray	Total
Number of HP					
Pneumonia					
P/Sever/S diarrhea/Dysentery					
Diarrhea(some)					
Diarrhea(no)					
Malaria					
Severe Uncomplicated Malnutrition					
Severe Complicated Malnutrition					
Measles with eye complication					
Measles					
Rx with Cotrimoxazole					
Rx with ORS					
Rx with Coartem					
Rx with Chloroquine					

Regional coordination meetings

In addition to activities conducted by iCCM staff, interactions with other organizations are essential for the success of monitoring activities. The iCCM regional offices participate in a monthly meeting with the RHB as part of the Child Survival Technical Working Group, a body that includes the RHB, L10K/ iCCM, and other NGOs that do related work. During these meetings, representatives from these organizations discuss achievements related to child survival, along with difficulties that need to be overcome. Thus these meetings serve as a venue for distributing results of the iCCM monitoring system, but also provide valuable qualitative monitoring information on the program and regional health activities as a whole.

During these meetings, iCCM shares some of the routine data in which the RHB is most interested, such as caseload and service utilization information. Newly identified problems, such as a particular health post not being open, are raised at the meetings as well. The data from the iCCM monitoring system are thus useful at these meetings.

Form D, the “iCCM National and Regional Technical Working Group Meeting Tracking Form” is completed during each meeting. This form records the date, venue, participating partners, agenda points discussed, and main decisions or agreements arrived at for each meeting of national and regional technical working groups. A copy of Form D is included in the appendices.

Feedback to woreda and community levels

While iCCM staff members give general updates to the RHB, they often discuss more specific problems with woreda level staff. The Regional Coordinators and Clinical Officers work directly with the health centers and woreda-level health staff, as these officials are closer the ground and thus more able to deal with problems that arise at the health post and community level.

