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OPERATIONAL MANUAL FOR TEMPORARY MALARIA CLINICS ETHIOPIA

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Recommended Citation: Y. Petros, A. Gebreyohannes**,** M Tilaye, S Girma, G Dissanayake, H Teka, M Murphy, S Chibsa, T Demisse, M Haile, June 2020. *Operational Manual for Temporary Malaria Clinics, Ethiopia*. Rockville, Maryland: The Private Health Sector Project, Abt Associates Inc.

Contract Number: AID-663-LA-16-00001

Submitted to: United States Agency for International Development (USAID)/PMI

ACRONYMS

AL	Artemether-Lumefantrine
DHO	District Health Office
EDT	Early Diagnosis and Treatment
HMIS	Health Management Information System
IEC	Information Education Center
IMNCI	Integrated Management of Newborn and Child Illness
MMW	Mobile and Migrant Worker
ODK	Open Data Kit
PHEM	Public Health Emergency Management
PHSP	Private Health Sector Project
PMI	President's Malaria Initiative
RHB	Regional Health Bureau
RDT	Rapid Diagnostic Test
RRF	Report and Requisition Form
USAID	United States Agency for International Development

ACKNOWLEDGEMENTS

This manual was prepared by the Private Health Sector Project (PHSP) under contract AID-663-LA-16-00001. We appreciate the President's Malaria Initiative (PMI) and the United States Agency for International Development (USAID) for supporting its preparation, review, and dissemination. We would like also to extend our appreciations to the malaria prevention and control units of RHBs in Benshangul Gumuz, Amhara, Tigrai, and owners of the farms in these regions who partnered with PHSP to pilot and implement the malaria case management in temporary clinics

BACKGROUND

Malaria is a major public health problem in Ethiopia, as 60% of the population lives in areas where the disease is endemic. *P. falciparum* and *P. vivax* are the predominant parasite species causing malaria in Ethiopia—*P. falciparum* causes about 60% and *P. vivax* about 40%. *P. falciparum* is the leading parasite species in malaria epidemics, and it causes the severe and complicated manifestations that account for almost all malaria deaths in Ethiopia. [1]

The rapid growth of the population overall, added to the scarcity of arable land in the high and midland areas and increased investment opportunities in agricultural activities in the fertile lowlands of Ethiopia have led to large seasonal population shifts into lowland areas such as Benishangul-Gumuz and Gambella regions, and the western parts of Amhara and Tigray regions. The majority of agricultural workers are seasonal migrants: they reside in an area for less than six months, or between six months and one year. As they move into high transmission areas to work, they face increased exposure to malaria infection, and the risk of progression to severe disease and death is high. Infected workers also may serve as carriers of the malaria parasite and unwittingly spread the disease to where malaria transmission is low or non-existent.

Early diagnosis and treatment (EDT) is essential to reduce malaria transmission in areas with high migrant flows and to reduce the severity of symptoms and death. EDT also is needed to reduce the parasite reservoir and lower the risk of onward transmission (which is of particular concern in an elimination or pre-elimination setting). EDT can be achieved by strengthening public and private sector health services and implementing innovative approaches that increase access to malaria care and treatment services for mobile and migrant workers (MMWs) located in remote locations.

Where access to EDT is limited or non-existent, MMWs who contract malaria have limited options for care and treatment. They are likely to turn to self-medication, use sub-standard or counterfeit pharmaceuticals (which can contribute to drug resistance and onward transmission of malaria), or forgo treatment of any kind. Even if a health facility exists, symptomatic migrants may avoid seeking care for fear of losing their job while sick, and delayed treatment increases the severity of malaria and the risk of transmission and death. Any of these alternatives to EDT are inadequate and hinder efforts to suppress malaria transmission.

The Private Health Sector Project (PHSP) is a five-year project (October 2015–October 2020) funded by the United States Agency for International Development (USAID) and the President's Malaria Initiative (PMI). PHSP aims to improve the provision of critical public health services, including for malaria, by fostering partnerships between the public and private health sectors. These partnerships will expand the availability of high-quality care at an affordable cost and strengthen the capacity of private health providers to provide the care. One PHSP effort in several regions of Ethiopia has been to support the establishment of temporary malaria clinics in private businesses that employ migrant workers, with the participation of the public health sector.

