



## MALARIA COMMUNITIES PROGRAM

# Achieving, Tracking, and Maintaining High ITN Coverage: Community Strategies

## INTRODUCTION

The global malaria community's three key goals for insecticide-treated nets (ITNs) are achieving universal coverage, sustaining universal coverage, and ensuring proper net use. The primary mechanism for scaling up ITN coverage is mass distribution campaigns. In order to sustain high coverage, countries need regular, ongoing distribution systems to replace damaged nets and meet the needs of a changing population. In addition, ensuring appropriate use of nets is essential to infection prevention and requires innovative, context-specific behavior change communication (BCC) methods. The President's Malaria Initiative (PMI) Malaria Communities Program (MCP) partners supported all of these strategies, linked with national partners to raise awareness about the need for and proper use of ITNs, and made significant contributions to national efforts to identify gaps in ITN coverage, distribute ITNs, and monitor their use.

### The Malaria Communities Program

The Malaria Communities Program (MCP) was launched on December 14, 2006. Through 20 awards to 18 partners in 12 countries, the President's Malaria Initiative (PMI) has supported efforts of communities and nongovernmental organizations (NGOs) to combat malaria at the local level.

The MCP increased local and indigenous capacity to undertake community-based malaria prevention and treatment activities; built local ownership of malaria control for the long term in partnership with communities and National Malaria Control Programs (NMCPs); and extended coverage of PMI and NMCP interventions to reach a larger beneficiary population.

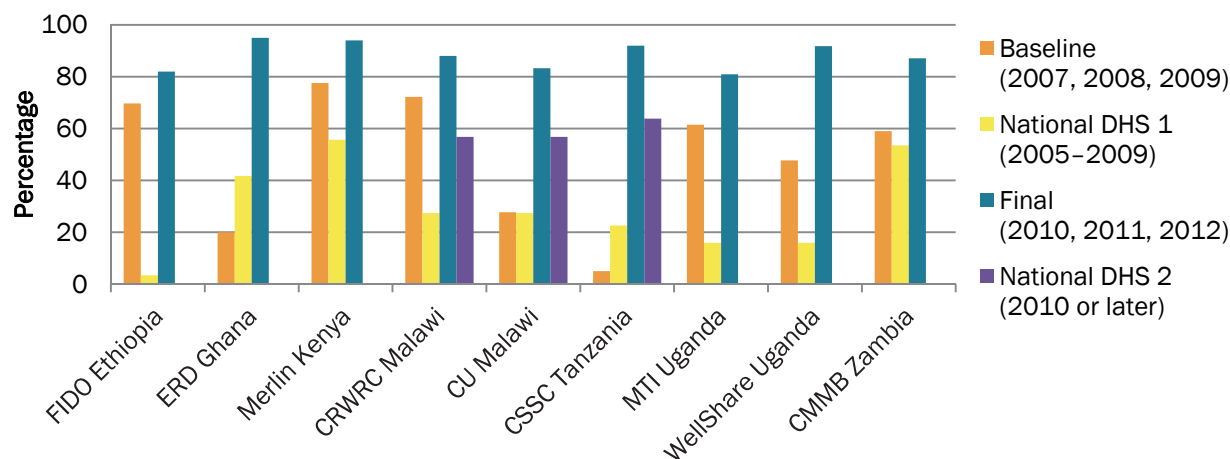
## METHODS AND DATA

This case study presents results from MCP projects working to increase ITN coverage and examines in detail the work of seven MCP partners and their contributions in this regard: EQUIP Liberia, WellShare International Uganda, Aga Khan Foundation (AKF)/Progresso Mozambique, Caritas Senegal, Episcopal Relief and Development (ERD) Ghana, Ajuda de Desenvolvimento de Povo para Povo em (ADPP) Angola, and Episcopal Relief and Development (ERD) Angola. MCHIP collected multiple forms of data from these five partners using qualitative methods, including individual interviews with key project personnel and review of key documents. MCHIP then compared data across projects to better understand the overall contributions made by MCP. Some partners conducted surveys and this case study includes relevant quantitative data.

## KEY FINDINGS

MCP partners: 1) increased access to ITNs; 2) monitored and tracked ITN ownership and use; 3) increased proper use of ITNs; and 4) identified and addressed challenges to ITN procurement, distribution, and use. Collaborative partnerships and coordination of efforts with the Ministry of Health (MOH), communities, and other local stakeholders supported efforts to distribute, promote effective use, and maintain ITNs. ITN ownership increased in nearly all MCP project areas (see orange and blue bars, Chart 1) where surveys were conducted. Final coverage estimates in project areas are significantly higher than national estimates (yellow and purple bars), even where project baseline coverage was lower than national averages.

