

MACEPA

MALARIA CONTROL AND ELIMINATION PARTNERSHIP IN AFRICA

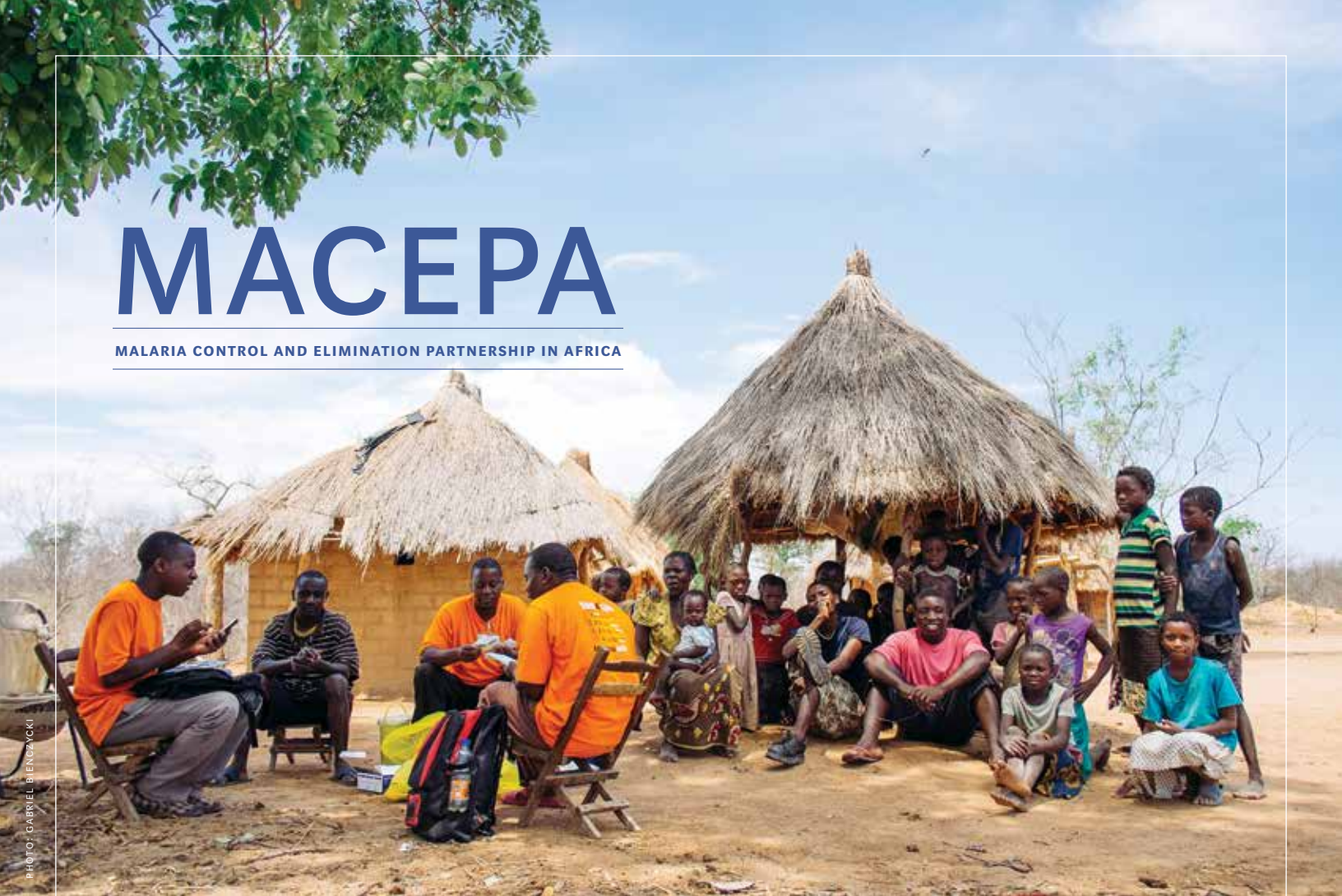


PHOTO: GABRIEL BIENOWICKI

A DECADE OF IMPACT

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MACEPA  PATH

WWW.MAKINGMALARIAHISTORY.ORG



THE YEAR WAS 2000, AND THE WORLD WAS JUST BEGINNING TO BREATHE NEW LIFE INTO THE FIGHT AGAINST MALARIA.

