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AMAZON MALARIA INITIATIVE

Strategic Malaria Communication Guide for Central America

2015 – 2020

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ABOUT THE AMAZON MALARIA INITIATIVE (AMI)

The US Agency for International Development (USAID) has supported the Amazon Malaria Initiative (AMI) to improve malaria prevention and control in Latin America and the Caribbean since 2001. That same year, the Amazon Network for the Surveillance of Antimalarial Drug Resistance (RAVREDA) was created through the Pan American Health Organization (PAHO/WHO) to help address the challenge of antimalarial drug resistance in the Americas region. Because malaria transmission transcends international borders, AMI/RAVREDA uses a regional approach that complements country-specific activities carried out by National Malaria Programs (NMPs). AMI/RAVREDA supports countries' malaria control programs to adequately identify and implement interventions against malaria, as well as to incorporate best practices into their work, to adapt responses to the epidemiological context, to consider special at-risk populations, to monitor the emergence and spread of antimalarial resistance, and to address the risk of malaria reemergence.

In addition to fostering South-South collaboration, AMI/RAVREDA brings additional expertise of technical partners including the PAHO/WHO, the US Centers for Disease Control and Prevention (CDC), the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program managed by Management Sciences for Health (MSH), the Promoting the Quality of Medicines (PQM) Program managed by the US Pharmacopeial Convention (USP), and Links Media, LLC. AMI/RAVREDA has provided support to the Central American countries of Belize, Guatemala, Honduras, Nicaragua, and Panama since 2008.

For more information, please visit the AMI website: http://www.usaidami.org.

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1 This document has been made possible through USAID communication technical assistance to the Central American countries of Belize, Guatemala, Honduras, Nicaragua, and Panama, through contract AID-527-C-13-00004 with Links Media, LLC.

ACRONYMS AND ABBREVIATIONS

AMI	Amazon Malaria Initiative
CAFTA-DR	Dominican Republic – Central America Free Trade Agreement
CDC	US Centers for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
COMISCA	Council of Ministers of Health of Central America and the Dominican Republic
CSO	Civil Society Organization
DDT	Dichloro-diphenyl-trichloroethane
EMMIE	Initiative for the Elimination of Malaria in Mesoamerica and the Island of Hispaniola
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GMEP	Global Malaria Eradication Program
GMP	Global Malaria Program
IDB	Inter-American Development Bank
IEC	Information, Education, and Communication
IVM	Integrated Vector Management
KAP	Knowledge, Attitudes, and Practices
LLIN	Long-Lasting Insecticidal Net
MCR	Regional Coordinating Mechanism (Spanish acronym)
MDG	Millennium Development Goals
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
NMP	National Malaria Program
PAHO	Pan American Health Organization
PQM	Promoting the Quality of Medicines Program
PRAIS	Regional Platform on Access and Innovation for Health Technologies (Spanish acronym)
RAVREDA	Amazon Network for the Surveillance of Antimalarial Drug Resistance (Spanish acronym)
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Test
SBCC	Social and Behavior Change Communication
SIAPS	Systems for Improved Access to Pharmaceuticals and Services Program
SICA	Central American Integration System (Spanish acronym)
USAID	US Agency for International Development
USP	US Pharmacopeial Convention
WHO	World Health Organization

INTRODUCTION

The goal to eliminate malaria from Central America and the island of Hispaniola is ambitious, but it is achievable. Communication and advocacy must play a vital role in the transition from malaria control to malaria elimination in this region by helping to increase awareness of elimination terminologies and measures, build political will, strengthen partnerships, and mobilize sustainable resources.

This Strategic Malaria Communication Guide was developed following an assessment that included in-depth interviews of key actors and a literature review that led to the definition of key focus areas and recommended communication tactics that National Malaria Programs (NMPs) in Central America should use to further their goals. It provides recommendations on key messages, target audiences, communication channels, and activities that NMPs can implement to foster effective communication with other actors and move towards malaria elimination. This guide seeks to:

- Build awareness among NMP representatives in Central American countries about proven communication and advocacy practices to help create the appropriate conditions for malaria elimination.
- Orient NMP representatives and other actors to the resources and reference materials available for malaria communication, which can be adapted and applied to regional and country-level efforts to reduce malaria transmission.

With this, it is expected that NMPs will be able to create a shared understanding of what it means for countries in the region to be working towards elimination in the long-term, in terms of funding levels, technical interventions, multi-sectoral engagement, and sustained surveillance and reporting requirements. In addition, it is hoped that NMPs and other malaria actors will be able to expand the base of support for malaria elimination in Central America.

The countries of Central America have already reduced malaria morbidity by 88% since 2000, according to the World Health Organization's World Malaria Report

Photo: PAHO/WHO

2014.[2] Yet with this success in the declining incidence of malaria, many countries have now refocused their resources on other health issues. At this critical juncture, with a smaller number of malaria cases than ever, it is time to finally eliminate the disease from the region.

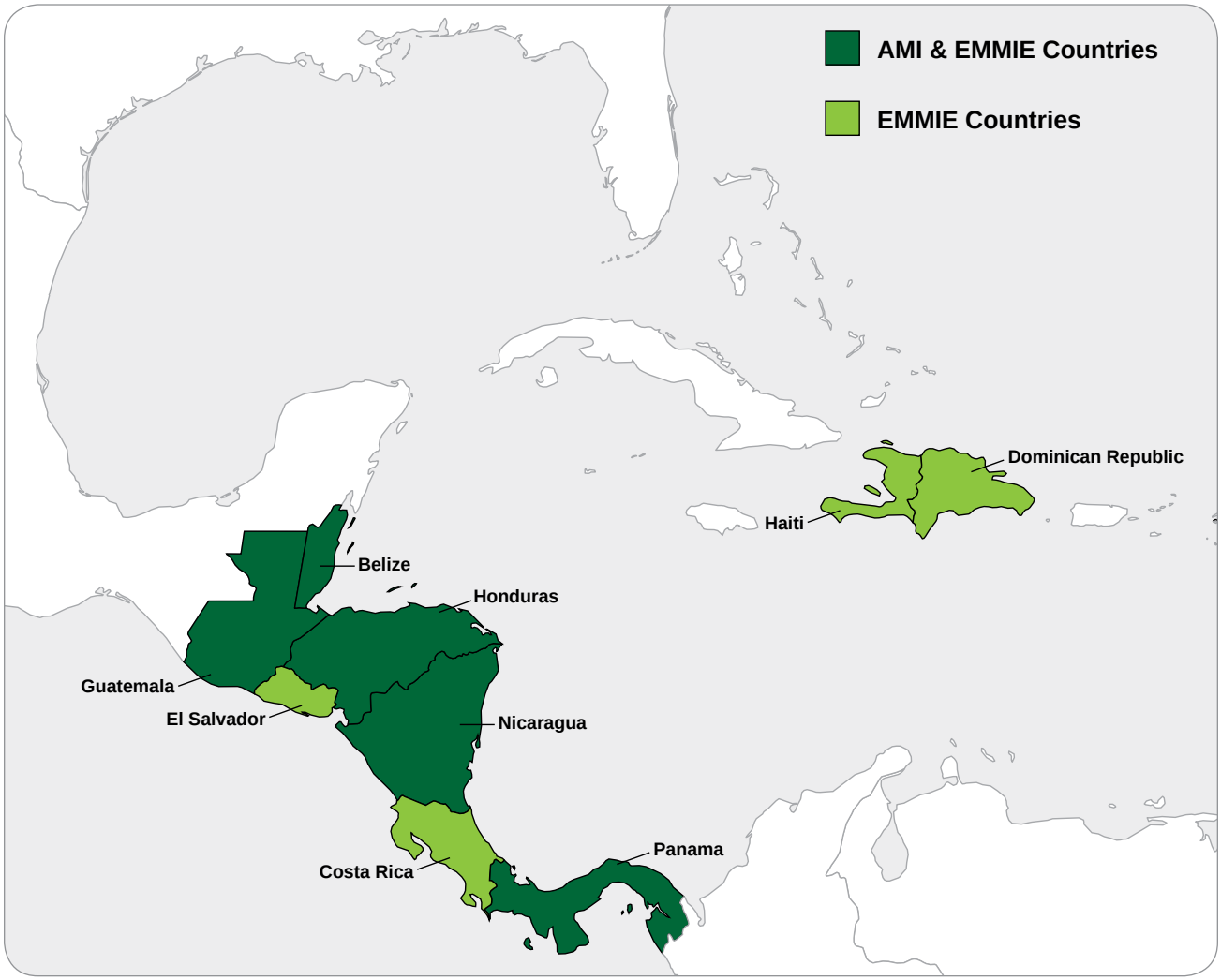
A regional declaration[3] signed in 2013 to eliminate malaria by 2020 has the potential to change this lack of attention to the disease. Past malaria elimination experience suggests that funding levels and implementation efforts need to be elevated in order to successfully eliminate the small number of malaria cases that remain in Central America. By using the recommendations in this guide, NMPs can work towards the communication goals of increasing awareness with regard to malaria elimination and persuading national decision-makers in Central America to dedicate sufficient resources to the malaria elimination and post-elimination phases so as to avoid reintroduction of the disease.