**Chart 1. Percentage of households in MCP project areas with at least one ITN\* compared to national trends\*\***



\*Household surveys were carried out in MCP project areas, and are not nationally representative.

\*\*Limited availability of national coverage estimates through Demographic and Health Survey (DHS)/Malaria Indicator Survey (MIS).

## Increasing Access to ITNS

MCP partners worked diligently to ensure that communities had access to ITNs. Although MCP partners did not directly procure nets, they played two important roles in increasing access: advocating with agencies procuring and providing nets (such as national governments, PMI, and UNICEF); and assisting in community-based distribution. For example, ERD Ghana convinced the MOH to supply nets outside of the prioritized regions and was able to distribute 26,000 nets over the first two years of its project. With the shift in policy to universal coverage in 2012, ERD Ghana assisted the MOH with distribution and household hang-up of 99,838 ITNs in its 280 project communities.

EQUIP Liberia initiated a collaboration with the USAID-funded DELIVER PROJECT and the Nimba County Health Team to distribute 184,000 ITNs. ERD Angola advocated for UNICEF to allow community-level, as well as facility-level, distribution. MCP partners provided data on ITN coverage of households to support their requests to donors for additional net distribution in their project areas; as a result, suppliers were more willing to engage with them as partners in net distribution. The PMI Advisor for Uganda described the results of WellShare International’s collaboration and coordination with multiple partners, including the Global Fund, PMI, and the Gates Foundation: “Overall they distributed [over 100,000] ITNs.

WellShare were very strong in advocacy and in establishing a distribution network. WellShare reached out to initiate partnerships. If a nongovernmental organization (NGO) has grassroots reach and advocacy system, it is possible to be successful in this endeavor.”

Nearly all MCP partners supported ITN distribution through a variety of strategies at both community and facility levels. Caritas was on Senegal’s national committee for net distribution. In this effort, Caritas collaborated with other partners in the rollout of the national distribution strategy, dividing support in different areas among the team of partners led by the district MOH. Caritas helped finance the operational costs of the LLIN [long-lasting insecticide-treated net] Universal Coverage activity and assisted in the preparation for and actual distribution of

**Table 1. Nets distributed by MCP partners**

Partner	Nets Distributed
ADPP Angola	29,466
ERD Angola	21,000
ERD Ghana	125,838
EQUIP Liberia	184,000
AKF Mozambique	7,798 (to orphans and vulnerable children and people living with HIV/AIDS)
Caritas Senegal	3,044
WellShare International Uganda	102,876

the LLINs, including orienting teams of volunteers and supervisors who conducted the distribution. Caritas distributed over 3,000 LLINs including 856 LLINs in a mass distribution; 1,188 nets to pregnant women through targeted distribution; and 1,000 nets to health huts in areas reached by the universal coverage campaign.

At the community level, MCP partners worked with volunteers and community leaders to register beneficiaries according to national policy<sup>1</sup> and to distribute the nets door to door, ensuring that distributors did not overlook or exclude any households. The relationships that partners built with community leaders and volunteers enabled effective community distribution. ERD Ghana described their house-to-house distribution, which promoted mutual accountability between community leaders and volunteers, ensuring that nets reached their target population:

“We gave the leaders a base training on what we expect them to do to help us in the project and to help us sustain the gains when the project is gone. When we send the nets to the communities in most cases we load the nets in the community leaders’ house, and the volunteers go there to pick the nets to do the distribution. This is one way to put a check on the volunteers so that they don’t do anything funny. The community members also help with passing messages and talking to community members to encourage them to cooperate; for example some people weren’t comfortable with volunteers coming into their rooms to hang-up nets, but the community members talked with them to explain the importance of the volunteers’ work.”

Many MCP partners also supported ITN distribution through routine service channels at facilities including antenatal care and immunization clinics, and also to other vulnerable populations like those living with HIV/AIDS. Partners that supported distribution through such channels included ADPP Angola, ERD Angola, WellShare Uganda, ERD Ghana, AKF Mozambique, and EQUIP Liberia. ADPP Angola’s strategy linked members of school-based Malaria Control Patrols to health facilities to assist in distribution of ITNs. With a variety of modes of distribution, MCP partners effectively linked national-level partners that procured and coordinated net distribution to communities and community volunteers who conducted community sensitization and assisted with distribution activities in communities to increase ITN coverage (see Chart 1).

