

Reducing the burden of malaria



Investing in social behaviour change communication and community-based health service delivery

Key Messages

- Designing tailored behaviour change communication strategies to improve communities' knowledge of malaria control and prevention can increase uptake of malaria prevention interventions and early treatment seeking, particularly in remote communities.
- Strengthening the links between community-based healthcare and health facilities, and good referral processes is effective in ensuring that all children with fever receive early diagnosis and prompt treatment.

The ICIMS project

Ethiopia's population suffers from a high burden of preventable disease despite the government's efforts to provide key interventions and services. In the Southern Nations, Nationalities and Peoples Region (SNNPR), febrile illnesses are the leading cause of sickness and death for children under five, with malaria accounting for one-fifth of all in-patient and out-patient cases. The region accounted for 31 percent of the total malaria cases reported at the national level for the years 2016/2017. Boloso Sore and Halaba districts in SNNPR were widely known to be highly affected by episodic outbreaks of malaria.

Malaria Consortium began implementing the three-year Integrated Community-based Interventions for Malaria Services (ICIMS) project in 2014 to help reduce the malaria burden in the SNNPR. The project, funded by the James Percy Foundation, focused on:

- Improving the effectiveness of community-based health services for over 507,000 people in SNNPR's Boloso Sore and Halaba districts, and strengthening existing community referral systems.
- Increasing the uptake of these services by using social behaviour change communication (SBCC) activities to change community attitudes and behaviours towards malaria prevention interventions.

This brief describes the methods and activities Malaria Consortium carried out to achieve the goals outlined above, and highlights the key successes and challenges faced in the implementation of these activities.

Contents

Ethiopia's Health System	3
Designing the ICIMS intervention	4
Lessons Learnt	8
Results and recommendations	9

Background

Current interventions to prevent malaria, such as long-lasting insecticidal nets (LLINs) and indoor residual insecticide spraying (IRS), diagnosis and treatment are provided free of charge by the Ethiopian government, however, access to these services has been particularly low in rural areas.

In an effort to scale up the delivery of essential, primary health interventions, the government sought to expand health services to reach rural areas. The Health Extension Programme (HEP) was launched in 2004 to accelerate the expansion of community-based health facilities. This programme has seen many successes and is partly responsible for Ethiopia's remarkable achievement in reducing under-five mortality rates by two thirds and maternal mortality by three quarters between 2000-2015. For instance, in 1990, under-five mortality was one of the highest in the world at 214 per 1,000 live births; by 2016 this rate fell to 67/1,000 live births, a 69 percent fall. (EDHS 2016)

Through the HEP, health posts were established in every community. Health posts are connected to health centres via a referral system and run by community health workers, who are known as health extension workers (HEWs) in Ethiopia. HEWs, most of whom are women, conduct home visits and provide primary health services at health posts. There are two HEWs assigned for each health post.

In 2011, the health development army (HDA), a team of mostly female volunteers, was introduced and incorporated into the HEP to provide community-based care at the household level. Working alongside HEWs, HDA volunteers encourage behaviour change by regularly visiting neighbours to teach them about global health initiatives and encouraging good health practices.

Seeking early care, as well as having ready access to diagnostics and treatment, is crucial to preventing severe illness and in some cases, death. However, recognising malaria symptoms remained a challenge for HDA volunteers, which had a knock-on effect on providing those displaying signs of infection with timely and appropriate treatment. Communities were also not effectively engaged in the proper use of malaria prevention commodities and services, thus reducing the potential impact of these on preventing cases of malaria.

This document outlines how Malaria Consortium worked with the regional and district health and education offices to address these challenges, firstly through efforts to improve understanding of malaria symptoms among HDAs, together with a more effective referral process for cases showing danger signs, and secondly through social behaviour change communication activities to increase communities' awareness of malaria and prevention interventions, and for community engagement and mobilisation.