Figure 1. Strategic Objectives and Communication Goal

2 World Health Organization. *World Malaria Report 2014*. December 2014

3 See the Global Fund to Fight AIDS, Tuberculosis and Malaria website: http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-06-28_Ten_Countries_Rally_to_Eliminate_Malaria_in_Central_America_and_the_Caribbean/ and http://theglobalfight.org/malaria-free-by-2025-mesoamerica-hispaniola-regional-initiative/

Map 1: Central America and the island of Hispaniola



Credit: Links Media, LLC

SITUATIONAL ANALYSIS: OVERVIEW OF MALARIA IN CENTRAL AMERICA

Central America has a long history of fighting malaria that started with the creation of the Panama Canal.[4] In the 1950s and 1960s, countries were actively involved in a global effort to eradicate malaria. Unfortunately, the region experienced a resurgence of the disease in the 1970s and 1980s. Since this time, health actors in the region have promoted prevention and control to help communities reduce the number of cases through targeted interventions such as integrated vector management and diagnosis and treatment of cases. Since 2000 there has been an 88% reduction in morbidity, and the mortality rate has decreased drastically, with only one confirmed death in the region in 2013 in Honduras. Nearly 90% of malaria cases in Central America are caused by the *Plasmodium vivax* parasite, with approximately 10% caused by *P. falciparum* according to 2013 data.[5] The majority of these cases are treated with a combination of chloroquine and primaquine, to which the parasites still demonstrate sensitivity in most of the region.[6]

4 See: http://www.cdc.gov/malaria/about/history/panama_canal.html.

5 *P. malariae* is another parasite species that causes disease in this region.

6 Resistance to chloroquine has been observed in parts of Panama near the Colombian border.

Six of the seven Central American countries are on track to have a greater than 75% decrease in incidence between 2000 and 2015. Panama has had a 32% reduction in cases since 2000, and is projected to have a decrease between 50-75% by 2015. In the pre-elimination phase, Costa Rica and El Salvador have both experienced a 99% decrease in cases since 2000. Belize experienced a 98% reduction in cases, and had only 26 cases in 2013 (see Annex 1). Challenges still remain in the efforts to eliminate all transmission in the region, however. From 2008-2013, the data in Annex 1 show that cases in AMI-supported countries fell by only 23%.[7] This has been a smaller rate than the reduction seen between 2000 and 2008. In addition, from 2008-2013 Nicaragua showed a nearly 57% increase in cases, and in 2013 Guatemala experienced a 16% increase from 2012. These data demonstrate the difficult nature of malaria control, not to mention elimination.

MOVING TOWARDS MALARIA ELIMINATION AND BEYOND

The World Health Organization (WHO) defines malaria elimination as the "reduction to zero of the incidence of infection caused by human malaria parasites (including *P. falciparum*, *P. vivax*, *P. malariae* and *P. ovale*) in a defined geographical area as a result of deliberate efforts.[8]" In order for elimination to be officially recognized within a given member state, the regional WHO office for the Americas, which is the Pan American Health Organization (PAHO/WHO), would begin the certification process upon the request from the country with at least three consecutive years of zero mosquito-borne malaria transmission. The malaria elimination certification process entails a lengthy and in-depth evaluation which demonstrates that "beyond a reasonable doubt there is no longer any mosquito-borne malaria transmission in the country" and provides "full confidence that the national health system, as it is, will be able to prevent re-establishment of malaria transmission in the country." For elimination to be effective, it must not end with the certification process.[9] A country may remain vulnerable to malaria transmission for as long as the competent vector remains. Measures must continue to be enforced beyond the elimination milestone so that the disease is not re-established.

From 1955-1969, the Global Malaria Eradication Program (GMEP) helped to eliminate malaria from many regions of the world. Unfortunately, during the 1970s and 1980s, there was a resurgence of malaria in some regions as international support efforts waned due to financial constraints.[10] Furthermore, the failure of eradication efforts has been partly attributed to an inability to build on advances and adapt to evolving epidemiological contexts, including the emergence of resistance to insecticides and antimalarial medicines.[11] One example of this was in Nicaragua, where the eradication campaign failed as a result of a decrease in funding along with the emergence of resistance to the insecticides dieldrin and dichloro-diphenyl-trichloroethane (DDT).[12] Within the last few years, the global health community has again started a push to eliminate malaria from the remaining endemic regions and to achieve a malaria-free world once and for all. In order to achieve elimination, national leaders, technical actors, stakeholders, and affected communities must commit to learning from previous lessons of the failed eradication program. This includes committing to a sustainable approach over the long-term that emphasizes a flexible strategy to address evolving epidemiological contexts, with a robust public health surveillance system, on-going

7 World Malaria Reports, 2008-2014

8 World Health Organization. *Weekly epidemiological record, No. 29,* 89th Year, pp 321-336. Geneva, Switzerland. July 18, 2014

9 World Health Organization. *From Malaria Control to Malaria Elimination. A Manual for Elimination Scenario Planning.* 2014

10 Nájera JA, González-Silva M, Alonso PL (2011) Some lessons for the Future from the Global Malaria Eradication Program (1955-1969). *PLoS Med* 8 (1): e1000412. http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000412. Published: January 25, 2011

11 Malaria Consortium. *World Malaria Day 2014: Lessons from the past – can malaria ever be eradicated?* http://www.malariaconsortium.org/news-centre/lessons-from-the-past-can-malaria-ever-be-eradicated.htm

12 Cohen, J. et al. Malaria resurgence: a systematic review and assessment of its causes. *Malaria Journal* 2012, 11:122 http://www.malariajournal.com/content/11/1/122

Photo: PAHO/WHO

research to identify and provide evidence-based interventions, involvement of affected communities in the planning and implementation of programs, and incorporation of malaria elimination efforts within the wider health system.[10]

In 2013, the Council of Ministers of Health of Central America and the Dominican Republic (COMISCA) signed a declaration to eliminate malaria in the region by 2020. To support this effort, the Global Fund to Fight AIDS, Tuberculosis and Malaria launched a regional program called the Initiative for the Elimination of Malaria in Mesoamerica and the Island of Hispaniola (EMMIE). The NMPs of Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Panama participate in the EMMIE initiative. The Global Fund is offering a financial incentive to those countries that successfully meet the 2020 malaria elimination target under EMMIE, with no conditions on its use. There are six key pillars of the EMMIE initiative, to improve: 1) malaria prevention, surveillance, early detection and malaria outbreak control, 2) integrated vector management, 3) treatment and diagnosis, 4) case management, 5) promotion, communication, alliances and collaborations, and 6) strengthening of health systems. The Global Fund views EMMIE as a catalyzing agent that will help the countries of Central America and Hispaniola accelerate towards elimination.