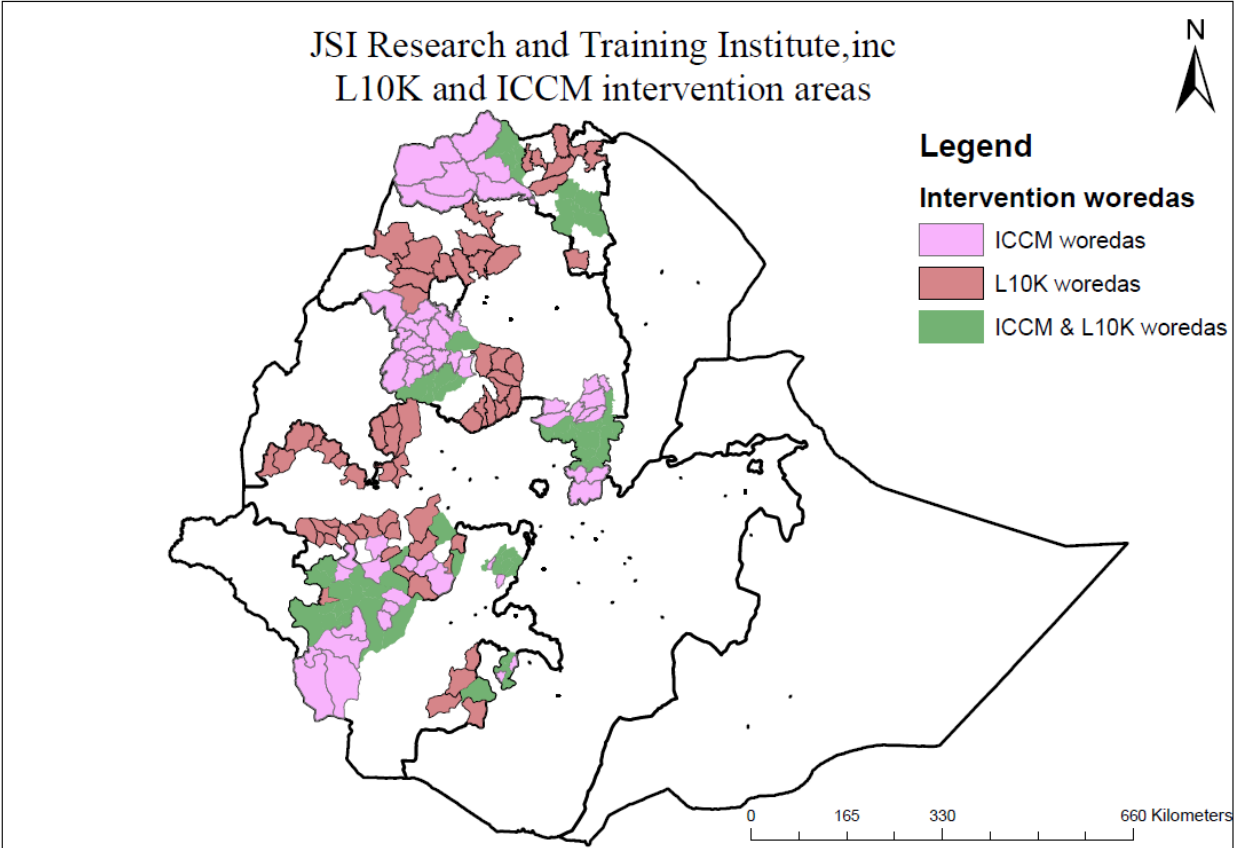
Conclusion

Establishing a mechanism for continuous monitoring and evaluation is one of the objectives of iCCM. UNICEF's M&E framework for iCCM calls for tracking several Intermediate Results, including access, availability and quality of case management and provides feedback, accordingly. The HMIS described in this document serves as the backbone of the iCCM M&E framework and contributes to fulfill these objectives.

The iCCM registers are designed to assist the HEWs to follow the iCCM protocol for classification, treatment and follow-up of diseases. The HMIS draws data from HEW and HEW supervisor trainings and from HEW registers, through processes that include SS and PRCMM. The data are entered into databases from a number of standardized forms, and this data is then analyzed to create quarterly progress reports for UNICEF and to give feedback to the regional iCCM offices. The awareness of iCCM progress and challenges created by this continuous data monitoring helps L10K/iCCM staff ensure that the program achieves its objectives.

L10K is now expanding implementation of iCCM to a total of 198woredas. As L10K/iCCM expands coverage to these additional woredas, the HMIS will be essential to its success. Rigorous implementation of iCCM—reinforced by routine program monitoring—is bringing proven case management techniques for childhood illnesses to the kebele level in Ethiopia, accelerating Ethiopia's progress towards meeting MDG 4.

Appendix 1: Map of L10K and iCCM intervention areas



Appendix 2: Photographs

Photo 1: Tigray Regional Coordinator and a Health Extension Worker review one of the treatment registration books.



Photo 2: Tigray regional iCCM staff members and Health Extension Worker review the health post's supplies of materials.



Appendix 3: Form C

Implementing NGO partner _____

Form C: ICCM Supportive Supervision/ Follow up checklist

I. Identification

Region _____ Zone: _____ Woreda: _____ Kebele/H. Post: _____
Kebele's total # of population; _____; Total # <5 population _____
Name of supervising health centre: _____
Name of HEW in charge: _____ date of visit (dd /mm/yyyy) _____ Lead supervisor's name: _____ Responsibility _____ Organization _____
Period covered since last visit: _____ weeks.
Direct Case Observation made: Yes ___ No ___ Number of sick <5 observed: _____; SC* ___ SYI** ___
ICCM registration book reviewed: Yes ___ No ___ # of sick <5 whose case has been reviewed ___; SC ___ SYI ___

II. HEW case management performance (quality of care) assessment of the last 10 Sick children

Main symptoms found in sick child 2 month to 5 year	#classifications seen=A	Agreement between case management tasks		
		Assess and Classify = B	Classify and treat (DSD)*** = C	Classify & Stated f/ up date =D
		#Agree	#Agree	# agree
Cough/difficult breathing				
Fever				
Diarrhea				
Malnutrition				
Total classifications seen in SC				
Age below 2 months				
Possible serious bacterial infection/ severe disease				
Total classifications seen in SYI				

*SC= sick child; **SYI= sick young infant; ***DSD= Correct Dose, Schedule and Duration.