Designing the ICIMS intervention

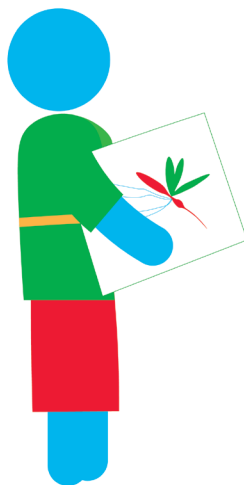
Strengthening the community referral system

Households to health posts

At the household level, the ICIMS project supported the training of HDA volunteers to improve their ability to recognise malaria signs and symptoms. This involved the production of simple visual tools, which were distributed to 114 health posts, to help them assess patients by identifying specific 'danger signs' for volunteers to look out for. The HDA volunteers were also given 'red cards' to hand to carers of children with fever or those demonstrating any other danger signs, who were then referred to the nearest health post for prompt diagnosis and treatment.

As a result of this activity, the proportion of children under-five with fever seen at health posts, who were referred by HDA volunteers, increased from 33 percent before the project began to 77 percent.

- Roles of HDA volunteers**
- Observe how families use LLINs
 - Examine household members for symptoms of malaria using the danger sign tools, which illustrate malaria symptoms
 - Use the danger sign tools to start conversations about malaria, how to prevent it, what symptoms caregivers should look out for and the importance of seeking care early
 - Give a red card to a household member with malaria symptoms to take to the health post for further examination and treatment, if necessary



2,850 danger signs tools
were produced and
distributed to 2,427
HDA volunteers

“Those tools are being used for referral and to help villagers learn about signs and symptoms, and the illustrations open discussion on how to prevent malaria.”

Amarech Chinasha, Health Extension Worker, Dola Health Post.

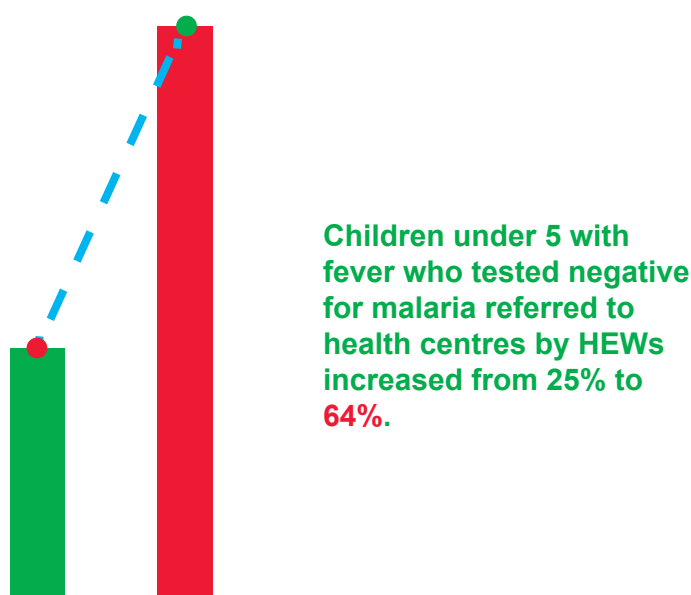
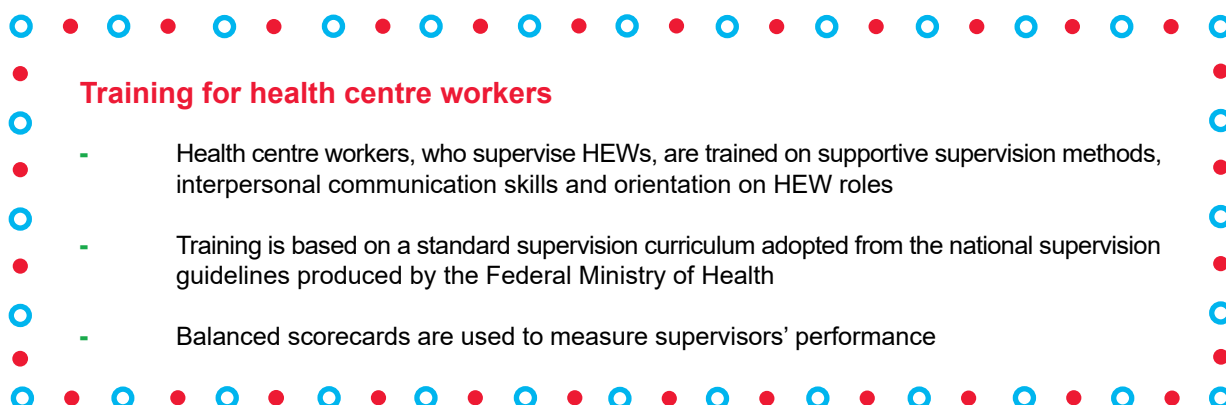
Health posts to health centres