In order to learn from past malaria elimination efforts and avoid future resurgence of malaria, communication and advocacy are vital for regional coordination efforts as well as to mobilize additional resources for malaria elimination. NMPs must lead the strategic communication effort and communicate effectively with both internal and external audiences in order to demonstrate why malaria should remain on the public health agenda, why additional investment and expertise are required, and why sustained commitment and support are needed at both the policy and community levels in order to meet WHO standards for elimination.

STRATEGIC COMMUNICATION FRAMEWORK

The role of communication will be vital in supporting the regional efforts to achieve malaria elimination by mobilizing political will, resources, and civil society. The following information should help guide NMPs and health actors in their communication programs in support of malaria elimination. The communication process should rely on four key principles as set forth by the Roll Back Malaria (RBM) Partnership's *Strategic Framework for Malaria Communication at the Country-Level 2012-2017*.[13]

USE A SYSTEMATIC AND EVIDENCE-BASED PROCESS

The communication process should follow an iterative and systematic approach that uses research and data to effectively target audiences and adapt based on evolving local contexts. This includes collecting data throughout the process from planning (assessment), pre-testing, and deployment, to monitoring and evaluation during implementation.

APPLY THEORY-BASED COMMUNICATION

Theories are key to effective communication because they help public health campaigns understand the factors and pathways that may negatively or positively affect behavior and actions of communities and individuals.[14] There are various theories for social and behavior change, but all rely on population-specific information that must be collected to help understand internal (beliefs, attitudes, skills, etc.) and external (availability and access to health services and commodities, policies, etc.) factors that may influence these behaviors. Once these key factors are identified, opportunities for change can be identified that are central to the communication process.

SYSTEM-BASED

The whole system must be factored in when developing and implementing a communication program. This includes different levels, such as health services at local and national levels, socioeconomic systems, educational systems, and government.

USE APPROPRIATE AND MULTIPLE APPROACHES

Identify and utilize the most effective approaches to target key audiences and achieve communication goals and objectives. Approaches may include advocacy (at the policy level), education or social mobilization (at the interpersonal or community level), social and behavior change communication (SBCC) or social marketing (at the individual level), and interpersonal communication on a variety of levels.

For additional guidance on malaria communication, please see Annex 4 (Recommended Malaria Communication Resources).

Photo: PAHO/WHO

13 Roll Back Malaria (RBM) Partnership. *Strategic Framework for Malaria Communication at the Country-Level 2012-2017*. 2012

14 Glanz, Karen and Rimer, Barbara K. *Theory at a Glance: A Guide for Health Promotion Practice*. National Cancer Institute, National Institutes of Health, U.S. Department of Health and Human Services. NIH Pub. No. 05-3896. Washington, DC: NIH, Second Edition, September 2005

TARGET AUDIENCES

The NMPs in each country will be responsible for communicating with the following target audiences:

Key Policy Makers and Public Opinion Leaders consist of influential individuals within the Central America region. Some of these influential individuals are elected officials or public figures directly involved in decisions about public policy and funding (e.g. Congress, National Health Council, Ministries of Finance, Education, Social Inclusion, Agriculture, Foreign Affairs). Others are journalists or writers who help to shape the public agenda. These individuals must be well informed on the threat of malaria and the need for keeping it on the public policy agenda.

Ministry of Health Decision-Makers constitute an internal audience that the NMP must inform on a continual basis to ensure that they are aware of successes, challenges, and needs in the efforts for malaria elimination. This is mainly a technical audience of elected officials and civil servants who are responsible for overseeing national and regional health budgets and policies, as well as representing their countries at COMISCA. This audience must understand the importance of investing in and continuing surveillance, vector control, and other efforts beyond elimination. By promoting the sustainment of these efforts, Ministry of Health decision-makers can help to reduce systemic vulnerability to malaria transmission.

Technical and Cooperation Agencies refers to agencies and donors that provide technical and monetary support to malaria prevention and control in the region, including AMI partners and stakeholders such as USAID, PAHO/WHO, CDC, MSH/SIAPS, USP/PQM, Links Media, and NMPs from the neighboring AMI countries, in addition to international donors including the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), the Clinton Health Access Initiative (CHAI), the Bill & Melinda Gates Foundation, and multilateral donors such as the Inter-American Development Bank (IDB). These agencies should be kept informed of progress and challenges throughout the effort.

Private Sector and Non-Governmental Organizations (NGOs) are organizations that may have an interest in providing support to malaria-affected communities and/or are already involved in other health projects. These organizations can be both

Photo: PAHO/WHO

Photo: PAHO/WHO

technical and non-technical audiences and can provide additional resources to the effort including funding and in-kind support. Uniting with the private sector and NGOs that are already working in malaria-affected communities can be a good way to introduce and strengthen malaria programming and communication.

Health Professionals, Researchers, and Academic Institutions encompass both technical and non-technical audiences that use and contribute to the evidence base for malaria prevention and control. They can be powerful allies for ensuring sustainability of the malaria prevention and control efforts by providing technical assistance and training beyond the life of the elimination initiative. For certification of elimination, health professionals including health service providers from both the public and private sectors must report all confirmed cases to the national health system and must be informed of policies and guidelines for a coordinated response. They need to understand the importance of a long-term commitment to malaria elimination and their day-to-day roles in avoiding the re-establishment of malaria transmission.

Communities affected by malaria are non-technical audiences that must be considered throughout the planning, implementation, and evaluation process. For their part, communities must also understand the significance of a long-term commitment to malaria elimination. Communities have varying degrees of vulnerability to malaria transmission according to vector presence and limitations on the prevention, diagnosis, and treatment of cases. Many of the most vulnerable communities represent remote and underserved populations such as indigenous peoples and migrants. In order to achieve malaria elimination, communities must be engaged through effective and culturally sensitive communication. In addition to public communication approaches including Information, Education, and Communication (IEC) and SBCC, community leaders must be integrated within communication efforts to help instill ownership. Working with Civil Society Organizations (CSOs) that are already present in these communities can be a good way to introduce and strengthen malaria programming and communication.

KEY MESSAGES

When communicating with various audiences, NMPs and other malaria actors should be familiar with and be able to repeat key messages and definitions.[15] The messages should be simple and easy to understand by both technical and non-technical audiences. They should be reiterated by all actors as part of a coordinated communication approach. The following messages are for key policy makers and public opinion leaders, Ministry of Health (MOH) decision makers, technical and cooperation agencies, private sector and NGOs, health professionals, researchers and academic institutions, and communities affected by malaria in Central America.

To key policy makers and public opinion leaders:

- Central America has made considerable advances in decreasing malaria, but malaria remains an issue that must be addressed.
- The EMMIE initiative is offering a financial incentive to countries that successfully eliminate malaria by 2020, with no conditions on its use. A window of opportunity exists to make the most of the EMMIE resources to accelerate efforts against malaria.
- Going from few malaria cases to zero cases requires additional financial and political support. Elimination also requires a long-term commitment to prevent re-establishment of malaria in the future.
- Once a country has reached zero cases, it may remain vulnerable to malaria transmission due to the presence of the vector and arrival of infected individuals. Thus, the country must maintain its capacity to address malaria cases after elimination.
- A multi-sectoral approach must be used to advance towards elimination. Malaria is not just a health issue, but also impacts other sectors including education, trade, tourism and agriculture.
- Ongoing operational research, as well as medicine quality and efficacy testing, are needed to ensure that the chosen interventions are as effective as possible. The results should lead to continuous adaptation and improvement when necessary.