Based on PHSP's experiences, this manual provides guidance for establishing temporary malaria clinics for MMWs and strengthening malaria management services. The step-by-step guide outlines the procedures involved in providing malaria diagnosis and treatment services at the temporary clinics, as a means to sustain improved performance in malaria case management and treatment.

[1]Federal Democratic Republic of Ethiopia, National Malaria Guidelines, Addis Ababa: November, 2017.

INTRODUCTION

More than one million seasonal MMWs are deployed to work on farms in food crops production, floriculture, and horticulture, and on sugar cane plantations and construction sites. Deployments are often to malaria-endemic lowlands, during the high malaria transmission season. Except for farms run by governmental organizations such as the Ethiopian Sugar Corporation, international organizations, and indigenous organizations, most farms that employ MMWs do not have health facilities that provide malaria diagnosis and treatment to their employees at their work places.

Most health facilities in towns near farms in Benishangul-Gumuz, Gambella, Amhara, and Tigray regions are private primary clinics that lack microscopy services and medical professionals trained in malaria diagnosis and treatment. Additionally, migrant workers do not have access to information about malaria prevention and treatment and therefore do not seek professional care in a timely manner. Innovative approaches are needed to improve the provision of malaria care and treatment in areas with a large presence of MMWs. Between 2015 and 2020 PHSP provided technical assistance and financial support to the regional health bureaus (RHBs) in the four aforementioned regions to establish 37 temporary malaria clinics at private workplaces that employ large numbers of MMWs for periods of three to five months (August–December). Temporary clinics are a cost-effective way to expand malaria care management. The innovative approach has increased access to malaria diagnosis and treatment and prevented complications and deaths due to malaria and drug resistance.

Temporary clinics have proven to be efficient in identifying and treating malaria cases in Benishangul-Gumuz, Amhara, and Tigray over the past five years. A total of 15 temporary clinics provided malaria diagnosis and treatment services in Benishangul-Gumuz and Tigray regions from October 2017 to January 2018. Temporary clinics tested 17,814 malaria suspected cases using rapid diagnostic tests (RDTs) and diagnosed 11,624 malaria cases, a 65% RDT positivity rate. *P. falciparum* cases accounted for 94% of the positive cases.

Ten temporary malaria clinics in Benishangul-Gumuz registered 5% of all malaria tested and 9% of the total malaria cases in the region.

PURPOSE OF TEMPORARY MALARIA CLINICS

The main reasons for establishing the temporary malaria clinics are:

- To improve access and availability of quality malaria diagnosis and treatment services for MMWs in remote areas during the high malaria transmission season. This will reduce malaria morbidity and mortality among the MMWs themselves, and keep them from carrying the disease to new areas.
- To improve the case recording and reporting of malaria-infected seasonal migrant workers to the district health office (DHO) using public health emergency management (PHEM) and health management information system (HMIS) reporting tools. This information will strengthen advocacy for the allocation of government resources to the prevention and control of malaria and promote evidence-based decisions about malaria-related activities.
- To make more likely the realization of Ethiopia's goal to eliminate malaria by 2030.

BENEFICIARIES OF TEMPORARY MALARIA CLINICS

The main beneficiaries of temporary malaria clinics are seasonal MMWs who work remote farming areas with poor access to malaria management services. Other beneficiaries are their fellow permanent workers, those who stay on the farm for more than 12 months, and people in locations to which the workers might carry the disease.

Benefits of temporary malaria clinics include:

- ✓ Proper malaria diagnosis and treatment
- ✓ Reduction of the malaria transmission rate
- ✓ Reduced rates of transporting malaria parasites outside the work area, thus contributing to overall prevention
- ✓ Economic benefits for workers and employers

STEPS TO ESTABLISH A TEMPORARY MALARIA CLINIC

1. MAPPING AND SELECTING ELIGIBLE SITES

Mapping of a region's development corridor is necessary for identifying and selecting sites for temporary malaria clinics. By identifying where the MMWs population is most at risk of contracting malaria and where access to prevention and treatment is limited, mapping helps to determine sites where the benefits from access to clinics will be greatest.