Malaria rapid diagnostic tests to confirm malaria diagnosis are provided by the government to all health posts in Ethiopia. A child with fever who is referred to a health post and tests positive is given immediate treatment by the HEW. However, if malaria is ruled out, children are then referred to a health centre for further diagnosis and treatment, as there are no other diagnostic tools for HEWs to use for severe febrile illnesses.

To strengthen the effectiveness and sustainability of this referral system, the ICIMS project provided health centre workers with training in supportive supervision to strengthen the linkage between health centres and health posts as well as to improve the quality of HEWs' performance in health service delivery at community level.

Through this training, HEWs felt better supported by the health system and observed an improvement in their provision of quality community-based health services. The performance of health centre workers providing supervision to HEWS was regularly evaluated, ensuring their accountability to their mentoring activities.

From a baseline of 70 percent, health centre workers rated as 'very good' or 'excellent' as supervisors to their catchment health post increased to 99 percent. There was also an increase seen in the proportion of children with severe febrile illnesses who were referred from health posts to health centres. This process also enabled health centres to evaluate their processes to ensure the needs of communities were met and that quality of care continued to improve beyond the ICIMS project.



SBCC to change attitudes to malaria

To encourage communities to make better use of the health facilities and malaria prevention interventions available to them, the ICIMS project introduced SBCC approaches. Innovative activities were designed to promote behaviour change with respect to the proper and consistent use of LLINs, early healthcare seeking behaviour, environmental management and adherence to treatment.

Malaria awareness in schools

At the community level, the ICIMS project worked closely with district health and education offices to promote malaria awareness and improve healthcare seeking behaviour through the introduction of anti-malaria school clubs.

Schools that were selected for the anti-malarial clubs received a mini-media kit, which they have used to introduce new activities. In the rural villages, 18 schools with no access to electricity were also given solar panels to power the mini-media kits. Parents of students and other adults in the community were also able to benefit from this access to electricity. The solar panels provided lighting for evening adult education classes, and for older students to study – which were previously not possible in their communities.

Promoting malaria awareness through anti-malarial clubs

- Selected schools are equipped with billboards illustrating malaria prevention messages and mini-media kits, consisting of a cassette stereo, an amplifier, loudspeaker and microphone
- Anti-malaria school clubs use these media tools to share key malaria prevention messages throughout the school day
- Indoor lights, as well as a solar panel and a battery inverter system to power the mini-media kits, are provided to selected schools without electricity
- Twice a year, students in the anti-malaria school clubs put on plays for parents and other local members of the community to show what symptoms to look for, demonstrate how to use and care for LLINs and teach them about other interventions, such as drying out breeding sites.



Malaria messages and media equipment were provided to 72 schools to start anti-malaria school clubs

Community engagement

An innovative malaria-focused 'community conversation' approach was designed to support participation and ownership by communities. HEWs were trained on how to teach HDA volunteers to lead these discussions using the danger sign tools, which provided an opportunity for them to correct misconceptions about malaria and help communities understand the consequences of not seeking early treatment.

HEWs and HDA volunteers were able to identify issues on the community's use of interventions and developed and set actions to improve the use of the interventions through these discussions. This led to improved household practices and communities' awareness on malaria prevention and control activities as the skills and knowledge of families at the household level were strengthened.