To Ministry of Health decision makers:

- With the goal of working towards elimination, malaria must be maintained as a key priority under the national health agenda.
- Efforts cannot end upon reaching zero-cases and obtaining certification of elimination. The country will remain vulnerable to malaria transmission.
- Sustain malaria control achievements by remaining proactive about strategic control actions. If health system surveillance falters, the gains towards elimination could disappear.
- The strengthening of surveillance systems and vector control needed to eliminate malaria can also benefit the prevention and control of other vector-borne diseases such as dengue and chikungunya.

To health professionals, academic and research institutions:

- Public and private sector health services and institutions must follow the lead of the Ministry

Photo: PAHO/WHO

15 The WHO definition of elimination and how each country plans to achieve it is vital information.

Photo: PAHO/WHO

of Health and be involved in malaria elimination efforts, especially related to the reporting of cases.

- All confirmed malaria cases must be reported to the national health surveillance system in order to properly record all cases and investigate individual cases.

To private sector and non-governmental organization(s):

- Malaria elimination is a whole-of-society issue that requires other sectors to invest in healthy communities beyond elimination to prevent future malaria transmission.

- Non-health organizations and businesses are also affected by malaria when employees and consumers become sick. Protecting communities from malaria benefits us all.

To technical and donor/cooperation agencies:

- Central America has made considerable advances in decreasing malaria, but malaria remains an issue that must be addressed.

- The EMMIE initiative is offering a financial incentive to countries that successfully eliminate malaria by 2020. However, EMMIE only provides catalytic and not operational funding; countries are responsible for mobilizing the resources they need to meet the elimination target. There is an opportunity to support this effort by pooling resources for the region.

- Going from few malaria cases to zero cases requires additional financial and political support. Elimination also requires a long-term commitment to prevent re-establishment of malaria in the future.

To communities affected by malaria:

- Malaria prevention begins with the individual. You have the power to stop malaria by protecting yourself and your family from mosquitoes.

- Seek care from a health center if you suspect you have malaria.

- All suspected malaria cases must be diagnosed with a blood test.

- Do not take antimalarial medicines unless you have been diagnosed with malaria.

- Take the medicine as prescribed and complete your antimalarial treatment.

SUGGESTED CHANNELS

Table 1 below shows suggested channels through which NMPs and malaria actors in the region can reach the aforementioned target audiences.

Table 1. Audiences, Channels and Communication Products for Malaria Communication and Advocacy

Audience(s) Reached	Channels	Communication Products
Policy makers and public opinion leaders	• High-level dialogue (international pressure) • International summits • Meetings with local authorities such as mayors • Presentations on awareness days • MOH websites – See Annex 3 • Local and international online & print media (newspapers, magazines) • Regional and national awards ceremonies • Legislative bulletins • Conversations with peers • Letters from constituents • Site visits	• Letters • Informational bulletins • Policy briefs • Opinion editorials • Oral presentations • Social media • Outdoor advertisements (billboards)
Ministry of Health decision makers	• High-level dialogue (international pressure) • International summits and South-South cooperation meetings • PAHO/WHO website • PRAIS (Regional Platform on Access and Innovation for Health Technologies) • Online (NMP website, MOH websites, e-mail listserv, social media including Facebook) • Site visits	• Scientific articles • Presentations • Epidemiological bulletins • Technical bulletins • Policy briefs • Social media posts

Audience(s) Reached	Channels	Communication Products
Health professionals, researchers and academic institutions	• Academic journals • Academic conferences • Online (NMP website, MOH websites, e-mail listserv, social media including Facebook) • Medical and health science libraries • Technical bulletins • Professional association meetings	• Scientific articles • Presentations • Policy briefs presented by local and international universities and NGOs
Technical and donor/ cooperation agencies	• Online (NMP website, MOH websites, e-mail listserv, social media including Facebook) • International online & print media (newspapers, magazines) • Program reports and assessments • Newsletters • Conferences & meetings	• Assessment reports • Technical presentations • Congressional testimony • Policy briefs presented by local and international universities and NGOs • Social media posts
Private sector and NGOs	• Online (NMP website, MOH websites, e-mail listserv, social media including Facebook) • International online & print media (newspapers, magazines) • Program reports and assessments • Newsletters • Conferences & meetings • Site visits	• Technical presentations • Policy briefs presented by key malaria actors • Social media posts • Public service announcements
Communities affected by malaria	• Interpersonal Communication • Edutainment events • Public opinion campaigns o Broadcast Media (Radio, TV) o Information, education, and communication (IEC) materials • Town hall meetings • School classrooms/Educational curricula	• Informational pamphlets • Public service announcements • Outdoor advertisements (billboards) • Oral information • News articles • Opinion editorials

RECOMMENDED COMMUNICATION AND ADVOCACY TACTICS IN SUPPORT OF EFFORTS TOWARDS MALARIA ELIMINATION

For effective communication and advocacy efforts, coordination between NMPs, agencies, and donors must be open and frequent to help address challenges and needs. Timing can be important in order to build critical mass, so malaria advocates should consider using the following dates to help bring greater awareness to malaria elimination efforts when working with the media and influential public opinion leaders.

Table 2. Important Dates for Public Outreach about Malaria

Important Dates for Public Outreach about Malaria	
April 7	World Health Day
April 25	World Malaria Day
August 9	International Day of the World's Indigenous Peoples
November 6	Malaria Day in the Americas
Early December	Release of World Malaria Report
December 18	International Migrants Day

The focus areas and sub-topics that follow were identified during the assessment phase with NMP representatives, AMI/RAVREDA technical partners, and other malaria actors. These communication focus areas are accompanied by concrete actions that MOHs should lead as part of a wider Central American initiative to eliminate malaria.

Photo: PAHO/WHO

FOCUS AREA 1: NATIONAL AND INTERNATIONAL COALITIONS

Communication Matrix 1

Communication Issue	Malaria is not seen as a priority area for health actors and national leaders. Malaria elimination efforts require stronger support from a wide range of national and international stakeholders.
Target Audience(s)	Policy makers, public opinion leaders, media, Ministry of Health and decision makers from other sectors, technical and cooperation agencies, private sector, non-governmental organizations (NGOs), and communities
Communication Objective	To promote the building of coalitions among multi-sectoral stakeholders and influential public voices to help raise awareness of efforts towards malaria elimination.
Key Messages	• Central America has made considerable advances in decreasing malaria, but malaria remains an issue that must be addressed. • Going from few malaria cases to zero cases requires additional financial and political support. Elimination also requires a long-term commitment to prevent re-establishment of malaria in the future. • Malaria elimination is a whole-of-society issue that requires other sectors to support affected communities. Alliances should be established across organizations and sectors. • Elimination efforts that have been successful have shown the importance of establishing coalitions among a wide range of actors and sectors.
Key Promise and Support Points	By strengthening alliances and increasing coordination for malaria elimination, we can help communities and strengthen the overall health system, which can help to control other diseases like dengue and chikungunya.
Desired Outcome	Involvement of traditional and non-traditional partners to ensure a sustainable, long-term strategy so that together, we can achieve elimination and prevent re-introduction of malaria.

Photo: PAHO/WHO

Photo: PAHO/WHO

NATIONAL COORDINATION

From the outset, it is important to establish alliances and coalitions among all those who have influence over malaria in each country: decision-makers, state bureaucrats, cooperation agencies and other donors, public opinion leaders, NGOs, researchers, and academic institutions. Despite the existence of many well-intentioned efforts working in parallel, fragmentation can lead to ineffectiveness. Power increases when people and organizations commit to broad alliances or coalitions. The benefit of reaching an agreement and joining forces with other groups that support the same end goal can be sizable.

