



SITUATIONAL ANALYSIS OF QUALITY MALARIA MEDICINES COMMUNICATION IN MALAWI



Corinne Fordham and Cheryl Lettenmaier
Promoting Quality Malaria Medicines Initiative

DRAFT January 5, 2016



USAID
FROM THE AMERICAN PEOPLE

Contact:

Health Communication Capacity Collaborative
Johns Hopkins Center for Communication Programs
111 Market Place, Suite 310
Baltimore, MD 21202 USA
Telephone: +1-410-659-6300
Fax: +1-410-659-6266
<http://www.healthcommcapacity.org/>

Suggested Citation:

The Health Communication Capacity Collaborative. (2016). *Situational Analysis of Quality Malaria Medicines in Malawi*. Baltimore: Johns Hopkins Center for Communication Programs.

Cover photo: House advertises that LA is provided free by all government facilities in Malawi. © 2016, Cori Fordham. All rights reserved.

© 2016, Johns Hopkins Center for Communication Programs

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
ACRONYMS.....	5
INTRODUCTION	6
ABOUT THIS REVIEW	7
ANTIMALARIAL SITUATION IN MALAWI.....	8
Malaria Medicine Quality and Availability in Malawi.....	8
Malaria Medicine Quality.....	8
Malaria Medicine Availability and Diversion.....	9
Political Will to Address Malaria Medicine Diversion.....	10
Factors Influencing the Availability and Quality of Malaria Medicine.....	10
Health Worker Quality of Life.....	11
Law Enforcement	11
Cultural and Social Factors Associated with Theft and Reporting.....	12
Consumer Healthcare and Treatment-Seeking Attitudes and Behaviors.....	12
INFLUENTIAL PARTNERS AND ACTIVITIES	14
Potential Partnerships.....	14
Existing Activities and SBCC Options	15
Current Activities.....	15
Potential SBCC Considerations	16
REFERENCES	17

ACKNOWLEDGEMENTS

The USAID-funded Health Communication Capacity Collaborative (HC3) – based at the Johns Hopkins Center for Communication Programs (CCP) – would like to acknowledge Cori Fordham and Cheryl Lettenmaier for authoring this report with input from the United States President’s Malaria Initiative (PMI) and Malawi’s National Malaria Control Program (NMCP). HC3 would also like to thank the many malaria and supply chain professionals who took the time to speak with the team either through key informant interviews or the stakeholder campaign plan workshop, as their insight and experience was invaluable.

This report was made possible by the support of the American People through the United States Agency for International Development (USAID). HC3 is supported by USAID’s Office of Population and Reproductive Health, Bureau for Global Health, under Cooperative Agreement #AID-OAA-A-12-00058.

ACRONYMS

ACT	Artemisinin-based Combination Therapy
AL or “LA”	Artemether-lumefantrine
API	Active Pharmaceutical Ingredients
CHAM	Christian Health Association of Malawi
CMS	Central Medical Stores
DHS	Demographic and Health Surveys Program
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
HC3	Health Communication Capacity Collaborative
HES	Health Education Services
HSA	Health Surveillance Assistant
MAD	“Make a Difference”
MOH	Ministry of Health
NMCP	National Malaria Control Program
OIG	Office of Inspector General
PMI	U.S. President’s Malaria Initiative
PMPB	Pharmacy, Medicines and Poisons Board
SBCC	Social and Behavior Change Communication
SSDI-Communication	Support for Service Delivery Integration – Communication
SSFFC	Substandard, Spurious, Falsified, Falsely-labeled and Counterfeit
USAID	United States Agency for International Development
WHO	World Health Organization

INTRODUCTION

Malaria is a preventable and treatable disease that affects almost half of the world's population. The massive scale-up of malaria prevention and treatment programs has fortunately improved the global malaria burden – contributing to a 37 percent global reduction in malaria incidence (42 percent in Africa) and 60 percent global reduction in malaria mortality between 2000 and 2015 (World Health Organization – WHO, 2015). Malawi has also made improvements in its malaria prevention and treatment, reducing the national under-five malaria mortality rate by 36 percent between 2004 and 2014 (PMI, 2015). Unfortunately, despite these gains, malaria remains a public health problem in Malawi, and accounts for 30 percent of outpatient visits and 40 percent of hospitalizations in children under five (President's Malaria Initiative – PMI, 2015).