## Monitoring and Tracking ITN Ownership and Use

MCP partners used routine monitoring to assess progress toward goals, make key management decisions, and advocate with partners for increased net supplies and changes to policies (such as the transition from targeting vulnerable populations to achieving universal coverage). Project baseline assessments determined ITN coverage levels, which helped partners plan behavior change and distribution strategies, and estimate the numbers of nets needed—either for universal coverage or for certain vulnerable populations. Partners’ community presence and close collaboration with community leaders and volunteers enabled accurate counts of households, sleeping spaces, and the number of nets in use.

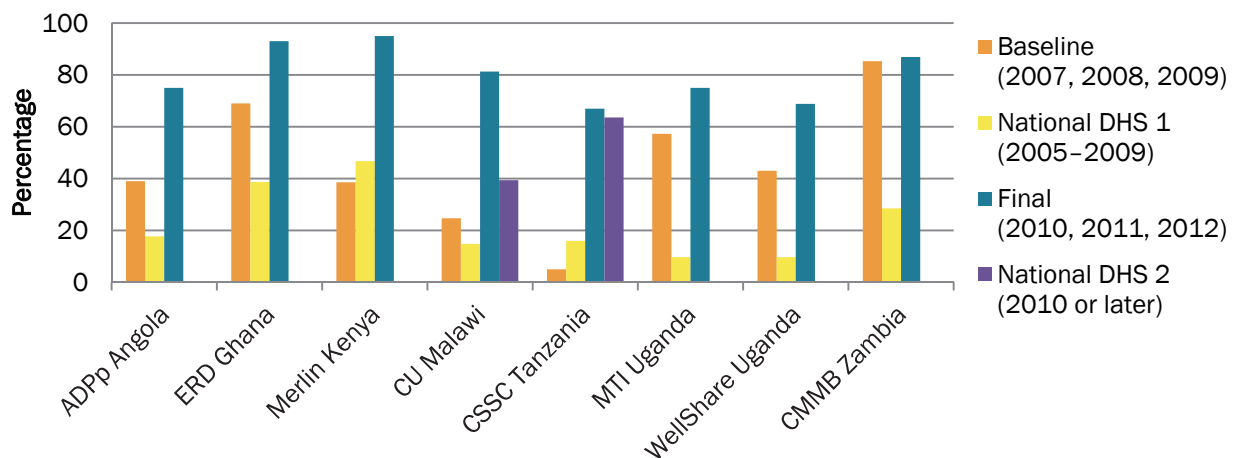
Multiple MCP partners conducted baseline surveys and quantification exercises. A Community Health Focal Person on Liberia’s Nimba County Health Team described how they worked with EQUIP to carry out their first ITN quantification exercise: “Before net distribution, there was an assessment done. There were people recruited to go from community to community to identify sleeping places, to look at the quality of the nets, and to see whether the nets were treated. EQUIP, along with the County Health Team, did the assessment; it was something we

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<sup>1</sup> Universal coverage was not policy in all countries during the life of the MCP projects.

planned all together.” EQUIP used the data from the quantification assessment to request an increased supply of nets from the National Malaria Control Program (NMCP) and donor agencies for their project area. In Angola, ERD conducted a baseline coverage survey in their catchment area including house-to-house visits to quantify existing ITNs (focusing on pregnant women and children under the age of five) and to identify needs prior to net distribution. Likewise, WellShare Uganda used ITN coverage data from their household baseline survey to focus on areas with the lowest coverage, thus maximizing the project’s impact by ensuring that the most underserved were reached. Chart 2 compares the percentage of children under five who slept under an ITN in project areas where surveys were conducted (orange and blue bars) with the national estimates. In most cases, the use of an ITN among children under five in MCP project areas was higher than the average national estimate by the end of the project period.

**Chart 2. Percentage of children under five in MCP project areas who slept under an ITN the previous night\* compared to national trends\*\***



\*Household surveys were carried out in MCP project areas and are not nationally representative.

\*\*Limited availability of national coverage estimates through DHS/MIS.

MCP partners used routine monitoring data to make adjustments to activities and provided data to MOHs to inform policies. ERD Angola persuaded the NMCP to incorporate community-level data into its monitoring and evaluation system, a step toward improving use of resources and achieving better coverage. Such data-sharing also increased MCP partners’ credibility, improving partnerships. As one ERD employee explains, “By sharing [our] project data with MOH counterparts, these counterparts have come to understand the importance of the community-level work ERD is conducting.”

ERD Angola developed a Net Use Monitoring Card that was distributed with the net. During household visits, volunteers used the monitoring cards to note the number of nets in each household and their condition. This allowed efficient, detailed data collection and gave families more impetus to keep and use their nets properly. ERD also used information collected through the Monitoring Cards to monitor net decay rates and advocate for replacement campaigns. In Ghana, ERD used a family registration system to monitor use and quality of nets, which helped ensure that damaged nets were either repaired or replaced in a timely manner.

