



# Beyond ExxonMobil: Sustaining the Gains

*A decade-long partnership with ExxonMobil Foundation  
under the project Improving the Quality of Malaria Control Services  
in Chad and Cameroon*

*2011-2021*



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- The regional health management teams and district health management teams, as well as the administrators and health personnel at the project-supported health facilities, whose partnership proved to be decisive in the sustainable achievement of the project objectives.
- The health facilities and their staff and the community health workers in their respective villages, who through their daily efforts enabled the implementation of malaria control activities and contributed to the reduction of malaria mortality in the project zone and in each country.
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and trust, enabling us to address their needs in a dignified manner in the fight to ensure the sustainability of malaria eradication and save lives.

This brief is based upon the end-of-project report authored by Gladys Tetteh, Eric Tchinda Meli, Kyra Brown, Veronique Massaedoe, Noella Umulisa, Mathurin Dodo, Naibei Mbaibardoum, Karine Nankam, and Pascale Verly.



# Introduction

As in many countries in sub-Saharan Africa, malaria is the leading cause of morbidity and mortality in Chad and Cameroon, especially among children under age five and pregnant women. In 2011, there were an estimated 529,000 cases of malaria and 12,628 deaths in Chad, and 3.1 million cases of malaria and 12,276 deaths in Cameroon.<sup>1</sup>

In June 2011, the ExxonMobil Foundation began a strategic partnership with Jhpiego to improve the quality of malaria control in Chad and Cameroon. Approximately 1.4 million people live along the 1,070-kilometer pipeline, which runs from an oil field in Komé, Chad, southwest through Cameroon, ending in the port of Kribi (see Figure 1). Mirroring the national profile, malaria is also the leading cause of sickness and hospitalization along the pipeline. With ExxonMobil funding, Jhpiego's plan was to initially work in three districts—two in the Logone Orientale Region in Chad and the Kribi district in Cameroon.

Although the Ministries of Health (MOHs) in Chad and Cameroon had appropriate policies and structures in place to prevent malaria, several challenges hampered access to quality services for children and pregnant women living in project-targeted districts. Jhpiego conducted a rapid baseline assessment in 2011 to identify barriers to access to quality malaria services in both countries. Findings from the assessment highlighted a lack of trained health care providers, especially in rural facilities. Apart from the facilities in N'Djaména, most health facilities in Chad had only two or three providers with minimal training. In addition, the two-day training on malaria case management that most staff received did not adequately address all technical areas of malaria prevention and control services.

The lack of malaria commodities was also seen as a barrier to services in both Cameroon and Chad. Malaria medicine stock-outs were common as most regional and health districts relied heavily on outside donors, such as UNICEF and the Global Fund to Fight AIDS, Tuberculosis and Malaria, to provide supplies. Malaria-specific health education and job aids were generally absent at most health facilities and in the community. Although communities had taken steps to build awareness and mobilize against malaria, resources were limited. The introduction of community-based care, although a priority, had been slow given the limited capacity of the National Malaria Control Programs (NMCPs) and MOHs in both countries to implement those services.

Jhpiego shared the assessment results with the ExxonMobil Foundation, partners, and other key stakeholders. Findings were validated, needs prioritized, and the process for building on existing community- and facility-based resources to respond to the needs of both countries was identified.

Figure 1. The ExxonMobil Foundation and Jhpiego worked together to improve the quality of malaria control for the 1.4 million people who live along the 1,070-kilometer pipeline running from Chad to Cameroon



<sup>1</sup>World Malaria Report 2020. Geneva: World Health Organization. <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2020/>

# The Project

The **Improving the Quality of Malaria Control Services in Chad and Cameroon** project leveraged the experience, expertise, and success of other ExxonMobil-funded malaria projects implemented by Jhpiego in Nigeria and Angola. With an initial annual budget of \$700,000, the project aimed to strengthen malaria control among pregnant women and children under age five years living in communities along the pipeline. Specifically, the project targeted the 1.4 million people living in the 11 malaria-endemic areas along the pipeline: Doba, Bodo, Béboto, Bébédjia, Goré, Bessao, Baïbokoum, Laramanaye, Donia, and Kara in Chad, and Kribi in Cameroon. The targeted districts, population, and health facilities supported by the project are shown in Table 1.

