The United States Agency for International Development’s (USAID) Organized Network of Services for Everyone’s (ONSE) Health Activity supported Malawi and its Ministry of Health (MoH) in reducing maternal, newborn, and child morbidity and mortality. Partnering with the MoH and national- and district-level stakeholders, ONSE worked to improve access to and quality of priority health services, strengthen performance of health systems, and increase demand for priority health services. ONSE’s activities were based on three core principles that promote self-reliance: data-driven, district-specific targeting to jointly identify needs for high-impact interventions; systemic capacity building coupled with smart capacity building approaches; and mutual accountability. ONSE’s Health Activity was a five-year program led by Management Sciences for Health (MSH) from 2016 to 2021 (with an extension to June 2022).

Malawi’s location in sub-Saharan Africa, which is burdened with over 90% of all malaria cases and deaths globally, makes it highly susceptible to malaria. In Malawi there are approximately five million malaria cases per year, and malaria is the leading cause of morbidity and mortality in children under five.¹

Early diagnosis and treatment are critical in reducing deaths. Malaria can initially present as a fever with headache and chills, and if left undiagnosed and untreated, it can be deadly. Clinical diagnosis is recommended before treatment and requires microscopy or use of the malaria rapid diagnostic test (mRDT). Preventive measures include the use of long-lasting insecticide-treated nets (LLINs) and management of malaria during pregnancy with sulfadoxine-pyrimethamine, an antimalarial drug.

ONSE was designed to strengthen the continuum of care for priority health services, from communities to district hospitals, in each ONSE-supported district. ONSE supported improved diagnosis and better-quality malaria care in Malawi and aided private health clinics in standardizing and improving the diagnosis, treatment, and case management offered to malaria patients.
ONSE malaria activities were guided by the Malaria Operational Plan and the objectives of the National Malaria Control Program (NMCP).

ONSE’s progress in malaria was measured against three key indicators:

- **Tracking diagnostics**
- **Case management**
- **Intermittent preventive treatment in pregnancy (IPTp)**

Key activities of the ONSE program included:

- **Building capacity** for malaria case management and malaria in pregnancy (MiP) service delivery
- **Supply chain** systems strengthening to ensure availability of mRDTs and malaria commodities
- **Strengthening data documentation and data** for decision making through mentoring and supervision

### INTERVENTIONS AND IMPACT

#### Malaria Case Management

Malaria case management includes early diagnosis of malaria and efficient treatment and is an important aspect of the management of malaria outcomes. ONSE’s case management activity expanded malaria service delivery and improved the quality of malaria services provided in 10 districts.

ONSE conducted targeted supportive supervision informed by outreach training and supportive supervision (OTSS) that included observation, practical demonstrations, on-the-job training, and patient record reviews. The supervision focused on both mRDTs and microscopy, the use of artemisinin combination therapy, and data quality.

Targeted case management supervision resulted in 5,278 visits with health workers. Health workers benefited from on-the-job training, supervision, coaching, and mentoring on observed gaps in delivery of services.

### Key Performance Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>% of confirmed malaria cases receiving first-line antimalarial medication</th>
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<tbody>
<tr>
<td>PY1</td>
<td>87%</td>
</tr>
<tr>
<td>PY2</td>
<td>100%</td>
</tr>
<tr>
<td>PY3</td>
<td>100%</td>
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<tr>
<td>PY4</td>
<td>99%</td>
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<tr>
<td>PY5</td>
<td>100%</td>
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PY = Project Year
Malaria in Pregnancy (MiP)

MiP can be dangerous to the health of the mother or the fetus, and MiP services are largely provided during antenatal care (ANC). ONSE’s strategy focused on proven solutions in addressing MiP, including the administration of sulfadoxine-pyrimethamine for IPTp, distribution of LLINs, and effective diagnosis and treatment of MiP. ONSE supported capacity building activities including coaching; supervision; mentorship (individual and group mentorship) of ANC providers in recommended MiP guidelines; IPTp; and ANC standard protocols. Also, to ensure coordination at the district level, ONSE promoted collaboration between safe motherhood coordinators and MoH malaria coordinators.

Community Intermittent Presumptive Treatment in Pregnancy Study Findings

Health surveillance assistants (HSAs) serve as an important link between health systems and communities. ONSE collaborated with the President’s Malaria Initiative to study whether community-based delivery of IPTp by HSAs increased coverage of three or more IPTp doses compared to IPTp delivery only at health facilities while also improving or maintaining ANC attendance. The study showed that HSAs led to increased knowledge of the need for these IPTp interventions.

