Malaria Consortium is committed to reducing the burden of malaria and other communicable diseases in Mozambique, especially those affecting children under five. Since establishing our Maputo office in 2005, we have been working closely with the Ministry of Health (MoH), the National Malaria Control Programme (NMCP), the National Community Health Workers Programme — locally known as Programa de Agentes Polivalentes Elementares (PNAPE), provincial and district health authorities and affected communities.

We provide technical assistance to our partners to strengthen existing health systems by: improving the integrated community case management (iCCM) of common illnesses, such as malaria, diarrhoea and pneumonia; deploying functional surveillance mechanisms; developing and scaling innovative community-focused platforms to facilitate data-informed decision-making; filling knowledge gaps through operational research; and organising social and behaviour change activities.
Areas of focus

Surveillance

Data-informed strategies are key to achieving the World Health Organization (WHO) target of reducing global malaria cases and deaths by 90 percent by 2030. In Mozambique, we support the government’s efforts to develop functional malaria surveillance systems and provide decision-makers with the necessary evidence to effectively target malaria interventions.

Operationalising an integrated malaria information storage system

In 2018, Malaria Consortium assisted the NMCP in assessing the Mozambican Malaria Information System. Its core challenges were found to be poor data accessibility, quality and use. To address these bottlenecks in line with the National Malaria Strategic Plan (2017–2022), we are supporting the NMCP with the operationalisation of an integrated malaria information storage system (iMISS) that is responsive to all transmission strata across the country.

This innovative, digitised platform harmonises all sources of malaria data into a centralised data repository. Malaria staff at all levels can use it to monitor epidemiological indicators; assess progress towards programmatic goals; measure access to quality malaria services; evaluate vector control and other community interventions; understand potential drivers of transmission; and facilitate early warning systems for rapid outbreak detection and response.

Further reading: https://bit.ly/30Rw7YJ

Genomic surveillance

We are working alongside the NMCP to integrate genomic data into routine surveillance activities. The aim is to further support programmatic decisions on malaria control and elimination interventions with actionable intelligence. Applying a participatory approach, we are engaging all levels of the health system to promote a culture of genetic data use.

This cutting-edge intervention will better inform drug and diagnostic choices. With the help of transmission network models, the project monitors drug and diagnostic resistance and helps target the reservoirs sustaining transmission in near-elimination settings. Genomic surveillance will also supplement traditional surveillance by measuring genetic diversity within Plasmodium falciparum parasites to understand importation of malaria in low transmission settings and inform transmission dynamics in medium to high transmission areas. The project will further help us to understand how different intervention mixes affect transmission and resistance, and help inform how best to tailor context-specific interventions locally and nationally. We will use antenatal care clinics as a sentinel population to better understand how malaria dynamics in pregnant women reflect the realities among the general population.

iMISS Training in Lichinga, Niassa province

Developing capacity for surveillance

We facilitate comprehensive training and supportive supervision to help the NMCP develop the capacity of health staff at all levels to strengthen routine data quality, data use and data-to-action.

In 2020, we supported the training of master trainers on the use of the iMISS platform. In turn, they provided training to over 500 district-level malaria focal points and provincial technicians across 11 provinces, and more than 100 health workers from 46 health facilities across three districts.

We also encouraged health facility and district staff to exchange lessons learnt, which increased their motivation to report data and data availability.

**Digital health**

We believe that digital technology provides great opportunities to address health system challenges in low- and middle-income countries. Context-adapted digital health solutions can connect patients and health workers, improve the quality of services and bolster health-information reporting in remote areas.

---

**Improving community-based health services**

In 2016, we collaborated with the MoH and UNICEF to transform our successful pilot project, the inSCALE mobile phone application, into a complete digital platform. The upSCALE platform builds on inSCALE’s aim to improve the quality and coverage of iCCM by assisting community health workers (CHWs) with diagnosis, treatment and referral. It also allows supervisors to monitor CHWs’ performance and stock levels.