Guide on how to fill the grid

- A= Tally the # of classifications given by the HEW against each main symptom found, assessed, and checked among the reviewed < underfive children
- B= Tally the # of classifications that agree with assessment against each main symptom found and checked among the reviewed < underfive children.
- C= Tally the # of classifications that agree with treatment against each main symptom found and checked among the reviewed < underfive children.
- D= Tally the # classifications that agree with the follow up given by the HEW (when the sick <5 has more than one health problem take the shortest date that comes first and assume as if that child has received f/up care for the rest)

**IIa. Children with severe classifications and parent's compliance to referral recommendation
(From iCCM register review)**

# of children with severe classifications (as given by HEW)	# recommended with referral	# complied to referral recommendation	Remarks

**IIb. Children with none severe classifications and parent's compliance to follow up within treatment period
(From iCCM register review of follow up outcomes)**

# of children with non-severe classifications (as given by HEW)	# recommended with referral	# complied to recommendation	Remarks

**IIc. Treatment outcome of children managed by HEW in the health post/community in the reporting period
(From iCCM register review of follow up outcomes)**

Total # managed and received f/up care	outcomes					Remarks
	# The same	# Improved	# Worsened	Died	Unknown (didn't receive f/up care or outcome not recorded)	

II d. Children checked for well child care in the reporting period (register review)

Age of sick child	Total #	Checked for Immunization	checked for vitamin A	Checked for deworming	Remarks
≥ 6 months			Yes No		
<24 months		Yes No			
≥24 months				Yes No	

IIe. # of Children managed for classification in the reporting period (register review)

No	Classification	# F	# M	remark
1	Pneumonia			
2	Diarrhea			
3	Malaria			
4	Measles			
	Measles with eye/mouth complication			
5	Severe uncomplicated malnutrition			
6	Severe complicated malnutrition			
7	All children with severe classification seen			
8	All episodes of classifications seen			
Sick young infant				
1	Very sever disease			
2	Local bacterial infection			
3	All episodes of classifications seen			

III Immunization coverage Plan performance chart; EFY

Antigen	Quarter I		Quarter II		Quarter III		Quarter IV		Annual		Remarks
	#	%	#	%	#	%	#	%	#	%	
Pentavalent 3											
Measles											
TT2+ Pregnant											

IV. Logistics

IVa. Essential Job aids in place (in use) on the day of visit (Put a √ mark)

	Item	Yes	No	Remark
1	Chart booklet			
2	IMNCI Registration books			
3	Family health card			
4	OTP card (where service is available)			

IVb. Essential Equipments on the day of visit

	Item	Yes	No	Remark
1	Watch with second's arm			
2	Weighing scale - Baby lying or Salter scale with bowel			
3	MUAC tape			
4	Thermometer			
5	Newborn Ambu-bag			

IVc. Drugs and supplies (Put a √ mark)

No	Oral drugs and supplies	Last date procured	Available on day of visit (√)		Out of stock in the last one month (√)		Remarks
		Dd/mm/yyyy	Yes	No	Yes	No	
1	ORS						
2	Cotrimoxazole						
3	<i>Artemether Lumefentrine (Coartem)</i>						
4	RUTF (Plumpy nut or BP100) -eligible health post						
5	Amoxicillin for OTP						
6	Mebendazole / Albendazole						
7	Vitamin A						
8	Zinc tablets						
9	Paracetamol						
10	TTC eye ointment						
11	Vitamin K						
12	2cc syringe and needle						
13	RDT reagent						

Vid: Drugs and supplies stored in appropriate manner Yes No

Appropriate manner includes all of the following:

- 1) Storage is free from rodents or insects
- 2) Protected from sunlight
- 3) Sufficient space for the quantity
- 4) Dry space and free from flooding

V. ORT corner

(Put ✓ mark)

Service	Yes	No
ORT corner available (at least; a measuring jug, 2 cups, spoon, clean water, ORS)		
ORT corner functional (ORS solution given according to Plan B-registered)		

VI. Has the HP/HEW received supervisory visit in the last 3 months? 1. Yes b. No

VII. How are you working with VCHW to strengthen the implementation of iCCM?

VIII. Assessment of Knowledge –tell HEW to refer her job aids to answer the questions

Cough or difficult breathing

1. What is the correct breathing per minute cut off for the following?

- a) Infant less than 2 month _____ (60/min) correct: Y/N _____
- b) Child 2-12 months _____ (50/min) correct: Y/N _____
- c) Child 12-59 months _____ (40/min) correct: Y/N _____