Suggested Activities:

- **Create a stakeholder map at the national level and invite stakeholders to participate in the strategic planning process for communication and advocacy against malaria.**

Support Actions:

  - Identify actors and institutions with the capacity to collaborate on malaria prevention.
  - Hold bilateral and multilateral meetings with aid agencies in Central American countries in order to analyze the situation and establish common goals.
  - Promote "champions" who have a relevant political or public role in order to promote the malaria control and elimination initiative. External cooperation can be used to help identify and support these champions.

- **Create a broader base of support for malaria elimination, presenting successes and disseminating health summaries to other divisions.**

Support Actions:

  - Schedule visits for policymakers to observe malaria program activity sites.
  - Connect malaria control with other issues including poverty reduction and social inclusion to raise the profile of the disease on the policy agenda. Explain that increased economic opportunities can reduce the malaria risk associated with migration.

- Provide media trainings on malaria to ensure journalists understand key terms such as prevention, control, elimination, and eradication.

- **Provide information on malaria elimination in order to strengthen the capacity and will of decision makers who manage public policies by disseminating policy briefs and other accessible products that link to full technical reports.**

Support Actions:

- Send simple, concise situation reports on malaria to national and sub-national political leaders.

- Connect malaria control with other issues including poverty reduction and social inclusion to raise the profile of the disease on the policy agenda.

- Make an appeal to editors of legislative bulletins (briefings for legislators and members of Congress) to include information on malaria control activities in order to keep legislators abreast of activities.

- Request that materials from NMPs and AMI/RAVREDA be made available at national libraries, medical schools, and information centers.

- **Ensure that officials at all levels of the health system are made aware of important agreements reached at technical meetings in the region in order to ensure that these agreements are institutionalized as official policy and are implemented in practice.**

Support Actions:

- Following technical meetings where new agreements, guidelines, and good practices for malaria prevention, control, and elimination are defined, disseminate policy briefs to health professionals at all levels of the system.

- Train NMP staff on advocacy techniques.

Photo: PAHO/WHO

- Constantly communicate with medical personnel on how to properly diagnosis and treat malaria symptoms.

- **Support professional groups involved in public health and other relevant social areas in order to present their work at national, regional and international conferences to raise awareness and knowledge on the problem of malaria.**

Support Actions:

- Establish dialogue with persons or organizations involved in public health activities through personal meetings, regional conferences, etc.

- Form alliances with NGOs to promote adherence to official guidelines for diagnosis and treatment regimens.

- Obtain commitments for joint action.

INTERNATIONAL COORDINATION

The Central American region already has important coordination and collaboration mechanisms in place, including:

- A regional strategic plan for the prevention and control of malaria through AMI/RAVREDA; NMPs are working to strengthen the coordination and harmonization of diagnostic methods, treatment protocols, epidemiological surveillance, vector control, and formative/operational research;
- An information system, the Regional Platform on Access and Innovation for Health Technologies (PRAIS),[16] where national reporting data is collected in order to improve access to essential medicines, biological and diagnostic supplies in the region;
- Quarterly bulletins with national pharmaceutical warehouse inventory data. Monitoring this data helps to prevent antimalarial medicine stockouts through exchanges and donations between countries;
- The PAHO/WHO Strategic Fund, which helps finance the procurement of medicines, in addition to the Regional Malaria Program, which coordinates the acquisition of medicines for many countries through a consolidated purchase;
- A Regional Coordinating Mechanism (MCR) that has annual technical meetings;
- A reference laboratory in Honduras for microscopy diagnostic quality assurance;
- Regional collaboration to conduct joint activities along international borders, for example, meetings between municipalities at the border between Honduras and Nicaragua;
- Monitoring and evaluation (M&E) with support from technical partners including PAHO/WHO, USAID and others.

Working towards malaria elimination will require even closer regional cooperation. The most fundamental action that NMPs can undertake is to share their epidemiological bulletins with neighboring countries and/or ensure that their counterparts know where to retrieve this information if it is accessible online via a public portal. PAHO/WHO is the regional body that provides technical assistance to Ministries of Health. In this role, PAHO/WHO facilitates communication between NMPs and other actors. NMPs should commit to sharing information with PAHO/WHO and other AMI/RAVREDA partners, including by contributing to national reporting on antimalarial medicine stocks and supplies. In addition, AMI/RAVREDA meetings provide a regional forum for information sharing.

Credit: Links Media, LLC

16 See PRAIS website at: http://prais.paho.org/

Communication Matrix 2

Communication Issue	In order to achieve malaria elimination in Central America, NMPs and other malaria actors need to strengthen coordination at all levels, including between countries. This must be done to help capture epidemiological data that will help the NMPs identify priority areas and subsequent actions.
Target Audience(s)	Ministry of Health decision makers, NMPs, health service providers
Communication Objective	To increase communication flow and coordination among health actors between countries.
Key Messages	• Residents of border areas who travel frequently between countries may be diagnosed in either country, causing missed cases or double counting. • Vectors do not obey national boundaries.
Key Promise and Support Points	If you improve coordination it may be easier to track and respond to individual malaria cases.
Desired Action/Response	All cases are reported and investigated along borders, including among migrant populations.

Suggested Activities:

- **Raise awareness among officials and public servants about NMP's participation in regional efforts against malaria.**

Support Actions

  - Invite heads of legislative health committees and their staff to participate in international events that are organized around Malaria Day in the Americas (November 6). Promote the organization of local events to help celebrate this date and other dates in countries in the region (See Table 2 above).
  - Promote inter-disciplinary educational seminars among a diverse range of government sectors and actors.
  - Provide technical advising and concise information to public policy makers. As an example, provide epidemiological data and technical assistance to other ministries like the Ministry of Labor about malaria's effects on the workforces in order to demonstrate the importance of the disease to the country's economic development.
  - Establish certification initiatives in municipalities free of malaria transmission, following the example set by the Ministry of Health of Nicaragua that issues "malaria free" declarations for Nicaraguan municipalities that have been without local malaria transmission for the past five years.

- **Establish cross-border efforts to control malaria in mobile and migrant populations.**

Support Actions

  - Leverage regional forums including meetings of the Central American Integration System (SICA), COMISCA, and the Dominican Republic - Central America Free Trade Agreement (CAFTA-DR) in order to strengthen ties with Ministries of Health in neighboring countries.
  - Establish meetings between different municipalities or communities along the borders, using the experience between Honduras and Nicaragua as an example.
  - Coordinate efforts among NMPs to develop and disseminate communication materials throughout the region, especially for migrant populations.

FOCUS AREA 2: HEALTH SYSTEMS

As the linchpin of malaria prevention and control, the overall strength of health systems in Central American countries will be the key factor that determines the success of the regional elimination initiative. Managers and health professionals at all levels of the health system will be at the forefront of executing effective surveillance, prevention, diagnosis and treatment activities in support of national-level goals. It is up to the public health system to ensure that vulnerable communities have the knowledge and tools to do their part as well.

SURVEILLANCE

Communication Matrix 3

Communication Issue	Not all cases may be reported to the central level, including cases identified in the private health services sector.
Target Audience(s)	Ministry of Health decision makers, health service providers
Communication Objective	To have all cases reported to the central surveillance system.
Key Messages	• The WHO requires a robust surveillance system as part of the malaria elimination criteria. • All malaria cases must be reported to the central surveillance system to allow for proper management of medicines and supplies, and investigation of cases.
Key Promise and Support Points	Strengthening malaria surveillance can result in improving the overall health system including surveillance of other diseases such as dengue and chikungunya. Accurate data helps to ensure that affected communities have sufficient resources allocated to malaria and other diseases.
Desired Action/Response	All malaria cases from both the public and private health sector are reported to the central surveillance system.