Mass media campaigns on malaria

Other SBCC strategies included the development and dissemination of key malaria messages to communities through a mix of electronic and print media (posters, leaflets and booklets). Activities included:

- Malaria messages broadcasted during primetime slots through the regional FM station
- Mobile vans equipped with an audio-visual system conducted social mobilisation activities at 95 different sites in both districts
- Roadshows set up at village markets and during special occasions where there might be large numbers of people gathering together. The roadshows provided information on malaria conveyed through music, drama and competitions
- A question and answer session with community members during the roadshows.

400,000 people from local communities attended 111 road shows where educational movies were screened



Lessons learnt

Some of the key lessons from implementing the SBCC activities in both districts included:

- **An integrated training approach delivered** on three separate, but inter-related community health activities (community health information system, community conversation approaches and malaria danger sign tools) was effective in reducing HEW absences from health posts and reduced the overall cost required for the training.
- **The existing HDA structure**, offered a unique opportunity to effectively engage the community and was key to the success of many SBCC activities as HDA volunteers are already seen as role models in their neighbourhood and community members were more likely to listen and trust them.
- **Anti-malarial clubs set up in selected schools** provided an effective gateway to use students to disseminate messages to parents and their wider community. In addition, anti-malaria clubs made it feasible to provide new activities such as music and lighted study space after sunset for older students to prepare for exams and evening adult education classes.
- **Road shows that were set up at village markets and during special occasions** attracted larger crowds due to their location and timing. The road shows were effective in reaching a larger audience at once with key messages around proper and consistent use of LLINs and the need to seek early healthcare and adhere to treatment.
- **Demonstrating success and impact requires** various data sources and indicators that lead to a more focused approach to measure change. Determining these indicators can be challenging at the onset of the project and requires sufficient budget.

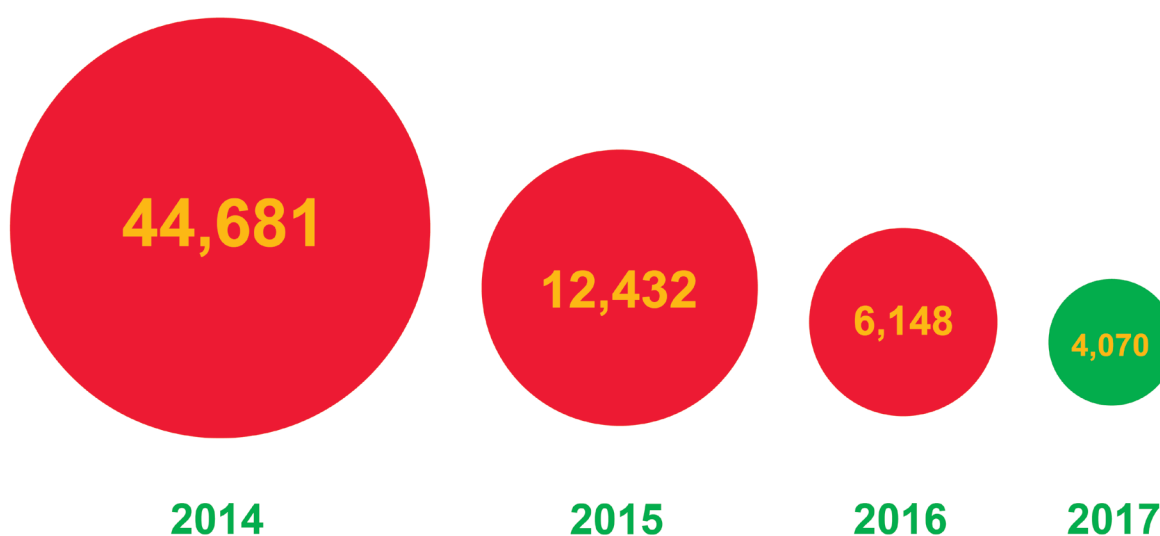
Results and recommendations

The ICIMS project successfully demonstrated that SBCC activities can be used to reach different segments of the community to enhance their awareness of malaria, the importance of seeking treatment early and malaria prevention interventions. It also demonstrated that strengthening the links between primary level health delivery systems through training, supervision and the use of SBCC tools helps to ensure that children with fever receive early diagnosis and prompt treatment. By enhancing communities' awareness and strengthening referrals to health facilities, the project contributed to reducing malaria related morbidity and mortality as indicated below.