PHOTO: PATH/LAURA NEWMAN

DESPITE BEING PREVENTABLE AND TREATABLE, THE DISEASE HAD GONE LARGELY UNCHECKED FOR DECADES, SICKENING AND KILLING MILLIONS OF PEOPLE EVERY YEAR.

DETERMINED TO STOP ITS SPREAD, LEADERS FROM ACROSS THE WORLD CAME TOGETHER TO PLEDGE TO CUT MALARIA DEATHS IN HALF.

Strong financial support, new advancements in technology, and a better understanding of how to defeat the disease fueled optimism that this ambitious goal could be achieved. But to secure the continued funding and political

commitment necessary to achieve this goal, the world needed a success story to show that controlling the disease in sub-Saharan Africa was possible.

A few years later, the Malaria Control and Elimination Partnership in Africa (MACEPA) began partnering with malaria-endemic countries to do just that, accelerating a global effort with many partners that ultimately

decreased malaria deaths by an incredible 60 percent and saved 6.2 million lives in fifteen years—most of them young children in Africa.

Now MACEPA is working toward an even more ambitious goal: to help countries build the science and programmatic approach needed to end malaria for good. Together, we are making malaria history.



**THE MALARIA
CONTROL AND
ELIMINATION
PARTNERSHIP IN
AFRICA (MACEPA)**

partners with national governments in sub-Saharan Africa to develop strategies and support programs to eliminate the transmission of malaria and improve the quality of life for millions affected by the disease.

MACEPA AT A GLANCE

PARTNERED WITH NATIONAL GOVERNMENTS TO:

- ✓ *Pilot new approaches*
- ✓ *Introduce new tools*
- ✓ *Strengthen health capacity and systems*
- ✓ *Build quality data*
- ✓ *Support national aspirations for elimination*

CONTRIBUTED TO A
60%
DECREASE
IN GLOBAL
MALARIA DEATHS
since the year 2000



BUILT CAPACITY
by training more than 10,000 health staff across Africa



COLLABORATED *on the development of STRATEGIES, DATA, AND TOOLS that have since been used by many malaria-endemic countries in Africa*

THE IMPORTANCE OF PARTNERSHIP: IT'S ALL ABOUT THE PEOPLE

DEVELOPING STRONG, LASTING PARTNERSHIPS IS CRITICAL TO THE SUCCESS OF ANY EFFORT TO DEFEAT INFECTIOUS DISEASE, AND IS A KEY PART OF MACEPA'S MISSION.

MACEPA works side by side with partners at the community, national, and global levels to support implementation of program

activities and efforts to secure support and commitment.

Collaboration among partners helps ensure that each partner's unique perspectives, expertise, and resources are leveraged for optimal impact, with national governments and ministries of health leading the way. Some of the key countries MACEPA has partnered with during the last ten years include Zambia, Senegal, and Ethiopia.

A supportive national policy environment has also been critical to success. MACEPA supports programs to collect and share information to help understand the readiness of key partners and stakeholders for the introduction of new tools and approaches, as well as assess perceived barriers and opportunities to increasing support for malaria on the global agenda.



PROTECTING PEOPLE, STRENGTHENING SYSTEMS

WHEN MALARIA-ENDEMIC COUNTRIES IN AFRICA FIRST BEGAN LARGE-SCALE EFFORTS TO FIGHT THE DISEASE, HOSPITAL BEDS WERE OVERFLOWING WITH MALARIA CASES AND THERE WAS SKEPTICISM THAT IMPACT COULD BE ACHIEVED WITH EXISTING, UNDERDEVELOPED HEALTH SYSTEMS.

To help countries reach their ambitious new goals, MACEPA provided training and technical support for program staff, data collectors, and health care workers with the goal of building capacity at national and local levels. Procurement and delivery systems also were strengthened as malaria activities were scaled up, improving efficiency and cost-effectiveness. This effort accelerated the rollout and evaluation of new approaches and tools, and optimized the use of effective technologies. Improvements in health systems have been sustained and are increasingly being led by the countries.