Malawi's ability to continue improving malaria case management – and ultimately morbidity and mortality – is largely dependent on residents' access to good quality malaria medicine, but frequent stock issues and the widespread availability of substandard, falsified, falsely-labelled and counterfeit (SSFFC) medicine severely threatens this progress (Khuluza et al., 2014; PMI, 2015).

SSFFC malaria medicine generally falls into one of three categories (Kaur et al, 2015), which contribute to treatment failure, death and drug resistance (IOM, 2013):

- **Substandard:** Medicine that does not contain enough active ingredient due to unintentional errors caused in manufacturing.
- **Falsified:** Medicine that does not contain enough or any active ingredient due to intentional fraudulent manufacturing. May carry false representation of their source or identity.
- **Degraded:** Medicine that does not contain enough active ingredient due to poor conditions in their storage environments, handling or transportation (light, heat, humidity, etc.). Stolen or diverted medicine at risk of becoming degraded.

The first-line treatment for malaria medicine in Malawi is artemether-lumefantrine (AL or commonly known as "LA" in Malawi), with artesunate amodiaquine (ASAQ) as the second-line treatment. LA is made available free of charge through government health facilities, but is often diverted into the formal and non-formal private sector (Personal Communication, Oct. 4, 2016).

This theft not only weakens the supply chain, but also the effectiveness of the medicine, as the conditions under which diverted medicine is stored (heat, humidity, dampness, etc.) puts it at risk for deterioration. For example, trucks transporting medicine often lack air conditioning and can reach up above 100 degrees Fahrenheit – and Coartem™ should not be exposed to temperatures greater than 86 degrees (Faucon et al., 2013). Poor quality medicine can also weaken the public's perception of its healthcare system, and negatively influence their healthcare-seeking behaviors (WHO, 2011).

Given these potential negative consequences, the international community and local stakeholders have come together to combat the impact of poor quality medicines on malaria in Malawi.

ABOUT THIS REVIEW

This document was developed by the Health Communication Capacity Collaborative (HC3) as a part of a collaboration with PMI, the United States Agency for International Development (USAID) and the National Malaria Control Program (NMCP) of Malawi. This review was conducted to serve as the foundation for HC3's technical assistance to design a social and behavior change communication (SBCC) campaign to address malaria medicine diversion and improve the use of good quality malaria medicines.

The document was developed with information gathered from three sources. First, HC3 conducted a review of peer-reviewed and gray literature on the malaria medicine situation in Malawi, and the factors that influence the availability and quality of antimalarials. Next, the HC3 team conducted key informant interviews with over 40 representatives of organizations working on this issue, including donors, pharmacists, supply chain specialists, health promotion professionals, health workers, journalists and law enforcement agents. Finally, HC3 invited 26 representatives from these organizations to a two-day stakeholder meeting to review the current malaria medicine situation and design an SBCC campaign to improve upon it. The findings of the literature scan, key informant interviews and meeting were captured in this analysis, and then reviewed by local stakeholders.

ANTIMALARIAL SITUATION IN MALAWI

Malaria Medicine Quality and Availability in Malawi

Malaria Medicine Quality

Malawi has several controls in place to assess the quality of antimalarials in its supply chain, many of which are run by the Pharmacy, Medicines and Poisons Board (PMPB). For example, the PMPB is mandated to inspect imported artemisinin-based combination therapy (ACTs) upon entry to the country. They also conduct quarterly surveillance tests for medicine in health facilities and hospitals, medicine stores and wholesalers. However, they are limited by inadequate funding, staff and equipment, and at the time of the interviews had been unable to conduct border inspections for the previous six months (Personal Communication, Oct. 6, 2016; Personal Communication, Oct. 3, 2016).