Suggested Activities:

- **Implement surveillance strengthening activities that increase awareness of WHO criteria and reporting requirements for malaria among public and private health sectors.**

Support Actions:

- Establish memoranda of understanding between MOH and private health service providers regarding the use of mechanisms for information sharing and reporting per WHO elimination criteria.
- On a monthly basis, circulate epidemiological bulletins—including disease surveillance data with breakdown of transmission by species—between the central level and decentralized health units to demonstrate the value in reporting all cases.
- Create an easily accessible public portal or mechanism to share information between NMPs and malaria actors at the community level.

PREVENTION

Communication Matrix 4

Communication Issue	People are not familiar with preventive measures including the use of long-lasting insecticidal nets (LLINs).
Target Audience(s)	Malaria-endemic communities
Communication Objective	To increase awareness within malaria-endemic communities on what measures they can take to protect themselves from mosquitoes.
Key Messages	• The proper use of bed nets and repellents can help prevent mosquitoes from biting you and spreading the parasite that causes malaria. • To help stop mosquitoes from spreading malaria, you should eliminate vector breeding areas.
Key Promise and Support Points	If you protect yourself and your community from mosquitoes it can help end malaria.
Desired Outcome	Individuals know how to employ effective measures to prevent mosquitoes from spreading malaria and other vector-borne diseases.

Photo: PAHO/WHO

Suggested Activities:

- **Protect at-risk populations by implementing an intervention with LLINs.**

Support Actions:

- Conduct knowledge, attitudes, and practices (KAP) studies to obtain a baseline on the proper use of LLINs.

- Evaluate the evidence base from previous mass LLIN distribution campaigns and analyze their usage in order to plan communication activities. Identify best practices for the promotion of LLINs use in communities in Central America and in other AMI/RAVREDA countries like Colombia and Suriname, in order to incorporate them into communication plans related to LLINs.

- Organize meetings with mayors of the municipalities that are most affected by malaria in order to obtain their commitment to the specific objectives for prevention and vector control. Secure their commitment to support the implementation of the distribution of LLINs.

- Establish certification initiatives for municipalities free of malaria transmission, following the example set by the Ministry of Health of Nicaragua that has made "malaria free" declarations for Nicaraguan municipalities that have been without local malaria transmission for five years. Certification can serve as an incentive or political prize for the local and community-level authorities to demonstrate a stronger commitment to the implementation of control actions.

- Distribute LLINs among the most at-risk populations in conjunction with evidence-based communication activities.

- Evaluate rates of proper LLIN use and make adjustments to the distribution program if necessary.

Photo: PAHO/WHO

DIAGNOSIS AND TREATMENT

Communication Matrix 5

Communication Issue	People may not obtain proper diagnosis and treatment. Presumptive treatment of malaria is widespread.
Target Audience(s)	Health service providers, malaria-endemic communities
Communication Objective	To increase awareness within malaria-endemic areas about the proper diagnosis and treatment of malaria.
Key Messages	• Clinical diagnosis is not enough. Patients must have microscopy or RDT diagnosis before treatment. • Treatment for malaria should only be given after diagnosis. • It is important to follow the treatment for malaria as prescribed.
Key Promise and Support Points	Proper diagnosis and treatment can help prevent malaria from spreading.
Desired Action/Response	Health service providers follow national protocol for diagnosis and treatment of malaria. Communities and individuals know how and where to access proper diagnosis and treatment.

Photo: PAHO/WHO

Suggested Activities:

- **Raise awareness among at-risk populations about early and correct diagnosis and treatment of malaria.**

Support Actions:

- Conduct a social mobilization campaign with IEC materials on malaria prevention, diagnosis, and treatment.
- Evaluate the implementation and impact of the social mobilization campaign to see if more people sought health services for proper diagnosis and treatment of malaria.
- Make necessary adjustments to the social mobilization campaign according to the results from the studies.
- Repeat the process.

FOCUS AREA 3: ECONOMIC IMPACT OF MALARIA

In addition to the health impact of malaria in Central America, one of the greatest concerns for the region is the impact on the economic sector. Malaria can result in lost revenue and productivity. However, there are steps that agribusinesses and other sectors can take to mitigate the effects of malaria.

THE IMPACT OF MALARIA ON AGRIBUSINESS AND OTHER BUSINESSES

Communication Matrix 6

Communication Issue	The agricultural sector is at risk of the effects of malaria due to difficulties in vector control and workers' vector exposure.
Target Audience(s)	Agribusiness associations, local Chambers of Commerce in malaria-endemic areas, business owners, agricultural workers, community leaders
Communication Objective	To increase awareness within the agricultural sector on the dangers of malaria including the cost associated with productivity lost.
Key Messages	• Productivity and profits may suffer when workers are sick with malaria. • Eliminate vector breeding areas. • Protect your workers from mosquitoes.
Key Promise and Support Points	If you help protect your workers from malaria and other vector-borne diseases, productivity may increase.
Desired Action/Response	Agribusinesses and other business owners provide resources to workers to protect them and their families from transmission.

Photo: PAHO/WHO

THE IMPACT OF MALARIA ON THE TOURISM SECTOR

Communication Matrix 7

Communication Issue	The tourism sector may suffer if people are not willing to travel to malaria-endemic areas. Malaria impacts local economies and livelihoods by damaging the brand image of tourism destinations.
Target Audience(s)	Business owners (hotels, tour operators, etc.), local Chambers of Commerce in malaria-endemic areas, tourism industry workers, community leaders
Communication Objective	To increase awareness within the tourism sector on the dangers of malaria, including the cost associated with lost revenue due to malaria outbreaks. Emphasize the fact that malaria and tourism do not go together.
Key Messages	• In order to protect and grow the tourism sector, more resources may be needed to control vector-borne diseases like malaria, dengue and chikungunya. • Protect tourists and provide them with key information about health risks. • Protect workers from mosquitoes and provide them with key information about health risks. • Eliminate vector-breeding areas.
Key Promise and Support Points	If you help protect your workers and visitors from malaria and other vector-borne diseases, tourism revenue may increase.
Desired Action/Response	Tourism businesses provide information to tourists and resources to workers to protect them and their families from transmission.

Suggested Activities:

- **Strengthen collaboration between NMPs and the private sector in support of program sustainability.**

Support Actions:

- Identify private businesses as partners to implement programs in schools and workplaces promoting good prevention behaviors against malaria. Select tourism businesses near popular destinations like Puerto Cabezas, Nicaragua. Consider the recent experience of the Dominican Republic as an example.[17]
- Communicate with universities to coordinate work, such as commissioning a university study to help document the relationship between development and the elimination of malaria in the country. Encourage masters and doctoral thesis projects on the subject.
- Hold meetings with Chambers of Commerce or other business associations to provide information on experiences from other countries, to demonstrate how private sector partnerships in health programs have led to increased revenue and public recognition (expert informant role).

17 PAHO/WHO recognized the work of the Centro Nacional de Control de Enfermedades Tropicales (CENCET) in 2013, when this entity of the Dominican Republic was a finalist in the Malaria Champions of the Americas 2013 competition: http://www.paho.org/hq/index.php?option=com_content&view=article&id=9130&Itemid=39966&lang=en. Visit this link to watch a video that speaks about the partnership between CENCET and the Association of Hotels and Tourism Projects in the East: https://vimeo.com/77532191.