Today, millions of bednets, medicines, insecticides, and other commodities have been quickly delivered through these strengthened systems, significantly decreasing malaria illnesses and deaths while demonstrating for the first time that mass distribution could be implemented at scale in malaria-endemic countries in Africa.

MACEPA IMPACT

Demonstrated that a comprehensive package of prevention and control tools could be taken to scale to significantly reduce malaria in Africa



PHOTO: PATH



Showed that mass quantities of bednets could be delivered through **EFFICIENT AND COST-EFFECTIVE STRATEGIES**

Improved access to timely and effective case management, including **INTERMITTENT PREVENTIVE TREATMENT FOR PREGNANT WOMEN**

Pioneered the use of **GEOCODING AND MAPPING TECHNIQUES** to direct and expand indoor residual spraying



Demonstrated how effective partnerships can bring **SUSTAINABLE CHANGE TO HEALTH SYSTEMS**

A NEW STRATEGY FOR BEDNET DELIVERY

IN LATE 2005, TRUCKS FROM ZAMBIA'S MINISTRY OF DEFENSE RUMBLED ACROSS THE COUNTRY, DELIVERING ZAMBIA'S FIRST MASS SHIPMENT OF INSECTICIDE-TREATED BEDNETS.

A centralized delivery system did not yet exist, so partners leveraged the existing resources of Zambia's

military to ensure that nets would reach their intended recipients on time. Over the next year, MACEPA worked with the Ministry of Health to develop a decentralized delivery system that would deliver nets from the port directly to the districts.

Decentralized delivery required extensive planning at the provincial level to facilitate

communication among districts, as well as working with district health management teams to ensure adequate storage capacity and security, coordinate planning and transportation, and cultivate partnerships. This new delivery mechanism reduced costs by nearly US\$1 for every net distributed and improved in-country delivery time from two months to one week.



MANAGING CASES, ENGAGING COMMUNITIES

SINCE 2005, MACEPA HAS WORKED TO STRENGTHEN THE MANAGEMENT OF MALARIA CASES BY IMPROVING ACCESS TO PROMPT AND EFFECTIVE DIAGNOSIS AND TREATMENT. OVER THE YEARS, A LARGE GROUP OF COMMUNITY HEALTH CARE WORKERS HAS BEEN TRAINED TO DIAGNOSE AND TREAT MALARIA DIRECTLY IN PEOPLE'S HOMES. THIS EFFORT HAS RESULTED IN BETTER UTILIZATION OF HEALTH SERVICES, DECREASED MALARIA ILLNESSES AND DEATHS, AND A SHIFT IN THE DEFINITION OF WHAT A "FRONTLINE" HEALTH PROVIDER IS.

These achievements, along with work done by many other partners, have demonstrated the feasibility and effectiveness of community-based diagnosis and treatment, which is now becoming the standard across Africa. Because so many malaria cases are now treated at the household level, hospitals have had more resources and staff freed up to serve patients with other health issues.

As progress continues, transmission becomes even more localized, with

most remaining cases occurring in small pockets or foci. At this stage, community-level surveillance is critical to finding and clearing these last pockets of infection—an effort that would be impossible without the knowledge and commitment of local health staff.

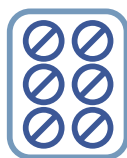
MACEPA has also led social mobilization activities to empower communities to understand their role in improving the health of their families and their neighbors. Efforts focus on engaging and

building ownership among community members, local leaders, radio journalists, and community health workers to share information, increase participation, and create mechanisms for soliciting community feedback.



MACEPA IMPACT

Strengthened malaria case management and provided evidence on the feasibility and effectiveness of community-based diagnosis and treatment



IMPROVED ACCESS TO DIAGNOSTICS AND EFFECTIVE MALARIA TREATMENTS and trained more than 2,500 community health care workers to test and treat people for malaria

Built a model for high-quality **COMMUNITY ENGAGEMENT STRATEGIES** to support program activities



Built a model to empower local leadership to **TAKE OWNERSHIP OF COMMUNITY HEALTH OUTCOMES**



STRENGTHENED ROBUST PARTICIPATION and high adherence to prevention and treatment interventions by community members

PHOTO: GABRIEL BIENCZYCKI



BUILDING QUALITY DATA

TO SUCCESSFULLY FIGHT MALARIA, A COUNTRY MUST KNOW WHERE AND WHEN THE DISEASE IS OCCURRING. ACCURATE, DEPENDABLE DATA ARE CRITICAL TO MEASURING PROGRESS, IMPROVING SERVICE DELIVERY, AND INFORMING WHICH STRATEGIES SHOULD BE APPLIED AS A COUNTRY CONTINUES TO REDUCE MALARIA TRANSMISSION.