Little public information is available about medicine quality in Malawi, but medicine from the formal, regulated sector is known to be of higher quality (approximately only 5 percent of samples failed according to a personal conversation with a PMPB representative on November 17, 2016), compared to the legal and illegal private sector, which is not quality assured and is driven by stockouts, cheaper prices and self-diagnosis and treatment (described below). A 2014 cross-sectional study of different brands of paracetamol and cotrimoxazol medicines from a range of sources (e.g., government health facilities, private or retail pharmacies, illegal drug vendors and grocery shops) found that 50 percent of medicines (n=22) were not registered by the PMPB. Almost a quarter of samples (27.3 percent) failed to meet the requirement for active ingredient (Khuluza 2014). Similarly, a 2015 post-marketing surveillance study showed that while most medicine sampled was registered (86.6 percent) and passed visual inspection (100 percent), the majority of samples (88.4 percent, 99/112 samples) failed quality assurance testing due to the presence of either insufficient or excessive active pharmaceutical ingredients (API). The authors of the study associate these high failure rates to improper handling and distribution (Malaria Journal, 2014). While both of these findings represent higher failure rates because samples were taken from both the public and regulated sector, as well as in private shops and via illegal hawkers/markets, they serve as an indication of the potential risk medicine consumers are taking if they buy outside of quality-assured sources.

In addition, demand for malaria medicine is seasonal, and counterfeit medicine presence increases during peak season (Personal Communication, Oct. 10, 2016).

While Malawi has identified some cases of substandard and falsified medicine, according to the Ministry of Health (MOH) NMCP and Drug Theft Investigation Units, the most pressing issue affecting malaria medicine quality in the country is drug pilferage – in particular, the diversion of medicines meant for the public sector to the informal and private sector (e.g., private hospitals, public markets, privately-owned pharmacies, small shops or outside of the country) (Personal Communication, November 16, 2016). PMI says that, while the issue of pilferage started in 2012-2013, it has worsened over the years. In 2013-2014, malaria professionals started noticing large discrepancies in the numbers of malaria cases reported versus those who received ACTs (Personal Communication, Oct. 4, 2016; Personal Communication, Oct. 13, 2016).

Malaria Medicine Availability and Diversion

Most ACTs in Malawi are provided free of charge through government health facilities or Christian Health Association of Malawi (CHAM) facilities, where medicines are provided by donors like PMI and the Global Fund for AIDS, Tuberculosis and Malaria (GFATM) (Personal Communication, Oct. 3, 2016). Only government hospitals, private clinics, pharmacies, village clinics and non-governmental organizations (NGOs) may provide ACTs. Nearby shops or hawkers are tempting options to malaria consumers because they can offer lower prices and an alternative medicine source during health centers and hospital stockouts. These hawkers are a risk to consumers because they are unqualified to provide medical advice and cannot guarantee the source, safety or quality of their product (Personal Communication, Oct. 3, 2016).

Medicine diversion has a serious impact on the availability and quality of malaria medicine in Malawi. In fact, the Minister of Health, Dr. Peter Kumpalume, recently announced that the country loses almost 30 percent of its annual budget to theft – approximately \$7 million USD out of its \$24 million USD total budget (Nkhata, 2015). One study found that malaria commodities were particularly prone to leakage, estimating approximately \$5,359,075 USD in unaccounted malaria medicine (Clinton Health Access Initiative, 2013).

There is much debate among professionals as to where medicine is getting lost in the supply chain, with the Drug Theft Investigation Unit and the Central Police Headquarters representatives believing the diversion is petty crime conducted by health workers, and health workers believing the problem boils down to systemic corruption which goes higher than the health worker level. According to representatives from the Central Region Police Headquarters, the theft seems to be an organized crime occurring at a couple of different points in the medicine supply chain. In some cases, medicine never makes it to the Central Medicine Store, in others medicine is diverted by drivers en route to the health facility, and then some medicine is removed from health facilities by health workers who give it to illegal vendors (Personal Communication, 2016). In October 2013, the Clinton Health Access Initiative, with support from the Norwegian Embassy, conducted a quantitative and qualitative study on the national leakage of medicines and supplies in Malawi which found 94 percent of the leakage was at the health facility level and 6 percent at the warehouse level. Additionally, all leakage at the warehouse level was found at Central Medical Stores (CMS) facilities, particularly CMS Kanengo, where high volumes of undocumented items were also found in stock (Clinton Health Access Initiative, 2013). Another assessment revealed that 30 percent of malaria medicines provided by U.S. Government/GFATM were stolen from the CMS warehouse in Lilongwe (Voice of America, 2016).