Monitoring and follow-up after net distribution enabled MCP partners to track where messages were acted upon and where they were not, and to make necessary adjustments. Monitoring data also revealed barriers to net use. For example, feeling hot under a net, fear of effects of the insecticide, and non-fixed sleeping spaces are among the common barriers to regular net use. MCP partners addressed the barriers that the monitoring data revealed. ERD Angola staff developed a checklist or “script” to assist volunteers when conducting home visits in an effort to address the gaps identified in their BCC strategy. ERD Ghana’s Program Manager noted that

consistency is important in monitoring, saying that the beneficiaries know that the volunteers come every month to check on the nets, so the families keep the nets hung above sleeping spaces.

## Behavior Change Communication to Increase Appropriate ITN Use

As net availability increased, MCP partners worked hard to close the gap between net ownership and net use. BCC strategies were a major focus of all MCP partners, particularly for ITNs, because correct and consistent use is a behavior that, in many contexts, necessitated changing attitudes and practices in communities and individual households. All MCP partner project areas included in this case study experienced a significant increase in ITN use among children under five (see Chart 2).

MCP partners used several different strategies to influence behavior, including radio messaging, distribution of posters and informational leaflets, and interpersonal communication via community meetings and household visits by community health workers and volunteers.

Household visits during initial distribution and follow-up monitoring provided the most opportunities to encourage net use. Door-to-door distribution allowed community volunteers to demonstrate how to hang a net or assist in net hanging, as well as to dialogue with families about the importance of net use. ERD Ghana gave their volunteers a

tool kit (hammer, nails, rope) to demonstrate net hanging as they distributed ITNs. WellShare Uganda trained and supported local civil society organizations to deliver messages on correct and consistent ITN use alongside ITN distributions through a variety of channels including use of flip charts and other print materials, and radio spots. EQUIP Liberia noted the value of hanging nets with families: “There are people who want to sell those things, so once they are hanged [sic] they are hanged for good; there is no room for them to take the nets to do something else with them.”



Photo by Jhpiego

MCP partners also identified appropriate ways to create social pressure and affect social norms to promote proper ITN use and discourage misuse. For example, in Malawi, village chiefs in Christian Reformed World Relief Committee project areas spoke out against use of nets for fishing and local leaders established fines for anyone found using ITNs for fishing or selling an ITN.

## CHALLENGES

MCP partners identified two key constraints to increasing ITN ownership and use: the lack of available nets at the local health facilities (a supply chain issue beyond MCP partners' control), and the cultural beliefs or attitudes within the communities that discouraged net use. EQUIP Liberia staff commented, “We have not been able to get enough nets to cover all households and communities that need them, so coverage has not really increased a lot. We have focused on increasing use of the nets that have been distributed.” AKF staff in Mozambique cited concerns that vulnerable populations such as women and children were often not prioritized in households for sleeping under nets because the man of the household was deemed the priority. In other contexts, like Ghana, nets were often moved outside or otherwise not used due to excessive heat. BCC activities, including household visits and community dramas, aimed to address these challenges by promoting proper hanging of nets and use by pregnant women and children under five.



## KEY MESSAGES

Learning from MCP partners' experiences in monitoring and tracking ITNs, partnerships with net procurers, government and donors, net distribution, and behavior change can make future community-based ITN programs more efficient and effective.

- **MCP partners facilitated dialogue between community leaders and facilities to prioritize procurement and distribution of key commodities.** Though procurement of medicines and supplies is not in the control of communities, dialogue between community leaders and facilities can prioritize key products, including ITNs and sulfadoxine-pyrimethamine for antenatal visits, for procurement.
- **Community-level efforts contributed to achieving high coverage and use. MCP partners demonstrated the value of community-level strategies to distribute nets.** Strategies included using volunteers and doing door-to-door distribution; community BCC focused on proper net hang-up and use; and net quantification and monitoring from which data were used to procure sufficient quantities of nets, plan for net replacement, and appropriately target net distribution. The success in project areas that utilized community-level strategies (see Charts 1 and 2) underscores the need for continued partnership between national-level stakeholders like NMCPs and community-level facilitators like NGOs.
- **Maintaining high ITN coverage and use required consistent monitoring and follow-up.** MCP partners found that routine monitoring of household use was critical to meet PMI's objective of maintaining universal coverage. Addressing barriers to use, replacing/repairing damaged nets, gathering data for ongoing net requirements, and assessing net lifespan were all vital contributions of MCP partners as they worked to achieve and maintain ITN coverage.

## ACKNOWLEDGMENTS

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