2. Could you tell the correct doses of co-trimoxazole for?

- a) Sick child weighing 7kg Y/N _____
- b) Sick child age 12 to 59 months Y/N _____

Diarrhea

3. What are the 4 rules of home management for a child with diarrhea (plan A)? (Do not prompt)

- a. Give extra fluid (breastfeed more frequently for EBF infant) Y/N _____
- b. Continue feeding Y/N _____
- c. Give zinc Y/N _____
- d. When to return Y/N _____

4. Could you tell the correct amount of ORS for a child with some dehydration?

- a) Sick child weighing 10 kg Y/N _____
- b) Sick child age 6 months Y/N _____

5. What are the General Danger Signs (GDS) in a sick child 2 months up to 5 years?

6. What are the signs of possible serious bacterial infection (PSBI)/ severe disease in the sick young infant birth to 2 months?

(Mark all that are noted, without prompting)

<u>GDS 2 months to 5 years</u>	Y/N	<u>PSBI/severe disease signs under 2 months</u>	Y/N
Lethargic or unconscious		Not feeding well	
		Convulsions	
Unable to drink or breastfeed		Fast Breathing	
		Severe chest indrawing	
History Convulsions		Grunting	
		Fever or low body temperature	
Persistent vomiting		Movement only when stimulated	
		No movement even when stimulated	

7.

Actions			
		Yes	No
1	Deliver baby on to mother's abdomen or into her arms		
2	Dry baby's body with dry towel; wipe eyes; wrap with another dry one and cover head		
3	Assess breathing, if not breathing or gasping or if breathing is <30 breaths per minute, then resuscitate.		
4	Tie the cord two finger from abdomen and another tie two fingers from the 1st one. Cut between the two ties and separate the baby from the placenta.		
5	Place the baby in skin-to skin contact with his mother and on the breast to initiate breastfeeding		
6	Apply Tetracycline eye ointment once to the newborn's eyes		
7	Give Vitamin K, 1mg IM on anterior mid thigh		
8	Weigh baby properly		
	Advice mother to delay bathing of the baby for 24 hours after birth		
	Provide 4 postnatal visits during at 6-24 hour, 3 rd day, 7th day and 6 th week		

Mention the Essential Newborn Care actions

(Put √ mark)

IX. Summarize the findings and secure agreement from the HEWs

IX a. Main Positive Findings (strengths):

1. _____
2. _____
3. _____
4. _____

IX b. Findings that need to be improved (weaknesses):

s. n.	Major Findings that need to be improved	Action taken
1		
2		
3		
4		

IX c. Further suggestions if any:

Annex: Sick child and sick young infant record forms for direct case observation

MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEAR																	
Name: _____ Age: _____ Sex: _____ Weight: _____ Temperature: _____ °C																	
ASK: What are the child's problems? _____ Initial visit? ___ Follow-up Visit? ___																	
ASSESS (Circle all signs present)		CLASSIFY															
CHECK FOR GENERAL DANGER SIGNS																	
NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS	LETHARGIC OR UNCONSCIOUS CONVULSING NOW	General danger signs present Yes__ No__															
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes__ No__																	
For how long? ___ Days	Count the breaths in one minute. ____ breaths per minute. Fast breathing? Look for chest indrawing. Look and listen for stridor.																
DOES THE CHILD HAVE DIARRHEA? Yes__ No__																	
For how long? ___ Days Is there blood in the stool?	Look at the child's general condition. Is the child: Lethargic or unconscious? Restless or irritable? Look for sunken eyes. Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? (slowly less than 2 seconds)																
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature > 37.5 °C or above) Yes__ No__																	
Malaria Risk: High Low No if low or no malaria risk, then ask: Has the child travelled outside this area during the last one month? If yes, has he been to a malarious area? For how long has the child had fever? ___ Days If more than 7 days, has fever been present every day? Has child had measles within the last three months?	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES: Generalized rash and One of these: cough, runny nose, or red eyes. <i>Do RDT: Positive__ Negative__ Not done__</i>																
If the child has measles now or within the last 3 months:	Look for mouth ulcers. Look for pus draining from the eye. Look for clouding of the cornea.																
DOES THE CHILD HAVE AN EAR PROBLEM? Yes__ No__																	
Is there ear pain? Is there ear discharge? If Yes, for how long? ___ Days	Look for pus draining from the ear_																
THEN CHECK THE SICK CHILD BELOW 6 MONTHS OF AGE FOR MALNUTRITION																	
	<ul style="list-style-type: none"> • Look For visible severe wasting • Look for pitting oedema of both feet. 																
THEN CHECK FOR MALNUTRITION THE SICK CHILD AGE 6 MONTHS AND ABOVE																	
	<ul style="list-style-type: none"> • Measure MUAC MUAC Less than 11cm MUAC 11 cm to <12 cm MUAC ≥12 cm and above • Check for Pitting oedema of both feet • Complication: Pneumonia, watery diarrhoea/dysentery, fever • If MUAC <11cm or oedema of both feet and no medical complication do appetite test: fail/ pass 																
THEN CHECK FOR ANEMIA																	
	Look for palmar pallor: Severe pallor? Some pallor?																
CHECK FOR POSSIBLE SYMPTOMATIC HIV INFECTION Ask: what is the HIV status of the mother Positive__, Negative__, Unknown__ What is the HIV status of the child Positive__, Negative__, Unknown__																	
CHECK THE CHILD'S IMMUNIZATION (age<2 year) AND VITAMIN A STATUS Circle immunizations/vitamin A needed today.		RETURN FOR NEXT IMMUNIZATION/ VITAMIN A ON:															
<table style="width:100%; border: none;"> <tr> <td style="border: none;">BCG</td> <td style="border: none;">Pentavalent-1</td> <td style="border: none;">Pentavalent-2</td> <td style="border: none;">Pentavalent-3</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Pneumococcal-1</td> <td style="border: none;">Pneumococcal-2</td> <td style="border: none;">Pneumococcal-3</td> </tr> <tr> <td style="border: none;">OPV 0</td> <td style="border: none;">OPV 1</td> <td style="border: none;">OPV 2</td> <td style="border: none;">OPV 3</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Measles</td> <td style="border: none;">VITAMIN A</td> <td style="border: none;">Mebendazole / Albendazole</td> </tr> </table>	BCG	Pentavalent-1	Pentavalent-2	Pentavalent-3		Pneumococcal-1	Pneumococcal-2	Pneumococcal-3	OPV 0	OPV 1	OPV 2	OPV 3		Measles	VITAMIN A	Mebendazole / Albendazole	_____ (DATE)
BCG	Pentavalent-1	Pentavalent-2	Pentavalent-3														
	Pneumococcal-1	Pneumococcal-2	Pneumococcal-3														
OPV 0	OPV 1	OPV 2	OPV 3														
	Measles	VITAMIN A	Mebendazole / Albendazole														
ASSESS CHILD'S FEEDING if child has ANEMIA OR MODERATE ACUTE MALNUTRITION or is less than 2 years old.																	
FEEDING PROBLEMS:																	
Do you breastfeed your child? Yes__ No__ If Yes, how many times in 24 hours? ___times. Do you breastfeed during the night? Yes__ No__ Do you empty one breast before you shift to the other one ? Does the child take any other food or fluids even water? Yes__ No__ If Yes, what food or fluids? How many times per day? ___times. What do you use to feed the child? If the child has moderate acute malnutrition: How large are servings? Does the child receive his own serving? ___ Who feeds the child and how? During this illness, has the child's feeding changed? Yes__ No__, if Yes, how? _____																	
ASSESS FOR OTHER PROBLEMS		COUNSEL THE MOTHER ABOUT HER OWN HEALTH															

MANAGEMENT OF THE SICK YOUNG INFANT AGE BIRTH UP TO 2 MONTHS

Name: _____ Age: _____ Sex: _____ Weight: _____ kg Temperature: _____ °C

ASK: What are the infant's problems? _____ Initial visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present)