MACEPA helps countries build robust information systems to guide programmatic action, from the community to national level. With partners, MACEPA supported the development and implementation of the first-ever nationally representative household malaria indicator surveys (MIS), starting with the Zambia MIS in 2006, to help countries monitor and evaluate national progress on a wide range of subjects including malaria parasitemia and anemia in young children, case management, and possession and use of insecticide-treated bednets.

Even more precise and timely information is required at the provincial, district, and health facility catchment area levels, particularly in regions that have fewer infections and are working toward the goal of elimination. In partnership with national governments, MACEPA has developed local rapid reporting systems to facilitate closer-to-home malaria case detection. These systems improve malaria surveillance, monitor health interventions, and speed up data access, helping health care workers clear reservoirs of infection before they can spread. These systems use mobile phones and an

open-source data platform called DHIS 2 to collect and send data in real time to a centralized server, where it can be quickly accessed, analyzed, and used to inform and direct a targeted response.

MACEPA works closely with partner countries to develop reporting systems to generate accurate and timely data for national and local planning, track malaria coverage gaps, and measure progress and impact.

MACEPA IMPACT

Demonstrated that malaria-endemic countries could produce high-quality data to effectively inform programmatic efforts



Supported the development and implementation of the first national representative household malaria indicator survey. Since 2006, surveys have been **IMPLEMENTED BY 24 COUNTRIES**

Helped countries to implement a new standard of reporting, requiring suspected malaria cases to be **CONFIRMED WITH A DIAGNOSTIC TEST**



Fueled demand for **ADDITIONAL TOOLS AND HIGHER-QUALITY DATA**



Improved timeliness and quality of routine data collection with nearly **1,000 STAFF TRAINED** to provide **WEEKLY MALARIA REPORTS**

Generated **ROBUST IMPACT DATA** that helped drive global investment, strengthened planning, and targeted resources



PILOTING STRATEGIES TO END MALARIA TRANSMISSION

THE WORLD HAS REVOLUTIONIZED HOW WE FIGHT MALARIA. IN JUST 15 YEARS, WE HAVE GONE FROM MALARIA KILLING MILLIONS OF PEOPLE AND NO PLAN FOR HOW TO STOP ITS SPREAD, TO DRAMATIC DECREASES IN ILLNESS AND DEATHS AND A GROWING BODY OF EVIDENCE ON HOW TO ELIMINATE MALARIA INFECTIONS.

With partner countries, MACEPA has contributed substantially to this global evidence base. During the first five years, MACEPA strengthened the cycle of planning, resourcing, implementing, monitoring, evaluating, and advocacy (known as the PRIME cycle) that powers malaria control programs, working with national governments and key partners to develop a package of interventions and an operational framework to accelerate progress. Through this effort, MACEPA and its partners demonstrated how mass distribution of lifesaving tools and approaches—like insecticide-

treated bednets and indoor spraying of insecticides—can rapidly bring down parasitemia rates. This approach, known as scale-up for impact (SUFi), has since been adopted by the Roll Back Malaria Partnership and implemented across Africa.

More recently, MACEPA has worked with national partners to demonstrate how countries can progress from scaling up programmatic activities to moving toward eliminating malaria transmission. This progression is characterized by a series of steps designed to guide the delivery

of a full package of effective interventions, with each step corresponding to a recommended set of actions to take as a country's malaria transmission intensity changes. This approach provides a framework for how countries in sub-Saharan Africa can potentially eliminate the disease with currently available tools and strategies.