In four years, upSCALE has recorded more than 500,000 patient interactions. This has enabled the collection of a unique data set that provides invaluable insights into disease aetiology and epidemiology at the community level. The ongoing use of near real-time data and localised analysis on disease-specific trends for decision-making have also optimised resource allocation.

To guarantee upSCALE’s sustainability, we developed the platform with CHWs and supported MoH ownership, aligning the platform with national guidelines for community-based care. We are also collaborating with the government to secure nationwide coverage by 2022.


---

**Public health communications**

Malaria Consortium facilitates locally adjusted social and behaviour change activities to strengthen community ownership of health issues and increase understanding of diseases and disease prevention.

---

**Collaborations and partnerships**

Since establishing a presence in Mozambique, Malaria Consortium has built close working relationships with the Mozambican MoH, the NMCP, PNAPE and provincial and district health authorities.

The important work we do in Mozambique would not be possible without the generous support from our donors, including the Bill & Melinda Gates Foundation and UNICEF — and, previously, UK aid from the UK government.

Many partner organisations contribute to the success of our projects in Mozambique. We are particularly grateful for our fruitful collaborations with the Barcelona Institute for Global Health, Clinton Health Access Initiative, Dimagi, Goodbye Malaria/LSDI2, the Institute for Disease Modeling, Manhica Health Research Centre (CISM), the University of California San Francisco, U.S. President’s Malaria Initiative and WHO.

---

**Community dialogues**

Using a community dialogue approach, we enhanced rural communities’ understanding of digital health services. Trained volunteers led participatory community meetings that provided a platform to discuss locals’ concerns and draw up collective solutions.

During the sessions, the volunteers were able to address misconceptions surrounding upSCALE and demonstrate the platform’s benefits. This was key to increasing community members’ acceptance of CHWs’ using the tool during consultations. By framing the devices as communal property, the volunteers further promoted community ownership.

Operational research

Malaria Consortium specialises in conducting operational research to identify best practices and health system innovations. We share our results and findings at national and international levels to inform policy.

Seasonal malaria chemoprevention

Malaria Consortium is a leading global implementer of seasonal malaria chemoprevention (SMC), an intervention recommended by WHO for children 3–59 months in areas of highly seasonal malaria transmission. After reaching over 12 million children in Burkina Faso, Chad, Nigeria and Togo in 2020, we assessed the feasibility, acceptability and impact of implementing SMC in Mozambique in partnership with the NMCP and CISM.

We adapted our implementation model to the local context and successfully administered SMC to over 75,000 children in Nampula province. To understand the drugs’ protective effectiveness and drug resistance, we evaluated the intervention through key informant interviews, focus group discussions, health facility data analysis, a non-randomised controlled trial and a bio-marker study. Our findings will be used to inform SMC policy and practice in Mozambique.


Reactive malaria surveillance activities

In partnership with the CISM and NMCP, we are implementing reactive malaria surveillance activities in very low transmission areas in the southern Magude and Matutuine districts. These will include reactive focal mass drug administration, as well as outbreak and hotspot investigation and response.

This intensified epidemiological and entomological surveillance is needed to identify remaining pockets of transmission and speed up progress towards elimination. We will evaluate the intervention’s feasibility and impact on the malaria burden to inform a future scale-up of reactive surveillance activities in low transmission areas across Mozambique.

COVID-19

We are committed to fighting the COVID-19 pandemic. In 2020, we conducted a cross-sectional knowledge, attitudes and practices (KAP) survey, which revealed that, at the start of the pandemic, few CHWs could correctly identify COVID-19 symptoms, transmission routes and prevention measures. Based on these findings, we rapidly developed an integrated plan to adapt upSCALE to help CHWs understand and manage COVID-19.

To reinforce government messaging and dispel misinformation, we co-developed targeted awareness and education materials and effectively shared these through SMS, video and audio messages. We will evaluate their impact through a second KAP survey and develop a COVID-19 dashboard to report on key community-level outcomes relating to the pandemic.