1.1 MAPPING

Mapping of development corridors is conducted by the region's RHB, in collaboration with its Bureau of Social and Labor Affairs and investment offices to identify:

- The number of private farms in the district
- The number of permanent and temporary residents at each farm
- The availability of a clinic with malaria care and treatment capabilities at each farm
- Access to other health facilities (distance and time to the closest health facility)
- Duration of MMWs' stay at a farm and the period when the number of MMWs is greatest
- Contact information of farm management and community leaders

Mapping of the development corridors should be conducted on an annual basis to ensure the temporary malaria clinics are sited in locations of most risk. Use the mapping tool in Annex 1 to record and organize this information.

1.2 SITE SELECTION

The number of seasonal MMWs at each farm and access to public or private health facilities as found by the mapping is used to pre-select eligible and appropriate farm sites for the establishment of temporary clinics.

Once the farm sites are identified, the RHB or district staff contact the farm owners to propose the creation of a temporary malaria clinic. Owner consent is required before final determination of where to locate the temporary clinics.

The RHB or district staff conduct a briefing with the farm owner to discuss the importance and benefits that the temporary malaria clinics offer to seasonal MMWs. The briefing includes a discussion of the following eligibility requirements:

- The farm must designate one room for outpatient consultations and drug storage.
- Ideally, the farm will provide a separate room to lodge the health provider during his/her time on the farm. If a separate room is not available, the region, in collaboration with the district and/or other stakeholders, can pitch a secured temporary tent as an alternative, but it must be designated exclusively for the purpose of the provider's lodging.
- The farm is encouraged to provide meals to the health provider because the sites are remote and it is difficult to purchase and prepare food. If the farm is unwilling to do this, it must allow the provider to prepare food using farm utilities or allow them to buy food from the farm.
- The farm must allow employees of nearby farms to access the service.

The number of temporary clinics and of providers in the clinics is based on the number of MMWs on the farms. Each temporary clinic is expected to serve 3,000–5,000 beneficiaries. If the number of beneficiaries exceeds 5,000, the number of clinics should be increased. Health workers should be deployed for the entire season or on a monthly rotating basis.

2. CONSENSUS BUILDING

The RHB, DHO, and private enterprise owner must agree on the need to establish a temporary clinic, the implementation mechanism, and the division of responsibilities among them. If an implementing partner in the region is willing to support the establishment and maintenance of the clinic, it should be included in the consensus-building process. Once all partners reach consensus, they should sign a memorandum of understanding delineating the roles and responsibilities of each. A list of responsibilities for each entity is specified below.

Responsibilities of RHB/DHO:

- Lead the mapping of farms to identify eligible clinic sites.
- Analyze mapping results and list eligible sites with the number of temporary clinics needed in the catchment area of the district/town health office.
- Select staff (nurses and/or health officer) to be deployed to the temporary clinic.
- Conduct monthly onsite supportive supervision and at least bi-weekly phone-based mentoring.
- Establish the frequency (weekly, bi-weekly, monthly) and duration of supervision/mentoring to the clinics.
- Provide refresher or basic malaria case management training to health providers before they are deployed.
- Collect performance data regularly using the national reporting tools.
- Print and provide registration books and morbidity reporting formats to the clinics.

- Print and provide information, education and communication (IEC)/social behavior change communication materials and job aids to the clinics.
- Establish a communication system with the clinics and cover phone expenses.
- Monitor clinic performance by conducting onsite supervision.
- Pay monthly salary and per diem to health provider.
- Provide medical supplies including drugs, RDTs, gloves, lancets, etc. (See the list of items and supplies for mobile clinics-table-1.)
- Provide medical waste container for disposal of infectious and non-infectious material.
- Provide the health provider with transportation to the temporary clinic.
- Transport medical supplies and commodities to the clinic.
- Provide regular health education to workers at selected locations (early morning before deployment to the field).
- Oversee the signing of a memorandum of understanding between the RHB, the health provider, and the health facility that employs the provider to ensure that the provider will stay at the temporary clinic for the assigned period and will receive an allowance from RHB to cover incidental costs incurred during the deployment, in addition to his/her regular salary. The provider is expected to stay at the clinic until the clinic closes.