PHOTO: PATH/MARK MURRAY

At the core of this model is the notion that elimination must be the ultimate goal as countries steadily make progress in decreasing malaria infections. When transmission is high, the emphasis should be placed on strengthening health systems, improving vector control and case management (including community outreach to find and treat infections early), and building quality and timely data systems. At moderate or lower levels of transmission, population-wide approaches to quickly and broadly clear infections are introduced to further drive down infection transmission. Next, when remaining cases are few, the last infections are identified, confirmed, and treated in health facilities and through community outreach and then investigated to identify the possible sources of transmission. Quality surveillance systems are critical to support the clearance of these last infections and permit the country to document and maintain malaria elimination.

To inform the development of this framework, MACEPA is conducting research to determine which strategies and tools will be most effective in helping countries transition from low malaria cases to no malaria cases. These studies include enhanced vector control to reduce transmission and implementing mass strategies to clear parasites from people, including those who do not show symptoms or feel sick, and investigating and clearing individual infections.

MACEPA IMPACT

Set the standard for an effective national program model and helped to catalyze national and global aspirations for malaria elimination

Implemented and assessed the effectiveness of new approaches including:

- ✓ **Mass testing and treating strategies**
- ✓ **Information and surveillance systems**
- ✓ **Case reporting and investigation**
- ✓ **Risk and mobility mapping**



Supported the development of **NATIONAL STRATEGIC PLANS**, costing and budgeting efforts, funding applications, and other action plans to defeat the disease

Contributed to a global shift from simply managing existing malaria cases to **PRIORITIZING STRATEGIES TO PREVENT and ELIMINATE** malaria infections

KEEPING PACE WITH AN EVER-CHANGING MALARIA LANDSCAPE

THE MALARIA PARASITE AND THE MOSQUITOES THAT TRANSMIT IT ARE NOTORIOUSLY DIFFICULT TO CONTROL BECAUSE THEY ARE CONTINUALLY DEVELOPING RESISTANCE TO THE WORLD'S BEST MEDICINES AND INSECTICIDES.

MACEPA's strategy has grown to keep pace with the constantly evolving malaria landscape: changing transmission patterns, fluctuating levels of global funding and political will, the availability of new tools, and the emergence of new research.

Progress is not always linear, and new research is continually

informing how we should be fighting malaria. The ability to respond quickly to new information and refine existing models and strategies has been critical to MACEPA's success. Continued impact is dependent on being as flexible and resilient as the parasite we fight.

A photograph of two men standing outdoors in a rural setting. They are both wearing bright orange long-sleeved shirts and have black backpacks. They are smiling at the camera. In the background, there are traditional thatched-roof huts and trees under a clear blue sky.

ACCELERATING TO ELIMINATION: TRACKING DOWN THE LAST PARASITES

EVERY MORNING, DOZENS OF HEALTH CARE WORKERS TRAVEL BY FOOT TO RURAL VILLAGES ACROSS ZAMBIA'S SOUTHERN PROVINCE.

Armed with powerful antimalarial drugs and diagnostic tests, they are moving house to house, treating everyone they meet for malaria. The effort is part of the country's mass drug administration (MDA)

campaign, which is designed to rapidly reduce transmission of the disease to very low levels, setting the stage for elimination. The hope is that MDA will clear infections not just from those with obvious symptoms of the disease, but also from those who feel fine—but who are still asymptomatic carriers of the disease. This "silent reservoir" can fuel malaria transmission indefinitely until these infections are treated.

MDA is just one of the strategies MACEPA has piloted to build a better understanding of what will help countries accelerate efforts toward elimination and attainment of malaria-free status. After significantly reducing malaria in a community, the next step is to proactively and aggressively find and treat any remaining infections as soon as they arise.



PHOTO: GABRIEL BIENZYCKI

A VISION FOR THE FUTURE

SINCE ITS INCEPTION, MACEPA HAS BEEN COMMITTED TO SHOWING WHAT IS POSSIBLE WITH STRONG NATIONAL LEADERSHIP, A UNITED PARTNERSHIP, ROBUST FUNDING, AND AN INNOVATIVE APPROACH.

We have evolved and grown over the years, adapting our approach to keep pace with the always changing malaria landscape.

Future success will need to focus on piloting new strategies to build a body of evidence that will help us accomplish what has never been done before—eliminating malaria in Africa.

Together, we can show what is possible when the world unites to achieve a common goal: making malaria history.



For more information, please contact macepa@path.org

www.makingmalariahistory.org

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