No matter when or where malaria medicine is diverted, the rate of theft puts medicine quality at risk and contributes to frequent stockouts in public hospitals, where healthcare is free of charge and therefore more accessible to people with lower incomes (Mitambo, 2016; Muula et al. 2005). PMI representatives stated that stockouts are most felt in rural Malawi, where there are no alternative medicine sources/pharmacies, and communities are more reliant on the limited health facilities (Personal Communication, Oct. 4, 2016). Stock outs (whether perceived or actual) can influence medicine procurement patterns because they promote use of the informal sector, but can also push community members to go to the health facility to get medicine “just in case,” when they learn about a shipment through word of mouth (Personal Communication, Oct. 5, 2016).

Once medicine is removed from hospitals or pharmacies, it is thought to be diverted to private drug stores, market vendors and hawkers in Malawi or taken across the borders into Zambia or Mozambique. In one recent case, PMI staff found malaria products labelled as property of the Malawian government

("Government of Malawi/Not for retail sale") in shipments going to Mozambique. PMI and GFATM have established parallel distribution systems for ACTs while also working to strengthen the national supply chain, and have considered developing parallel medical centers (Personal Communication, Oct. 4, 2016).

Political Will to Address Malaria Medicine Diversion

Political will is growing to address diverted medicines in Malawi, especially from donors. Recently, the U.S. Ambassador to Malawi, Virginia Palmer, shared her thoughts during the launch of the "Make a Difference" (MAD) Malaria Hotline (described under Current Activities) (GFATM, 2016):

"As a leading donor of malaria treatment drugs in Malawi, the U.S. Government is extremely concerned about any diversion of donated medicines that are meant to be freely prescribed to the people of Malawi. Drug theft has to stop and the public needs to play a key role in identifying it, reporting it and holding the people responsible accountable. The 'Make a Difference' hotline is a new opportunity for the Malawian public to do just that. And we applaud ongoing efforts by the Malawian Ministry of Health to deter and stop drug theft depriving its citizens of life-saving medications."

The GFATM Inspector General also spoke out on this matter, saying (Mitambo, 2016):

"The Global Fund has zero tolerance to wrongdoing and is committed to ensuring that its investments are used in the best way. When people steal medicines, it's a child, a parent or a sibling that might die of malaria. We encourage all Malawians to speak out now to stop drug pilferage and claim the free drugs that are their fundamental human right."

Moreover, the Ministry of Health has developed an action plan to address diversion and formed a Drug Theft Investigation Unit to investigate theft from the individual to global level – using audits and border checks to identify and curb the larger system of criminals (Personal Communication, Nov. 16, 2016).

One of the biggest challenges to truly tackling the problem lies in the suspicion that drug theft is committed by "insiders," (e.g., supply chain professionals, senior health management staff, security personnel and health workers). Some supply chain and health workers also mentioned social norms as a barrier to progress, as politicians and regional representatives have been known to normalize corruption by asking for free samples of medicine during visits, and have also been suspected of being involved in the larger system itself (Personal Communication, Oct. 5, 2016; Personal Communication, Oct. 6, 2016).

Factors Influencing the Availability and Quality of Malaria Medicine

Malawi is a ripe environment for SSFFC malaria medicines. The government of Malawi has paid the most attention to ensuring access to quality ACTs in the public sector, leaving the private sector largely unregulated. The PMPB does not have the necessary staff nor laboratory equipment to test shipments at the borders, and the national quality assurance laboratory is unable to conduct some tests necessary to detect substandard and falsified medicines. The country's borders are not tightly controlled, which puts residents of border districts at heightened risk for buying poor quality medicines (Personal Communication, Oct. 6, 2016; Personal Communication, Nov. 16, 2016).