Responsibilities of business/farm owners:

- Designate one room for the clinic and one room for the health provider's lodging.
- Provide at least two chairs and a table for patient consultations.
- Provide a lockable cupboard to store drugs and RDT kits.
- Allow the clinic to operate, including using the farms utilities, during daytime business hours and for night-time emergencies, seven days a week.
- Allow the provider to prepare food using farm utilities or allow them to buy food at affordable prices from the farm management.
- Support the RHB/DHO during the provision of mass awareness campaigns and health education sessions for the workers.
- Allow the MMWs to visit the temporary malaria clinic when experiencing symptoms and facilitate referrals for severe cases

3. PREPARE PROVIDERS AND COMMODITIES

3.1 Providers

The RHB is responsible for recruiting the health care providers who will work at the farm sites. One provider in one clinic is sufficient to serve a population of 3,000–5,000 workers. Following are recommendations for selecting the health care providers:

- Recruit providers who work in health facilities located in the same or a neighboring district so they are familiar with the public health system and environment.
- Give priority to providers who are experienced in treating malaria cases at government or private health facilities.
- Recruit providers who have received the national malaria case management training within the past two years and at minimum a clinical nurse.

The RHB should provide the health providers with support tools, including guidelines, pocket reference books, and a one-day orientation that covers the following content:

- ✓ Recent malaria case management updates and treatment guidelines
- ✓ Best practices for using RDTs and reading the results for malaria
- ✓ Recording malaria cases in registers and reporting them in the national PHEM and HMIS tools (Annexes 4 and 5)
- ✓ Content on health education for malaria prevention and control (Annex 3).
- ✓ Expected challenges at the sites and possible solutions

3.2 Commodities for case management

Before providers are deployed to the temporary malaria clinic sites, the RHB, Regional Ethiopian Pharmaceuticals Supply Agency (EPSA), and district malaria focal persons should coordinate to allocate and distribute the essential drugs and other medical supplies each clinic needs (Table 1). The initial allocation is based on estimates of the number of seasonal migrant workers who will utilize the service, the malaria positivity rate in the kebele (neighborhoods), and the past malaria data from the kebele(s). It is strongly advised to ensure an adequate initial drug and supply stock to avoid early stock-outs.

The temporary health worker should monitor drug stock levels and request additional supplies by submitting a Report and Requisition Form (RRF)/emergency request to the DHO before a stock-out occurs.

Table 1. Essential Commodities for Temporary Malaria Clinics

Drugs	Medical Supplies
1- Artemether-Lumefantrine (AL) tablets (adult and pediatric doses)	9- RDT kit
2-Chloroquine tablets and syrup	10-IEC/SBCC materials
3-Primaquine tablets	11-Treatment guideline and RDT user guide
4-Artesunate injection	12-Pocket reference booklet
5-Quinine tablets	13-Registers to record cases
6-Paracetamol tablets and syrup	14-PHEM and HMIS forms

7-IV dextrose (40%)	15-Bin cards and RRF formats
8-Artesunate suppository	16-Patient information charts and referral slips
	17-Safety box

These outpatient facilities also need non-medical commodities to ensure the site meets minimal standards for use as a clinic. These include:

- ✓ At least two chairs and a table for patient consultations
- ✓ An examination couch
- ✓ A lockable cupboard for storing drugs and RDT kits
- ✓ Waste baskets for infectious and non-infectious material disposal
- ✓ Smartphone to use the Open Data Kit (ODK) application for data reporting

3.3. Job description of health providers

The health providers in charge of temporary clinics must be clinical nurses or health officers because they have practical knowledge about malaria care and treatment. Their duties are:

- The provider is on duty during regular business hours, 7 days per week, and on call for emergencies at any time outside of regular business hours.
- Check patients for symptoms and signs of malaria and use RDT to test all patients with fever for malaria.
- Use standard operating procedures when conducting the RDT.
- Check for symptoms and signs of severe malaria in all patients with fever; if symptoms are present, refer the patient immediately to the nearby health center.
- Provide pre-referral treatment and referral slip to suspected severe malaria cases.
- Always discard used RDT kits in the safety box.
- Dispense medicines as per the national guidelines.
- Hold individual or group discussions to raise awareness of malaria symptoms and the importance of seeking treatment.
- Register and report positive malaria cases to the district using PHEM/HMIS.
- Refer clients with suspected treatment failure to the nearby health center.