FOCUS AREA 4: REACHING MOST AT-RISK POPULATIONS

Part of the difficulty in reducing the remaining number of cases in Central America includes underserved populations that are mobile and difficult to reach. Migrant populations, both domestic and foreign, are among the groups of people that have suffered most from malaria in recent years.[18] Agricultural activities like growing coffee and sugar cane, in addition to logging, mining, etc., have spurred the movement of male populations in order to seek work opportunities and have put this population at risk. In addition, populations in remote areas, indigenous populations and those living along international borders have been the most affected by malaria in Central America.

Communication Matrix 8

Communication Issue	Indigenous and migrant communities make up a disproportionate amount of the malaria burden. It is impossible to achieve elimination without addressing these populations.
Target Audience(s)	Ministry of Health decision-makers, national policy makers, public opinion leaders, local NGOs, CSOs
Communication Objective	To increase trust and communication flow between health service providers, indigenous, and migrant communities in order to help eliminate malaria in these populations.
Key Messages	• In order to help reduce the overall malaria burden, it is important to find successful ways to work with indigenous, migrant, and other special populations who contribute a large share of the cases. • Ongoing operational research is needed to improve malaria prevention and adapt health service delivery to indigenous and migrant communities.
Key Promise and Support Points	Adapting malaria work to the realities of special populations can help to prevent malaria and improve access to proper diagnosis and treatment, and can ultimately help to protect the majority of the population.
Desired Action/Response	All cases within indigenous, migrant, and other special populations are detected and treated.

Suggested Activities:

- **Increase access to timely diagnosis and adequate, safe, and effective malaria treatment for at-risk populations in main areas of transmission.**

Support Actions:

- Work with multidisciplinary groups comprised of anthropologists, sociologists, and public health personnel to provide solutions to access issues that may be related to cultural acceptance.

18 Links Media. *XIII Annual Evaluation Meeting of the Amazon Malaria Initiative (AMI)/Amazon Network for the Surveillance of Antimalarial Drug Resistance (RAVREDA), Managua, Nicaragua, March 11–14, 2014: Trip Report.* Submitted to the U.S. Agency for International Development. 2014

- Train or identify existing community health workers from indigenous communities who can provide malaria communication and/or care. Work to build trust within the community on malaria efforts.

- Work with NGOs or CSOs to help disseminate messages to at-risk populations to raise awareness on the importance of timely diagnosis as well as adherence to treatment.

- Leverage NGO service networks in order to increase access to timely diagnosis and to improve antimalarial medicine stockpiles in remote locations.

- Design and implement communication and social mobilization plans to increase protective measures against malaria. Engage in respectful, symmetrical dialogue with CSOs or grassroots movements to understand local concerns about health quality and access issues.

- Request assistance from universities to translate materials and to develop culturally appropriate activities, such as in the case of translations that the Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense has done for the Nicaraguan NMP.

Photo: PAHO/WHO

MONITORING & EVALUATION

Monitoring and Evaluation (M&E) should be done to ensure that the communication strategies and overall approach are advancing as planned by meeting recommended indicators for communication outputs and outcomes. Through M&E, evidence is gathered to help determine whether communication activities are making an impact, including if key messages are resonating with target audiences, if target audiences are appropriate, and if they are being reached via the identified communication channels. This allows for malaria communicators to decide whether to sustain, strengthen, or modify actions based on the data gathered. Disaggregated data can be useful to demonstrate the ways in which communication enhances malaria elimination efforts. In addition, since communication supports all of the key technical areas of elimination, communication M&E data provides valuable feedback on measures for all actors. Prior to implementing communication activities, NMPs should identify indicators that will help them measure the impact of communication based on data collected before, during, and after implementation. It is important for at least some of the indicators to be quantifiable. A list of recommended indicators is included in Annex 2.

NMPs should collect information pertaining to the selected indicators to serve as a baseline measurement before any communication intervention begins. This baseline will serve for comparison to determine if there has been a change once actions are implemented. Because of the regional nature of the elimination initiative, countries should consider standardizing the indicators and hence the data to be collected. In turn, NMPs should have national malaria communication M&E plans that detail the assessment methods they will use to provide data for the regional indicators. Various methods exist to collect M&E data, such as: surveys, pre- and post-assessments, questionnaires, interviews, count data, and others. Note that some data collection methods are more resource-intensive than others. In addition, the number and type of indicators selected may make the data collection more or less difficult. Technical assistance partners such as PAHO/WHO and Links Media are available to provide support for the development of rigorous M&E plans, in addition to the in-house resources at each Ministry of Health. Data should be reported to neighboring countries' NMPs, PAHO/WHO, and regional donors in a systematic fashion (quarterly, semi-annually, or annually).

INSTITUTIONAL MANAGEMENT AND SUSTAINABILITY

The implementation of this strategy requires that MOHs and NMPs integrate communication and dissemination strategies within their national strategic plans and annual work plans for malaria. Many of the countries in the region are creating or updating National Strategic Plans for Malaria Elimination. Communication should be well integrated within these plans. National Strategic Plans should be owned and championed by the countries of the region, with their own funding. For successful elimination, countries must intensify their actions and conceive of efforts even beyond the elimination milestone in order to remain vigilant and prevent re-introduction of malaria.

Countries should look to existing and potential regional support mechanisms to eliminate malaria from Central America and Hispaniola. Participation in AMI/RAVREDA should be emphasized as an established regional mechanism. MOHs could also develop memoranda of understanding with assistance from Ministries of Foreign Affairs to establish bilateral commitments to South-South collaboration. Finally, countries should document all advances and challenges in their efforts towards malaria elimination, which will provide accountability and guarantee regional support; the mechanism for this is COMISCA.

CONCLUSION

Communication and advocacy efforts will only succeed if countries and NMPs take the lead to create a shared understanding of elimination, so that health systems and civil society actors are sufficiently well informed to do their part to make elimination a reality in the region. NMPs should consider carefully the aforementioned focus areas of: 1) national and international coalitions, 2) health systems, 3) the economic impact of malaria, and 4) reaching most at-risk populations. They should then translate these themes into appropriate communication and action using the recommended messages and activities. Transitioning from a control to an elimination strategy will require buy-in at multiple levels, from national leaders to affected communities. As stated at a 2014 Malaria Day in the Americas event,[19] through advances in reducing morbidity and mortality, Central America has shown its potential to become the next region to permanently eliminate malaria, and as a result could serve as an example to other regions of the world. This is a crucial moment for the region in order to eliminate a disease that has impacted many lives and created unnecessary costs. The Central American region and its key stakeholders should use the window of opportunity opened by the EMMIE initiative to build momentum for sustained regional efforts to eliminate malaria and prevent its return.

Photo: PAHO/WHO

19 Kirova, Maria, Oral presentation on behalf of the Global Fund to Fight AIDS, TB and Malaria. Washington, DC, USA. November 6, 2014

ANNEXES

ANNEX 1: MALARIA TRENDS IN CENTRAL AMERICA (2000 – 2013)

Country	Population	At-risk population (low+high)	# of cases (2000)	# of cases (2008)	# of cases (2013)	% Reduction Between 2013 and 2000	% Reduction Between 2013 and 2008
AMI and EMMIE Supported Countries							
Belize§	331,900	N/A	1,486	540	26	98.25‡	95.19
Guatemala	15,468,203	7,038,032	53,311	7,198	6,214	88.34‡	13.67
Honduras	8,097,688	5,895,117	35,125	8,368	5,428	84.55‡	35.13
Nicaragua	6,080,478	3,052,400	23,878	762	1,194	95.00‡	-56.69
Panama	3,864,170	2,921,313	1,036	744	705	31.95	5.24
Sub-Total	33,842,439		114,836	17,612	13,567	88.19	22.97
EMMIE Supported Countries							
Costa Rica§	4,872,166	N/A	1,879	966	6	99.68‡	99.38
El Salvador§	6,340,454	N/A	753	33	7	99.07‡	78.79
Sub-Total	11,212,620		2,632	999	13	99.51	98.70
All Central America Countries							
Total	45,055,059	18,906,862	117,468	18,611	13,580	88.44	27.03