PMI and USAID have been working on this issue since 2010, when their team discovered that ACTs they funded (specifically Coartem) for use in public sector health facilities in several East African countries were being sold by informal pharmacies and medicine vendors in West African countries. Through this work, they have identified several systems and policy areas for improvement that contribute to

medicine theft, including “weak regulatory and enforcement capacity, corruption and the lack of financial, technical and other resources in developing countries to ensure the security of drug supply chains... [They note that] public sector supply chains in Africa are particularly vulnerable to theft or loss, due to weaker systems of inventory/record keeping, internal controls, management information systems and transportation,” (PMI, n.d.). Some suggest that activities to strengthen the supply chain and move the country onto an electronic monitoring system (as paper-based systems are more “prone to abuse”) would create barriers for insiders looking to divert medicines, while also improving Malawi’s ability to identify and amend stockouts. Additionally, improving record keeping and inventory control could help malaria professionals determine cases where medicine has actually been stolen versus the data being mismanaged. With this information, Malawian stakeholders will be able to identify theft but also prevent it (Clinton Health Access Initiative Malawi, 2013). While there are some safeguard features in the electronic system, a Malaria Program Analyst stated in an interview that some are concerned the data management/accuracy issues from the paper-based system must be addressed in order for the upgraded database to be functional (Personal Communication, Oct. 11, 2016).

Health Worker Quality of Life

Given the findings of the 2004 study, which included instances of health workers aiding theft by “authorizing early refills; filling prescriptions for deceased patients; filling phony written or called-in prescriptions; short filling prescriptions and pocketing medication; taking tablets from bottles and then replacing them with ‘lookalike’ tablets; and opening bottles or packages, removing tablets, then replacing and gluing the seal,” some experts suggest that health workers’ low income encourages theft (Ferrinho et al, 2004). Because many health workers “steal drugs to sell to private clinics and pharmacies in order to boost their incomes,” Ferrinho and colleagues suggest that improving health workers’ standards of living, through competitive salaries, incentives and benefits, would reduce theft (Ferrinho et al, 2014; Ronald, 2009, Mitambo, 2016). Others, such as PMI representatives interviewed during the landscaping, argue that theft is not the norm for most health workers, and quality of life is just an excuse for criminal acts (Personal Communication, Oct. 4, 2016).

The government’s free healthcare may also contribute to medicine pilferage and poor accountability. Because medicine is free, it may not be valued by health workers or patients, and pilferage may not be viewed as stealing from the country or community (Personal Communication, Oct. 5, 2016).

Law Enforcement

The Pharmacy Act, developed decades ago, does not support serious penalties and punishment for those found guilty of diverting or selling stolen medicine. The current punishment varies depending on the type of crime. Individuals who steal directly from the source generally receive three years in prison, with a maximum possible sentence of 12 years; individuals who sell medicines are generally given fines. Professionals’ perception is that these fines and jail times are not strong enough to deter theft. Given the potential profit from sales of stolen ACTs, criminals may be willing to resume medicine stealing/hawking after getting caught (Personal Communication, Oct. 3, 2016).

Interviews with several key stakeholders revealed the desire for a movement of community/social accountability that improves the demand for good quality medicine, as well as the acceptability and instances of reporting. Community action groups, as well as health facility advisory committee/village clinic/health surveillance agent (HSA) systems (village clinics and HSAs are present in areas that are 5 kilometers from formal clinics), were cited as potential people to drive this movement and hold facilities accountable (Lettenmaier & Fordham, Trip Report, Oct. 2016).

Cultural and Social Factors Associated with Theft and Reporting

A number of cultural and social factors add to the structural challenges mentioned above. For instance, culprits may feel little empathy for the victims of malaria, or may feel the ends justify the means – seeing drug theft as something everyone is doing or doesn't hurt anyone. Feeling overworked and underpaid, they may also rationalize their actions as a “perk.” Additionally, community members do not report theft because of a lack of ownership of the problem, an ignorance of reporting channels and a fear of ramifications of reporting, driven by a pervasive culture of silence – everyone is connected (“you may be reporting on your uncle or brother”) (Personal Communication, Oct. 5, 2016; Personal Communication, Oct. 11, 2016).

Consumer Healthcare and Treatment-Seeking Attitudes and Behaviors

Much of the existing research about care and treatment-seeking behaviors in Malawi revolves around that of caretakers of children with fever. While this population is not fully representative, findings give a glimpse of the knowledge, attitudes and behaviors of the general public.