In addition to conducting routine activities, health providers should follow these guidelines:

For patients who test negative but whose clinical symptoms suggest severe malaria, health providers should do the following:

- Give the patient an injection of Artesunate before referring the patient to the health center.
- Malaria treatment failure is considered within 4–28 days of treatment.
- Any person with an illness other than malaria should be referred to a nearby health center.

- Any person with a comorbidity should be referred to a nearby health center with the anti-malaria treatment.

4. ENVIRONMENTAL SAFETY

To protect providers, patients, and the surroundings from contamination, the temporary malaria clinic will observe safe injection and infection prevention standards. So that the clinic can do this, the RHB will provide the following safety materials to the clinic:

- Safety boxes for disposal of sharp materials
- Disposable gloves
- Anti-septic solutions
- Biohazard bags to store used RDT kits

The district will decide on how full safety boxes and biohazard bags will be disposed of, by incineration in a pit on site, or by transporting them to the nearby health center for incineration.

5. AWARENESS CREATION

The temporary health provider will conduct an awareness creation session for farm workers in the area to notify them that a temporary clinic is operating nearby. The session should convey at least the following information:

- The clinic is temporary and will only provide services for MMWs with malaria symptoms.
- The clinic will screen any worker with fever for malaria.
- The clinic's services are provided by a professional health provider.
- The service is free; there is no payment for the consultation, laboratory work, and drugs.
- The service is available during working hours, seven days a week, and at night for emergencies.

6. TRANSPORTATION

The RHB or district provides transportation for the health provider and clinic commodities to the farm site where the clinic will be located. The district focal person will accompany the provider and introduce the health worker to the farm owner or delegates who will support the provider during his/her stay at the farm site.

7. RECORDING AND REPORTING

Continuous data reporting aims to inform and improve evidence-based decisions at the central level. The health provider at the temporary clinic will record in the registration book all clients who are tested for malaria and who receive other malaria-related services, on a daily basis. This performance data are reported directly to the district's malaria focal person at the DHO, weekly using the PHEM reporting tool and monthly using the HMIS tool or ODK template application. The district malaria focal person will forward the information separately to the zone and the region (RHB) so that the prevalence of malaria in the target population and the performance of services

are documented. The RHB reports malaria monthly data to the Federal Ministry of Health, disaggregated by temporary workers and permanent residents. The temporary health worker reports the demand and consumption of drug and medical commodities using the RRF or emergency request form or by communicating with the district staff by phone to replenish stock.

8. ONSITE SUPPORTIVE SUPERVISION

The RHB and DHO will collaborate to supervise and provide onsite support to the temporary malaria clinics within the first month after service initiation. Subsequent onsite supportive supervision is based on the RHB/district plan. Annex 2 contains the Supervision-Mentoring Checklist tool that the supervision team uses when conducting the visits.

This supportive supervision team will monitor that the intervention is going as planned, identify gaps, and provide support. If the team identifies any knowledge and skill gap either via the checklist or other observation, the issue is addressed and corrected immediately, on site. Other challenges, such as drug shortages, may not be solved on site; the supervision team will take to the higher management team at the district or regional level to solve it in a timely way.

After the first onsite supervision visit, the RHB and DHO conduct continuous follow-up via phone calls (remote mentoring) to ensure that the identified challenges have been addressed as per the national recommendations.

9. CLOSING OF TEMPORARY CLINICS

When the temporary malaria clinic's intervention period ends, the provider will do an inventory of remaining commodities (RDT and drugs) and submits this information and the registration books to the District Health Office (DHO). The non-drug commodities the clinic used for patient evaluation can be kept at the farm site or DHO for a future round of the temporary malaria clinic.

The RHB and DHO decide on when clinic services will be terminated based on the following:

1. When MMWs return home

2. If there is any situation that might endanger the life of the service provider, e.g. insecurity, war.

3. If there is a prolonged shortage of supplies

4. If the farm owner deviate from the memorandum of understanding.

10. POTENTIAL CHALLENGES AND MITIGATION PLANS

Table 2. Potential Challenges and Mitigation

Challenge	Mitigation Step(s)
To be resolved by the RHB and/or DHO	
Difficulties getting the exact/near estimate of the number of farms and MMWs per farm during mapping	Collaborate with the Bureau of Social and Labor Affairs to update the number of workers and licensed farms at least once per year.
Problems with security, resources, and transportation to the mapping sites	Collaborate with other stakeholders to allocate budget and personnel to conduct the annual mapping.
Selection of an appropriate site for the temporary malaria clinic	Check the site eligibility requirements mentioned in section 1- Mapping and selection of eligible sites
Insufficient number of providers to deal with the clinic's patient load	Based on the mapping information, assign two providers for sites with a high number of MMWs (>5,000).
Harsh environment and poor infrastructure leave providers fatigued or burned out	Consider rotating providers every month.
Poor accommodations and meal service leave providers dissatisfied	**Option A-** Ask farm investors to provide better accommodations and meals. **Option B-** If option A is not applicable: The region/district can provide a tent for accommodation and ask the farm owner to arrange transportation so the provider can buy food/ meals.
Health and safety risks for providers	Supply repellents, prophylactic drugs, bed nets, mattress, blankets, and bedsheets.
Lack of insecurity at the farm sites reported by provider	Take immediate action to protect the provider.
Interrupted or shortage of supplies	-Allocate adequate commodities to districts during planning clinic planning. -Follow the supply and distribution of the commodities to the sites at least every two weeks. -Quickly resolve any shortage or interruption of the supplies.
Lack of supportive supervision and follow-up support	-Visit the temporary clinics, especially within the first month of operation, and then follow up and provide support. -Conduct phone-based mentoring when onsite support is not possible.
To be resolved by the provider	
Delay in recording and reporting of malaria cases	-Record cases in the registration book each day daily.

	- Report cases to the DHO using the weekly PHEM and monthly HMIS tools.

11. INTEGRATING OTHER ACTIVITIES INTO THE TEMPORARY MALARIA CLINIC SERVICES

The temporary malaria clinic can deliver Integrated Management of Newborn and Child Illness (IMNCI) services if the provider has received IMNCI training and the clinic is supplied with IMNCI commodities.

If there is an outbreak of acute watery diarrhea, measles, severe acute malnutrition, or other health threat at a site with a temporary clinic, the provider can support the region and district in outbreak management.

A temporary clinic provider can support any community awareness creation sessions that address and encourage behavior changes for malaria prevention (use of insecticide-treated nets and indoor residual spraying of insecticide), early treatment seeking, laboratory testing for malaria, prompt treatment and rational use of anti-malaria drugs, and treatment adherence. (See the Social Behavioral Change Guide and health education tips in Annex 3).

The RHB or DHO/town health office by itself or in collaboration with other implementing partners should consider other health services to integrate into the service package of the temporary clinics.

ANNEX 1. MAPPING TOOL TO ESTIMATE THE LENGTH OF STAY OF MMWS

NO	Name of farm	GPS location	Number of permanent residents at the farm	Number of temporary residents at the farm	Farm-based clinic (Y/N) If Yes F/NF*	Nearest health post/clinic (in km)	Nearest private health facility (in km)	During which month do the MMWs arrive at the farm (Use Ethiopian calendar)	During which months do MMWs typically stay at the farm (Use Ethiopian calendar)

Key: * If yes, F-functional facility, NF-Nonfunctional facility

ANNEX 2. SUPERVISION-MENTORING CHECKLIST

Name of workplace where temporary clinic is located: _____

Location of temporary clinic: _____

Name of temporary clinic (if applicable):_____

Name of temporary health worker at clinic: _____

Cell phone for temporary health worker: _____

Number of MMWs in catchment area: _____

Malaria Temporary Clinic Supervision/Mentoring Checklist				
No	**Parameters to check**		**Yes**	**No**
1.	Use single dose PQ for all patients with *P. falciparum*			
2.	Proper AL dosing (1st dose at 0 hr at outpatient consultation, then 2nd dose after 8 hrs at home)			
3.	Use Artesunate injection for referred cases only as pre referral treatment			
4.	Use AL for infants <5kg/<3months			
5.	Use CQ and PQ for all patients with *P. vivax*			
6.	Use AL and single dose PQ for mixed infection			
7.	Do not use AL for RDT negative cases			
8.	Make proper and timely use of the bin card and RRF			
9.	Properly store all anti-malaria drugs and RDT kits			
10.	Properly dispose of sharp objects in safety box			
11.	Provide health education			
12.	Distribute the IEC/SBCC materials			
13.	Availability of drugs and RDT kit	AL adult tablet		
		CQ tablet		
		PQ tablet		
		Artesunate injection		
		Quinine tablet		
		Paracetamol tablet		
		RDT kit		
14.	Proper and timely use of the reporting forms	HMIS		
		PHEM		
15.	Proper use of the registration books	Morbidity register		
		Laboratory register		