Analysis of malaria-specific health management information system (HMIS) data from Halaba and Boloso Sore districts showed that the number of malaria cases (out-patient) decreased from 44,681 in 2014 to 4,070 in 2017. Although other factors might have contributed to the decline, this shows that confirmed malaria cases in year three declined by 91 percent compared with the baseline. The downward trend in malaria cases is consistent with the regional data, which showed that malaria parasite prevalence declined from 2.5 percent in 2011 to 0.5 percent in 2015.

LLIN use, however, among children under five was lower (17 percent) than the baseline value (42 percent) in 2011 and the corresponding figure in 2015 (43 percent). This could have been due to low access to LLINs (60 percent) and very low universal coverage (four percent). In addition, people may have been less compliant in sleeping under nets since the malaria burden was significantly reduced in project areas.

Project districts of Halaba and Boloso Sore showed a significant decrease in the number of malaria cases (outpatient)



While the ICIMS project has shown that behavioural change at the community level is an important investment in the fight against malaria, the following recommendations are made for future investments or scale up of this approach and to address any gaps:

- **Collaboration with the SNNPR regional health bureau and district health offices** is needed to facilitate the provision of LLINs to households and to ensure high coverage and access.
- **Qualitative studies** need to be conducted to identify factors that contributed to the low use of nets and uptake of other malaria interventions, such as behavioural determinants and community perception.
- **Innovative SBCC approaches** need to be explored to persuade households to continue sleeping under nets despite reductions in the malaria burden.
- **Communication messages for malaria prevention and treatment** need to be updated to reflect the changing epidemiology and maintain desired behaviours to achieve and sustain gains as the country is transitioning towards malaria pre-elimination.
- **Future implementation of SBCC and community referral interventions** need to be transitioned to relevant government divisions (district health offices and the Regional Health Bureau) in an incremental manner in order to increase the likelihood of sustainability.
- **The links between schools and health centres** need to be strengthened. With endorsement from the Ministry of Health and Ministry of Education, health facilities can support their catchment schools through delivering scheduled health education on malaria prevention and control activities.
- **Changes in communities' behaviour towards malaria prevention and control** need to be measured through triangulation of different data sources, such as household surveys, to demonstrate the success of projects with an SBCC component.
- **Investing in relationship-building** is essential from the start. Programmes designed and implemented with limited or no community or national government involvement are difficult to sustain beyond the life of the project.

This project has been funded by the James Percy Foundation. The views expressed here do not necessarily reflect the position of the donor.

The Integrated Community-based Interventions for Malaria Services project, a three-year project to improve the use and effectiveness of community-based health services in the Southern Nations, Nationalities and People's Region (SNNPR) of Ethiopia.

Malaria Consortium is one of the world's leading specialist non-profit organisations. Our mission is to improve lives in Africa and Asia through sustainable, evidence-based programmes that combat targeted disease and promote child and maternal health.

© **Malaria Consortium / 2018**

Unless indicated otherwise, this publication may be reproduced in whole or in part for non-profit or educational purposes without permission from the copyright holder. Please clearly acknowledge the source and send a copy or link of the reprinted material to Malaria Consortium. No images from this publication may be used without prior permission from Malaria Consortium.

Malaria Consortium

Development House, 56-64 Leonard Street, London EC2A 4LT

Malaria Consortium Ethiopia

Yeka Sub-City Kebele 08, House No 630, Haile G/Selassie St, Addis Ababa, Ethiopia

www.malariaconsortium.org

info@malariaconsortium.org

Sign up to our newsletter: www.malariaconsortium.org/newsletter

 [@FightingMalaria](https://twitter.com/FightingMalaria)

 [malariaconsortiumuk](https://www.instagram.com/malariaconsortiumuk)

 [malaria_consortium](https://www.youtube.com/malaria_consortium)

 [@MalariaConsortium](https://www.facebook.com/MalariaConsortium)

 [MalariaConsortium](https://www.linkedin.com/company/MalariaConsortium)