Data show that the majority of children with fever are taken to healthcare professionals, primarily in the government/public sector. A Support for Service Delivery Integration – Communication (SSDI-Communication) 2012 baseline survey found that three-fourths of mothers sought medical assistance for children with fever, and were more likely to go to a health provider if symptoms of convulsing or severe vomiting were present. The majority of respondents (86 percent) reported taking their children first to a government facility, and 12 percent went to a CHAM facility. This number is in line with Malaria Indicator Cluster Survey (MICS) and Demographic and Health Surveys (DHS) program surveys, which reported 74.9 percent and 65 percent of children were taken to a health provider at a government and CHAM facilities, respectively. Other studies show that seeking treatment from a health provider/facility or pharmacy for a child under five with a fever tends to decrease with age, as does the percentage of those who use formal services as their first treatment option as they get older (36 percent of younger children, 30 percent of older children and 24 percent of adults) (MIS, 2014; Mota, 2009).

While many go to the formal sector for care, focus groups in urban and rural regions of Malawi reveal it is common to delay seeking treatment and engage home remedies in the beginning, while determining the cause of fever. These remedies include: placing children in lukewarm water; adding or removing clothes; visiting an herbalist; and giving them over-the-counter medicines. Residents may also meet with traditional healers if they suspect the symptom is due to witchcraft or “maternal ailments, such as ‘mauka,” (vaginal growths). According to health workers in the Mwanza-Neno district, many mothers give their children antipyretics and antibacterial treatment before going to a health facility (Chibwana et al., 2009).

The 2014 MIS shows that most caretakers of children under five with fevers obtained their medicine from public sources (47.8 percent total, ranging from 20.1 percent from the government health post to 7.7 percent from a HSA). CHAM hospitals/health center, private sources and drug shops were visited by 6.5 percent, 5.3 percent and 7.3 percent of clients respectively. Notably, caretakers who visited a health provider/facility before seeking treatment were significantly more likely to go to a public sector source for their medicine (71.5 percent, including 30.1 percent who went to a health center and 11.5 percent who saw an HSA), followed by a CHAM hospital/health center (9.8 percent), private sector (7.9 percent) and drug shop (10.9 percent). Only 31 percent of children under five with a fever took an ACT within the recommended time frame – with rural residents more likely (41 percent) to give children an ACT, compared to urban residents (23 percent) (MIS, 2014).

Knowledge and attitudes around treatment are positive, with the SSDI baseline survey showing that the majority of respondents understood the importance of taking the full course of medicine – 73 percent reported finishing their medication regimen and 97.8 percent reported they strongly agree it is “important to finish all the pills, even after feeling better.” However, a landscaping assessment revealed anecdotally that many people do not complete their medicine regimen – some save medicine for another time, others are only given partial doses at the health facility/pharmacy due to limited stock and fail to return for the rest. “Financial constraints to buy antimalarial drugs, inadequate knowledge on the correct dosage and fear of giving [children] expired drugs from shops,” have also been identified as additional barriers to obtaining the proper treatment (Chibwana et al., 2009).

Cost and time determines much of care- and treatment-seeking practices. Although medicine is free in Malawi, many end up paying for transportation and spend time traveling long distances or waiting at a health facility. In addition to distance and cost, perceptions that government health services are poor quality with long waiting times and frequent stockouts fuel rates of self-medication, and can drive people to self-diagnose and pay for treatment from private pharmacies and clinics, or cheaper unlicensed market vendors, hawkers and drugs stores (Personal Communication, Oct. 10, 2016). This practice is particularly common in urban areas, where pharmacies, drug stores and private clinics are most accessible. In addition to buying from the informal market, many people do not adhere to their full prescription, getting medicine from either the formal or informal sector but then only taking one or two doses (Personal Communication, Oct. 10, 2016).

While much is known about the public sector, little is known about the private sector and the way consumers act within it (Personal Communication, Oct. 10, 2016; Personal Communication, Oct. 11, 2016).

INFLUENTIAL PARTNERS AND ACTIVITIES

Potential Partnerships

- MOH/NMCP
- MOH Health Education Services (HES)
- MOH Drug Theft Investigation Unit
- USAID/PMI
- PMPB – MAD/TIPS Hotline
- Central Medicine Board Trust
- National Drug Quality Control Laboratory
- Global Health Supply Chain
- SSDI-Communication
- SSDI-Services
- SSDI-Systems
- FHI360
- Save the Children
- Village Reach
- Pharmaceutical association
- United States Pharmacopeial Convention
- MalariaCare
- Malaria Alert Center
- WHO
- UNICEF
- PSI
- Police Unit
- Logistic Management Information System (LMIS) database/Electronic Medical Systems
- Central Region Health Journalist Association
- Clinton Health Access Initiative Malawi
- GFATM - MAD Malaria Hotline
- Onse Project (Community Mobilization)
- Malawi Health Equity Network (Works with Health Advisory Committees/HACs)
- Local Government Account Project
- Options UK
- National Democratic Institute (Supports accountability clubs)
- Graça Michel Foundation (Supports social accountability causes)
- Health Rights Education Program