Note: PQ-Primaquine, AL-Artemether-Lumefantrine, RDT-Rapid Diagnostic Test, CQ-Chloroquine

ANNEX 3. HEALTH EDUCATION MESSAGES FOR DELIVERY BY PROVIDERS, ENGLISH AND AMHARIC

English

Providers' SBCC messages should include the following:

- Malaria is a killer disease if treatment is not sought early and treatment is not taken properly.
- When a family member has a fever, bring them to the clinic immediately or at least within 24 hours.
- Danger symptoms and signs of severe malaria.
- Do not interrupt taking medication. Take all (the full course) of the anti-malarial drugs prescribed by health personnel.
- Do not share drugs with others, including family members.
- Return to the health facility after three days of malaria treatment if symptoms do not improve or immediately if symptoms worsen.
- All family members, especially women and children, should sleep under long-lasting insecticide-treated nets every night.

Amharic

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1-የቁባ በሽታ ምንድን ነዉ?

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ለግብርና ስራ ከተለያየ የሀገሪቱ ክፍሎች ወደ ክልሉ የሚመጡ የግብርና ባለሙያዎች ለበሽታዉ ያላቸዉ ተጋላጭነት ከፍተኛ ሲሆን ተገቢዉን ህክምና በአፋጣኝ ካላገኙ በሽታዉ ሊቁሰሰብ እና ለሞት ሊዳርጋቸዉ ይችላል።

3-በክልሉ ዋናዉ የስርጭት ወቅት

ከመስከረም እስከ ታህሳስ ያለዉ ጊዜ ሲሆን ሰኔና ሐምሌ ወራት ላይም ከፍተኛ የህሙማን ቁጥር ይመዘገባል።

4-የቁባ በሽታ ምልክቶች ምንድን ናቸዉ?

የቁባ በሽታ ምልክቶች፦

- ✓ ትኩሳት
- ✓ ድካም
- ✓ የሰዉነት እን የጡንቻ ህመም
- ✓ ብርድ ብርድ ማለት
- ✓ እራስ ምታት
- ✓ ማቅለሽለሽ እና ማስታወክ እንዲሁም
- ✓ ከፍተኛ የሆነ የጀርባ ህመም ናቸዉ።

5-አደገኛ እና የተወሳሰቡ የቁባ በሽታ ምልክቶች ምንድን ናቸዉ?

የቁባ በሽታ በፍጥነት ተገቢዉን ህክምና በባለሙያ ካላገኘ ሊቁሰሰብ እና ለሞት ሊዳርግ ይችላል። በተለይ ደግሞ ለግብርና ሥራ ወደ ቁበማ ወደ ሆኑ በታዎች የሚመጡ ግለሰቦች በዋነኝነት ይጠቃሉ።

ምልክቶቹ፦

- ✓ ራስን መሳት
- ✓ መራመድ/መቀመጥ አለመቻል
- ✓ ያለማቋረጥ ማስታወክ
- ✓ የሽንት መጠን ከወትሮ በጣም መቀነስ
- ✓ የሽንት ቀለም ወደ ጥቁር መቀየር
- ✓ ከተለያዩ የሰዉነት ክፍሎች ደም መድማት
- ✓ ለምሳሌ፦ በአፍንጫ በኩል መድማት
- ✓ የሚጥል በሽታ አይነት ምልክት
- ✓ የአይን ነጩ ክፍል ቢጫ መሆን
- ✓ ትንፋሽ ማጠር ናቸዉ።

6-የቁባ በሽታ ምልክቶች ሲታዩ ምን ማድረግ ያስፈልጋል?