ONSE collaborated with various district health management teams to support MiP capacity building for 2,619 health care workers in 873 health facilities.

<table>
<thead>
<tr>
<th></th>
<th>PY1</th>
<th>PY2</th>
<th>PY3</th>
<th>PY4</th>
<th>PY5</th>
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<tr>
<td>% of pregnant women who received three or more doses of IPTp during ANC</td>
<td>37%</td>
<td>37%</td>
<td>45%</td>
<td>48%</td>
<td>48%</td>
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Integrated Supportive Supervision

The private sector is an important source of malaria treatment in Malawi, but compliance with recommended malaria treatment guidelines remains a challenge in private health facilities. To address this challenge, ONSE supported integrated supportive supervision (ISS) to the private sector using an ISS tool, a digital checklist designed to support quality improvements. These ISS visits documented non-compliance with standard malaria treatment guidelines, poor infection prevention practices, illegal operations of some facilities, and a lack of relevant reporting tools.

Gaps in service at private, for-profit facilities included the use of presumptive treatment for malaria, a lack of knowledge on the current treatment guidelines, and a lack of proper diagnostic skills in the use of mRDTs. Through ISS, coaching, and mentoring, ONSE customized capacity building and targeted support for both private facilities and providers to remain current on evidence-based diagnostic tools, medicines, and treatment protocols and ensure that they are effectively regulated and linked to the public health system.
Malaria Diagnostics

Quickly diagnosing malaria is vital for its effective treatment. Malaria microscopy is used in some referral hospitals, but the NMCP policy recommends the use of mRDTs in all other facilities. The NMCP also implemented a national policy shift toward confirming diagnosis of malaria for all age groups before treatment is administered.

ONSE supported intensive and comprehensive supervision, coaching, and mentorships in all ONSE malaria-supported districts to train staff in mRDTs. ONSE used OTSS to reinforce the knowledge and skills learned in previous trainings and supported OTSS, covering both diagnostics and clinical services. mRDT providers were coached and mentored on appropriate mRDT use and performance, and laboratory technologists and technicians were mentored on microscopy services. Health workers benefited from on-the-job training, supervision, coaching, and mentoring in areas of diagnosis; treatment in accordance with the revised treatment guidelines; and documentation and data.

To support improvement in laboratory diagnosis, ONSE strengthened distribution and re-collection of malaria samples to all laboratories, including soliciting other malaria species to be incorporated in the National Archive for Malaria Slides Bank.

<table>
<thead>
<tr>
<th>% of suspected malaria cases tested by either microscopy or rapid diagnostic test</th>
<th>PY1</th>
<th>PY2</th>
<th>PY3</th>
<th>PY4</th>
<th>PY5</th>
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<tbody>
<tr>
<td>87%</td>
<td>99%</td>
<td>96%</td>
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Stock Status Levels

Adequate inventory is central to a well-managed health facility. ONSE provided technical input to the development of the initial redistribution guidelines for Malawi. These guidelines adopted a target of six months of stock for stock adequacy. The mandatory use of transactional documents was included in the guidelines. ONSE-supported districts and health facilities to track stock status levels to ensure commodities were available at health facilities.

ONSE-supported redistribution efforts contributed to the reduction of overstocks of malaria commodities and corrected understocks and stock-outs at health facilities. Progress was achieved in stock status management and monitoring efforts.

Overstocks and stock-outs were kept to a minimum through systematic redistribution activities in several districts, supervision of facilities by district pharmacy personnel, spot checks by drug and therapeutic committees, and the mentoring of pharmacy assistants.
MALARIA SOCIAL AND BEHAVIOR CHANGE GRANTS

ONSE administered malaria social and behavior change communication (SBCC) grants in the 10 malaria districts. Grantees worked with community health action groups to explore malaria challenges and identify community structures that were responsible for bringing awareness to their communities. Communities became involved in the dissemination of the malaria awareness messages to individuals, which influenced the adoption of desired health-seeking behaviors.

Grantees were involved with the distribution of information, education, and communication materials at the community level, in health centers, and during outreach clinics. Grantees conducted activities to strengthen engagement with community structures in oversight and accountability interventions.

ONSE grants also supported the distribution of assorted low literacy SBCC materials on maternal, newborn, and child health and malaria prevention to health facilities and their surrounding communities. Health workers and community health structures were able to deliver health talks, interpersonal communication sessions, small group sessions, door-to-door interactions, and general awareness meetings using the distributed materials.

Learn more at msh.org/projects/ONSE/

1 World Health Organization (WHO), Malaria Fact Sheet: https://www.who.int/news-room/fact-sheets/detail/malaria