Existing Activities and SBCC Options

Current Activities

A number of supply system strengthening initiatives are currently in place that will undoubtedly influence the presence of poor quality medicine, including: labelling malaria medicine boxes as “Government of Malawi”; developing electronic systems to document medicine stock and use; establishing the Central Medicine Stores Trust; and forming a MOH Drug Theft Investigations Unit. The Malawian government has been expanding access to quality medicine through village clinics/health surveillance agents, who provide quality malaria medicine and share malaria messages that quality LA is available for free in health centers. Novartis has also partnered with Population Services International (PSI) and the NMCP by distributing LA to private clinics, pharmacies and drug shops, and anticipates expanding to include retail shops in cities and rural areas (Personal Communication, Oct. 12, 2016).

The current Malawi Malaria Communication Strategy has a component (4c) that includes messages about medicine theft. These messages include:

- **To chiefs:** Support case identification and report pilferage and avoid corruption
 - Products (drugs) that are poorly stocked lose efficacy, which affects recovery from malaria
 - Product misuse negatively affects service delivery and prevents health workers from serving families and communities in time of need
- **To pilferers:** Stop pilferage to be a good citizen (community member) and to avoid embarrassment from punishment
 - Product misuse negatively affects service delivery and prevents health workers from serving families and communities in times of need
 - Legal repercussions affect one’s and one’s family’s reputation and wellbeing
 - NMCP, National Malaria Communication Strategy (2015-2020)

Some SBCC activities aimed at addressing medicine theft have already taken place in Malawi. The USAID Office of Inspector General (OIG) launched the MAD Malaria campaign in several African countries, including Malawi, to solicit the involvement of local communities in the fight against those who threaten malaria programs. The MAD Malaria Campaign’s main objective is to obtain actionable information concerning the theft, transshipment, resale or falsification of antimalarial drugs and commodities within USAID/PMI funded countries. The MAD Malaria campaign is also working in Malawi to combat diverted medicine with support from the GFATM OIG. In Malawi, the MAD Malaria campaign has raised awareness about the issues through newspaper advertisements, broadcast radio spots and a coordinated press briefing with the GFATM OIG. Moreover, the PMPB also has a mandate to raise the public’s awareness of quality medicine issues. It has developed several campaign materials and also promotes the TIPS hotline, which has the same number as the MAD Hotline. However, it does not have the budget needed to fully implement its campaign (Personal Communication, Oct. 11, 2016).

The police have also conducted a number of public sensitization activities through a special branch reserved for public awareness campaigns. These community policy programs help populations better understand how various policies work, and encourage community members to report suspicious activity to the police. Many people report to the police through anonymous letters and calls (Personal Communication, Oct. 3, 2016).

Potential SBCC Considerations

A variety of channels may be used to communicate behavior change messages and advocate for safer malaria treatment and medicine use. For example, many communities have Community Action Groups that are well-respected and active; health journalist associations offer an opportunity to spark dialogue in the media about malaria medicine safety; and the national health communication campaign can integrate media messaging around this issue.

Based on the situation, HC3 has identified areas where SBCC could reduce theft and improve quality medicine use.

- Promoting do-able actions people can take to reduce their risk of using poor quality malaria medicines (e.g., get medicines from health facilities or licensed pharmacies; do not buy loose ACTs in pill packs; do not pay for ACTs labelled “Government of Malawi”; report people selling government ACTs; etc.).
- Reinforcing community and health worker responsibility and accountability using SBCC messages.
- Using social marketing to improve demand and quality of malaria medicines sold in the private sector.
- Improving drug store merchants’ awareness and efficacy around administering rapid diagnostic tests (RDTs) and ACTs.