ማንኛዉም ግለሰብ የቁባ በሽታ የመጀመሪያ ምልክት የሆነዉ ትኩሳት ሲከሰት በ24 ሰዓታት ዉስጥ ወደ አቅራቢያዉ የሚገኝ የጤና ተቋም በመሄድ የደም ምርመራ በማድረግ በደሙ ዉስጥ የቁባ በሽታ የሚያመጡት ተህዋስያን መኖራቸዉን እና አለመኖራቸዉን ማረጋገጥ አለበት።

7-የቁባ በሽታ እንዳለበት በምርመራ ከተረጋገጠ የሚከተሉትን ጥንቃቄዎች ማድረግ፦

- ✓ በባለሙያ የታዘዙትን መድሐኒቶች ብቻ በታዘዘዉ መጠን እና ሰዓት መዉሰድ
- ✓ የታዘዙትን መድሃኒቶች ለሌላ ግለሰብ ባለማካፈል በታዘዙት ቀናቶች መጨረስ
- ✓ በሕክምናዉ ወቅት የተወሰሰቡ የቁባ በሽታ ምልክቶች ካታዩ በአፋጣኝ ወደ ጤና ተቋም መመለስ
- ✓ የትኩሳት መከላከያ መድሃኒቶችን በመዉሰድ ትኩሳትን መከላከል
- ✓ ኣርተም የሚባለዉን መድሃኒት የሚወስዱ ታካሚዎች ቅባትነት ያለቸዉን ምግቦች ለምሰሉ ወተት እንዲወስዱ ይመከራል።

8-የቁባ በሽታ እንዴት መከላከል ይቻላል?

በሥራ እና በመተኛ ወቅተ ሰዉነታቸን ሙሉ በሙሉ የሚሸፍኑ አልባሳትን መጠቀም
አጎበር ሁል ጊዜ መጠቀም (በቀን ይሁን በማታ የመኝታ ጊዜ)
ህመሙ (በሽታዉ) የተገኘበት ሰዉ በሐኪም የተሰጡትን መድሃኒቶች በአግባቡ ወስደ መጨረስ

የአካባቢን ሁኔታ ለትንኞች መራቢያ ምቹ እንዳይሆኑ ማድረግ

9-የአጎበር አጠቃቀም

አንድ አጎበር በአማካይ ለአራት አመት ያገለግላል።
በመኝታ ጊዜ ምንጊዜም አጎበሩን ሙሉ በሙሉ በመዘርጋት ከዉስጥ ገብቶ መተኛት
አጎበሩ ሲቆሽሽ በልብስ ሳሙና እና በዉሃ አጥቦ ጥላ የሆነ ቦታ ላይ ማስጣት
አጎበሩ በተለያዩ ምክንያቶች ከተቀደደ ሰፍቶ መጠቀም ይቻላል
የአጎበር አቅርቦት በቂ በማይሆንበት ጊዜ ለነፍሰ ጡር እናቶች እና ለህፃናት ቅድሚያ መሰጠት ይኖርብናል።

ANNEX 4. WEEKLY MALARIA REPORT FORM ADAPTED FROM THE NATIONAL PHEM REPORTING FORM

Temporary malaria clinic name-		Woreda	
Kebele		Zone	
Start of week from Monday _____/_____/_____to Sunday_____/_____/_____ (Day)(Month)(Year in Ethiopian Calendar)			

Indicator		**Total cases**
Total malaria cases (confirmed by RDT +clinically diagnosed as malaria)		
Total malaria suspected fever cases (Tested by RDT)		
Number of fever cases positive for malaria parasites (by RDT)	P. *falciparum*	
	P. *vivax*	

ANNEX 5. MONTHLY REPORT FORM ADAPTED FROM THE NATIONAL HMIS REPORTING FORM

NCoD Code	HEADING	ICD-10 Codes
101	Malaria (clinical without laboratory confirmation)	B54
102	Malaria (confirmed with P. *falciparum*)	B50
103	Malaria (confirmed with species other than P. *falciparum*)	B51-B53
CDC_Mal	Malaria prevention and control	
Mal_Pos	Malaria positivity rate	
Mal_Pos.1	Number of slides or RDT positive for malaria	
Mal_Pos.1.1	< 5 yrs. : Male	
Mal_Pos.1.2	: Female	
Mal_Pos.1.3	5-14yrs. : Male	
Mal_Pos.1.4	: Female	
Mal_Pos.1.5	>=15 yrs. : Male	
Mal_Pos.1.6	: Female	
Mal_DX	Total number of slides or RDT performed for malaria diagnosis	