CLASSIFY

<p>ASSESS FOR BIRTH ASPHYXIA (immediately after birth)</p>	<p>Not breathing Is breathing poorly (less than 30 per minute) Gasping</p>	
<p>ASSESS FOR BIRTH WEIGHT AND GESTATIONAL AGE (the first 7 days of life)</p> <p>Ask gestational age; <32 wks, 32-<37wks, ≥ 37wks</p>	<p>7 days of life</p> <p>Weigh the baby: <1500g, 1500-<2500g, ≥2500g</p>	
<p>CHECK FOR POSSIBLE BACTERIAL INFECTION /SEVERE DISEASE and JAUNDICE</p> <ul style="list-style-type: none"> • Has the infant had convulsions? • Has the infant stopped feeding well? 	<ul style="list-style-type: none"> • Count the breaths in one minute. ____ breaths per minute Repeat if 60 or more ____ Fast breathing? • Look for severe chest indrawing. • Look and listen for grunting. • Look at umbilicus. Is it red or draining pus? • Fever (temperature ≥ 37.5°C or feels hot) or body temperature below 35.5°C (or feels cool) • Look for skin pustules. • Look at young infant's movements. Does the infant move only when stimulated? Does the infant not move even when stimulated? • Look for jaundice? Are the palms and soles yellow? Are, skin on the face or eyes yellow? Is age less than 24 hours or more than 14 days 	
<p>DOES THE YOUNG INFANT HAVE DIARRHOEA?</p> <ul style="list-style-type: none"> • For how long? _____ Days • Is there blood in the stools? 	<p style="text-align: center;">Yes _____ No _____</p> <ul style="list-style-type: none"> • Look at the young infant's general condition: Does the infant move only when stimulated? Does the infant not move even when stimulated? Is the infant restless or irritable? • Look for sunken eyes. • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? 	
<p>CHECK FOR HIV INFECTION</p> <p>Ask: what is the HIV status of the mother Positive _____, Negative _____, Unknown _____ What is the HIV status of the child Positive _____, Negative _____, Unknown _____</p>		
<p>THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT</p> <ul style="list-style-type: none"> • Is the infant breastfed? Yes _____ No _____ If Yes, how many times in 24 hours? _____ times • Do you empty one breast before switching to the other? Yes ___ No ___ • Do you increase frequency and length of breastfeeding during illness? Yes ___ No ___ • Does the infant receive any other foods or drinks, even water? Yes ___ No _____ If Yes, ask for any reason and how often? if yes what do you use to feed the child? 	<ul style="list-style-type: none"> • Determine weight for age. Low ___ Not Low ___ 	
<p>If the infant is feeding less than 8 times in 24 hours, is taking any other food or drinks, or is under weight for age AND has no indications to refer urgently to hospital:</p> <p>ASSESS BREASTFEEDING:</p> <ul style="list-style-type: none"> • Has the infant breastfed in the previous hour? - If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes. - If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again • Is the infant positioned well? To check positioning, look for: <ul style="list-style-type: none"> - Infant's head and body straight Yes ___ No ___ - Facing the breast nose against nipple Yes ___ No ___ - Infant's body close to mother's body Yes ___ No ___ - Mother supporting the whole body Yes ___ No ___ 	<ul style="list-style-type: none"> • Is the infant able to attach? To check attachment, look for: <ul style="list-style-type: none"> - Chin touching breast Yes ___ No ___ - Mouth wide open Yes ___ No ___ - Lower lip turned outward Yes ___ No ___ - More areola above than below the mouth Yes ___ No ___ <p style="text-align: center;">no attachment at all not well attached good attachment</p> <ul style="list-style-type: none"> • Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)? <p style="text-align: center;">not suckling at all not suckling effectively suckling effectively</p> <ul style="list-style-type: none"> • Clear blocked nose if it interferes with breastfeeding • Look for ulcers or white patches in the mouth (thrush). 	
<p>CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS</p> <p style="text-align: center;">Circle immunizations needed today.</p> <p>BCG _____ Pentavalent-1 _____ Pneumococcal-1 _____</p> <p>OPV 0 _____ OPV 1 _____</p>		<p>Return for next immunization on: _____ (Date)</p>
<p>ASSESS OTHER PROBLEMS:</p>	<p>COUNSEL THE MOTHER ABOUT HER OWN HEALTH</p>	

Appendix 4: Form D

Form D: ICCM National and Regional Technical Working Group Meeting Tracking Form

No	Date	Venue	Partners participated	Main agenda points discussed	Main decisions/agreements	Remarks