REFERENCES

- Chibwana, A. I., Mathanga, D. P., Chinkhumba, J., & Campbell, C. H. (2009). Socio-cultural predictors of health-seeking behaviour for febrile under-five children in Mwanza-Neno district, Malawi. *Malaria journal*, 8(1), 219. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763003/pdf/1475-2875-8-219.pdf>.
- Chikowe, I., Osei-Safo, D., Harrison, J. J., Konadu, D. Y., & Addae-Mensah, I. (2015). Post-marketing surveillance of anti-malarial medicines used in Malawi. *Malaria journal*, 14(1), 127. Retrieved from <https://malariajournal.biomedcentral.com/articles/10.1186/s12936-015-0637-z>
- Clinton Health Access Initiative. (2013). Health Commodity Leakage in Malawi: A quantitative and qualitative study on the national leakage of medicines and health supplies.
- Faucon, B., Bariyo, N. & Whalen J. (2013, Nov. 11). Thieves Hijacking Malaria Drugs in Africa. *Wall Street Journal*.
- Ferrinho, P., Omar, M. C., de Jesus Fernandes, M., Blaise, P., Bugalho, A. M., & Van Lerberghe, W. (2004). Pilfering for survival: how health workers use access to drugs as a coping strategy. *Human Resources for Health*, 2(1), 4. Retrieved from <https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-2-4>
- Fordham, C & Lettenmaier, C. (2016). Landscaping Activity Trip Report. Baltimore, MD, USA: Johns Hopkins Center for Communication Programs.
- Kaur, H., Allan, E. L., Mamadu, I., Hall, Z., Ibe, O., El Sherbiny, M., ... & Dwivedi, P. (2015). Quality of artemisinin-based combination formulations for malaria treatment: prevalence and risk factors for poor quality medicines in public facilities and private sector drug outlets in Enugu, Nigeria. *PLoS One*, 10(5), e0125577. Retrieved from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0125577>
- Khuluza, F. (2014). In-vitro evaluation of the quality of Paracetamol and Co-trimoxazole tablets used in Malawi based on pharmacopoeial standards. *Malawi Medical Journal*, 26(2), 38-41.
- Malaria Indicator Survey (MIS). (2014). MIS Final Report (English). Retrieved from <http://dhsprogram.com/pubs/pdf/MIS18/MIS18.pdf>
- Mitambo, C. (2016, July). How can drug pilferages be prevented in Malawi Public Hospitals? *Ministry of Health: Policy Brief*. Malawi: United Kingdom Department for International Development (DFID) and the African Institute for Development Policy (AFIDEP), SECURE Health Programme. Retrieved from https://www.afidep.org/?wpfb_dl=196
- Muula, A. (2015). Survival and retention strategies for Malawian Health Professionals. Pharmacy Security Checklist National Malaria Control Programme. *Malawi Malaria Communication Strategy 2015-2020*. Retrieved from http://www.thehealthcompass.org/sites/default/files/project_examples/Malawi_2015-2020_Malaria%20SBCC%20Strategy.pdf
- Nkhata, G. (2015, Dec. 6). State of Moral Decay 2: Malawi ARCs on “Jozi” Streets, qech and Thyolo used. Published on Afriem. Retrieved from <http://www.afro.who.int/en/Malawi/country-health-profile>.

President's Malaria Initiative (PMI). (2016). Malawi: Malaria Operational Plan FY 2016. Retrieved from <https://www.pmi.gov/docs/default-source/default-document-library/malaria-operational-plans/fy16/fy-2016-malawi-malaria-operational-plan.pdf?sfvrsn=5>

Government of Malawi, Support for Service Delivery Integration – Communication (SSDI-Communication). (2012). *Findings from the 2012 Baseline Survey of 15 Districts in Malawi*. Malawi: Government of Malawi, SSDI-Communication. Retrieved from http://pdf.usaid.gov/pdf_docs/PA00KJ9R.pdf

World Health Organization (WHO). *World Malaria Report 2015*. Geneva, Switzerland: WHO. Retrieved from http://apps.who.int/iris/bitstream/10665/200018/1/9789241565158_eng.pdf?ua=1

World Health Organization (WHO). (2011). *Survey of the Quality of Selected Antimalarial Medicines Circulating in Six Countries of Sub-Saharan Africa*. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/medicines/publications/WHO_QAMSA_report.pdf