Data Source: *World Malaria Report 2014*
§ Country in Pre-Elimination Phase
‡ Exceeds MDG 6 target of a 75% reduction by 2015

ANNEX 2: LIST OF POSSIBLE INDICATORS (M&E)

Process Indicators

Digital Media:

- Number of Ministry of Health websites or web pages with malaria information
- Number of NMP and partner-managed social media accounts that post information on malaria
- Number of electronic messages/posts on malaria sent via NMP and partners' social media channels

Print/Broadcast Media:

- Number of outreach attempts to journalists
- Number of media orientation trainings on malaria/ malaria elimination
- Number of news releases developed and disseminated
- Number of advertisements developed and disseminated
- Number and type of outlets where advertisements are run (television, radio, print, etc.)
- Number of public service announcements developed and disseminated

Regional Coordination:

- Number of outreach attempts made to neighboring countries' NMPs
- Number of epidemiological reports on malaria shared with neighboring countries' NMPs (weekly, quarterly, or annually)
- Number of epidemiological reports on malaria received from neighboring countries' NMPs (weekly, quarterly, or annually)
- Type and number of regional NMP coordination meetings attended (in-person, telephone, virtual)

Community Level:

- Number of community-level events or trainings held in endemic areas
- Number of participants at local events or trainings in endemic areas
- Number of meetings held with community leaders

Policy Level:

- Number of meetings or briefings with policy makers and public opinion leaders
- Number of policy makers/public opinion leaders briefed
- Number of briefing materials on malaria developed and disseminated

Resource Mobilization:

- Number of proposals submitted for new and/or continued funding
- Number of meetings or briefings with technical and cooperation agencies
- Number of reports submitted to donors
- Number of meetings or briefings with Ministry of Health decision makers
- Number of letters sent to national-level decision makers

Outcome Indicators

Digital Media:

- Number of individuals who follow NMP and partner-managed social media outlets
- Number of unique visitors to Ministry of Health dedicated malaria websites or web pages

Print/Broadcast Media:

- Number of articles/editorials published as a result of outreach efforts
- Number of broadcast news features as a result of outreach efforts

Regional Coordination:

- Number of memoranda of understanding signed between countries

Community Level:

- Number of community-level leaders who commit to supporting malaria efforts
- Number of communities that commit their own funds to malaria elimination efforts

Policy Level:

- Number of new government officials or stakeholders who publicly commit to support malaria efforts
- Number of malaria mentions in policy maker and public opinion leaders' speeches
- Number of memoranda of understanding developed and signed
- New malaria policies/laws passed
- Policy obstacles removed

Resource Mobilization:

- Number of overall donors
- Type and number of donors (private, government, bilateral, multilateral)
- Total amount in donations/funding towards malaria efforts
- Amount of financial vs. in-kind support
- New donors
- Total amount provided by new donors towards malaria efforts
- Number of domestic donors
- Total amount provided by domestic donors for malaria efforts
- Total amount provided by international donors for malaria efforts
- Share of domestic vs. international funding for malaria efforts
- Percentage of national health budget dedicated to malaria efforts

ANNEX 3: INVENTORY OF MINISTRY OF HEALTH WEBSITES IN AMI COUNTRIES (JULY 2014)

	MoH Website	MoH Malaria Website	MoH Public Information Website
Belize	http://health.gov.bz/www/	None	http://health.gov.bz/www/publications
Guatemala	http://www.mspas.gob.gt/index.php/en/	http://www.mspas.gob.gt/index.php/en/enfermedades-transmitidas-por-vectores.html	http://sigsa.mspas.gob.gt/
Honduras	http://www.salud.gob.hn/	None	http://secretariadesaludhn.wordpress.com/
Nicaragua	http://www.minsa.gob.ni/	None	http://www.minsa.gob.ni/index.php/noticias
Panama	http://www.minsa.gob.pa/	None	http://www.minsa.gob.pa/informacion-salud

ANNEX 4: RECOMMENDED MALARIA COMMUNICATION RESOURCES

Cohen, J. et al. 2010. How absolute is zero? An evaluation of historical and current definitions of malaria elimination. *Malaria Journal.* 9:213. http://www.malariajournal.com/content/9/1/213

Cohen, J. et al. 2012. Malaria resurgence: a systematic review and assessment of its causes. *Malaria Journal.* 11:122. http://www.malariajournal.com/content/11/1/122

Glanz, K. Rimer, BK. September 2005. *Theory at a glance: A guide for health promotion practice, Second Edition.* National Cancer Institute, National Institute of Health, U.S. Department of Health and Human Services. NIH Pub. No. 05-3896. Washington, DC: NIH.

Herrera, S. et al. 2015. Prospects for Malaria Elimination in Mesoamerica and Hispaniola. *PLosNeglected Tropical Diseases,* 9(5). http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.000370

ISGlobal. April 2013. *Malaria: una historia de eliminación.* http://www.slideshare.net/ISGlobal/malaria-una-historia-de-eliminacin

Making Health Communication Programs Work (Pink Book). National Cancer Institute, National Institute of Health, U.S. Department of Health and Human Services. http://www.cancer.gov/publications/health-communication/pink-book.pdf

Pan American Health Organization. 2008. *Una visión de salud intercultural para los pueblos indígenas de las Américas.* http://www.ops.org.bo/textocompleto/pi31302.pdf

Pan American Health Organization. October 2014. Malaria Champions of the Americas (Dominican Republic). http://www.paho.org/hq/index.php?option=com_content&view=article&id=9466&Itemid=40687&lang=en.

Pan American Health Organization. October 2014. *Malaria Day in the Americas 2014: Guidelines for Commemoration, Communications, and Advocacy.* http://www.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=27677&Itemid=270&lang=en

Pan American Health Organization. Regional Platform on Access and Innovation for Health Technologies. http://prais.paho.org/

Roll Back Malaria Partnership. 2012. *Strategic Framework for Malaria Communication at the Country-Level 2012-2017.* http://www.rollbackmalaria.org/files/files/globaladvocacy/docs/BCCstrategicFramework.pdf

Roll Back Malaria Partnership. August 2014. *RBM Advocacy for Resource Mobilization (ARM) Guide.* http://archiverbm.rollbackmalaria.org/docs/2014/ARMGuide.pdf

Roll Back Malaria Partnership. 2015. *Action and Investment to Defeat Malaria (AIM) 2016-2030.* http://www.rollbackmalaria.org/about/about-rbm/aim-2016-2030

Smith Gueye et al. 2012. Parasites and vectors carry no passport: how to fund cross-border and regional efforts to achieve malaria elimination. *Malaria Journal.* 11:344. http://www.malariajournal.com/content/11/1/344

Whittaker, M.A. et al. 2014. Advocating for Malaria Elimination – Learning from the Successes of other Infectious Disease Elimination Programmes. *Malaria Journal.* 13:221. http://www.malariajournal.com/content/13/1/221

World Health Organization. April 2007. *Malaria Elimination: a field manual for low and moderate endemic countries.* http://www.who.int/malaria/publications/atoz/9789241596084/en/

World Health Organization. April 2014. *From malaria control to malaria elimination: a manual for elimination scenario planning.* http://www.who.int/malaria/publications/atoz/9789241507028/en/

World Health Organization. July 2014. *WHO procedures for certification of malaria elimination.* Weekly Epidemiological Record (WER). Vol. 89, 29 (pp. 321 – 325). http://www.who.int/entity/wer/2014/wer8929.pdf?ua=1

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