**Table 1. Target districts and health facilities, 2020**

Country	District	Population	Total # of health facilities supported (# of hospitals)	# of health facilities supported in 2020 (%)
Cameroon	Kribi (1)	15,4370	40 (1)	33 (82.5%)
Chad	Doba	167,605	17 (2)	14 (82%)
	Bébédjia	184,437	18 (2)	15 (83%)
	Béboto	68,642	13 (1)	13 (100%)
	Bodo	141,461	18 (1)	17 (94%)
	Goré	159,010	20 (1)	17 (85%)
	Baïbokoum	73,894	11(1)	10 (91%)
	Bessao	180,140	15(1)	15 (100%)
	Laramanaye	66,493	8 (1)	7 (88%)
	Donia	86,906	14 (1)	12 (86%)
	Kara	65,180	8 (0)	6 (75%)
	Chad total	1,193,768	142 (11)	126 (98 %)
Chad and Cameroon Total	11	1,348,138	182 (12)	159 (92%)

To support Cameroonian and Chadian government efforts to meet their National Malaria Strategic Plan targets for reductions in malaria morbidity and mortality, Jhpiego supported the NMCPs to develop annual work plans and activities at the national, district, health facility, and community levels.

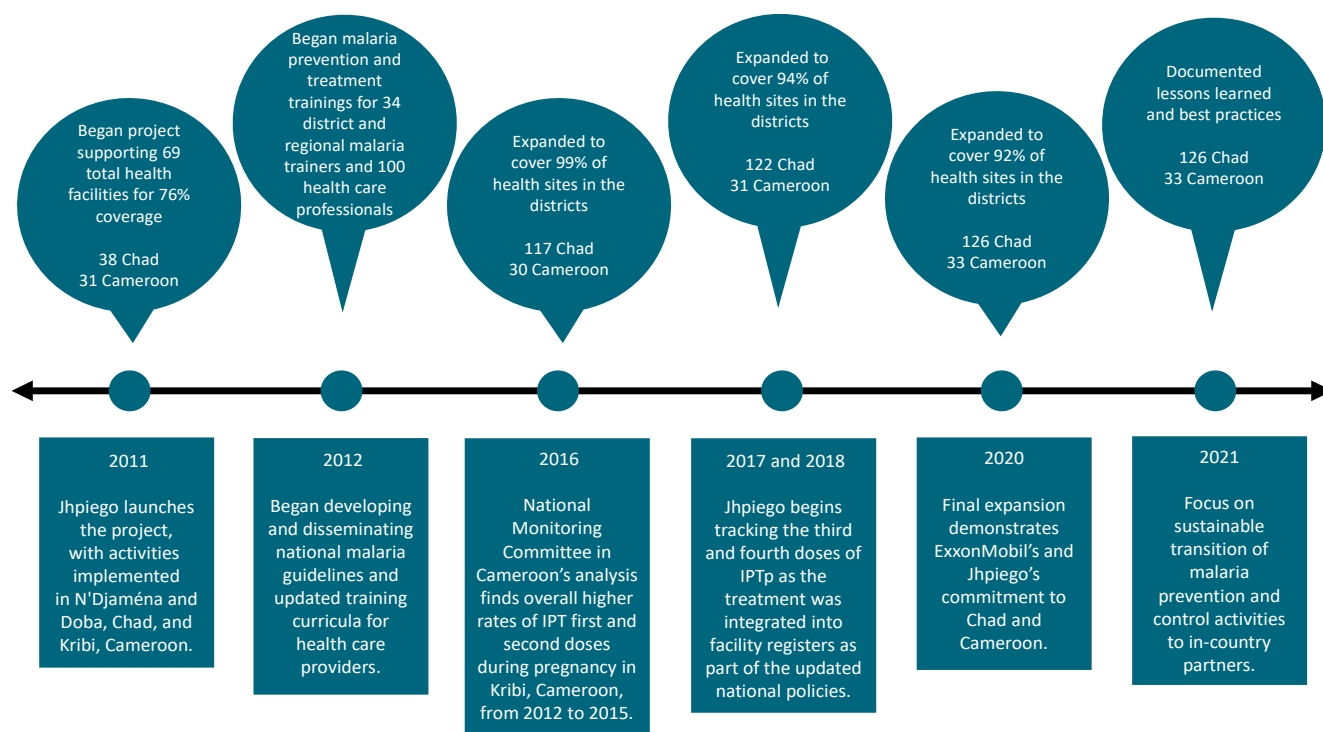
Between June 2011 and December 2021, Jhpiego implemented the following technical strategies in collaboration with the Chad and Cameroon NMCPs and district-, facility-, and community-level staff:

- At the national level, supported the Chad and Cameroon NMCPs to plan activities, as well as to develop and revise guidelines, policies, and training materials for malaria prevention and control services.
- At the district level, enhanced sustainability by ensuring district health supervisors have the competency to conduct effective supportive supervision visits at targeted health facilities.
- At the health facility level, improved health care providers' knowledge and skills in malaria prevention and control, including data collection and commodity management, and supported post-supervision follow-up visits together with district supervisors.
- At the community level, strengthened community interventions through a community health worker (CHW) network for prevention and case management, and supported tracking and use of data for decision-making.



Given the different stages of malaria planning and implementation in Chad and neighboring Cameroon, Jhpiego tailored project priorities and activities to meet each country's needs, as depicted in Figure 2.

Figure 2. Project priorities and activities, 2011–2021



# Achievements

Through ExxonMobil Foundation funding, Jhpiego's work contributed to the NMCP's goals of 75% reduction in malaria mortality and morbidity compared to its 2013 level in Chad, and at least a 60% reduction in Cameroon compared to 2013, particularly among children under age five and pregnant women in the project intervention areas.

Between 2011 and 2021, in partnership with stakeholders, Jhpiego-supported activities provided 1.5 million (1,550,194) pregnant women with preventive treatment, and 39.7 million (39,703,714) children and adults with prompt malaria confirmatory testing and appropriate treatment. These efforts are estimated to have averted approximately 17,795 deaths and 1.4 million (1,417,442) disability-adjusted life years. Activities implemented at the national, district, health facility, and community levels contributed to the following specific results.

## CHAD



**6,858,818**

Total # of beneficiaries



**559,280**

# of ITNs distributed at project-supported sites



**799,163**

# of RDTs administered at project sites



**1,531,948**

# of patients who received ACTs at project sites



**598**

# of providers trained



**54,901**

# of health education sessions



**694,329**

# of people reached through educational sessions

## CAMEROON



**1,013,198**

Total # of beneficiaries



**10,779**

# of ITNs distributed at project-supported sites



**100,723**

# of RDTs administered at project sites



**50,027**

# of patients who received ACTs at project sites



**414**

# of providers trained



**24,221**

# of health education sessions



**86,433**

# of people reached through educational sessions



## Decline in Reported Malaria Mortality Rates in Chad and Cameroon

In the Logone Oriental region (LOR) of Chad, the percentage of deaths due to malaria in the district hospitals decreased from 60% (in six district hospitals) in 2013 to 38% (in nine district hospitals) by December 2017 before experiencing a jump in 2018 due to a significant and protracted stock-out in several malaria commodities nationwide. From 2018 to 2020, the project continued to see a decrease in the percentage of malaria deaths, settling to 48.5% in 2020. In Kribi, Cameroon, the percentage of deaths due to malaria decreased from 24% to 17% at one district hospital during the same period. Many factors affect mortality from malaria (seasonal changes, availability of drugs, use of bed nets, etc.), and while the program has made significant achievements, Jhpiego will continue to work with in-country partners to strengthen the skills of providers and district health management teams to provide high-quality preventive and treatment services.

## Increase in the Percentage of Pregnant Women Receiving Preventive Medicine

With Jhpiego's support, both Chad and Cameroon updated their policies for malaria in pregnancy to follow the 2012 World Health Organization (WHO) intermittent preventive treatment of malaria in pregnancy (IPTp) guidance, which encourages earlier and more frequent dosing of sulfadoxine-pyrimethamine (SP) to prevent malaria exposure/infection during pregnancy.<sup>2</sup> Jhpiego also worked with the NMCPs to ensure that those policies conform to the WHO's 2016 antenatal care (ANC) recommendations for more frequent ANC contacts.<sup>3</sup> One of the most significant results of Jhpiego's technical support at the national level is that a greater percentage of pregnant women who attend ANC visits are receiving their first dose of SP (see Figure 3).

Despite these gains, the rates have stagnated over the past three years and coverage of IPTp2 remains below the national targets of 80% in both countries. This is thought to be because women tend to attend only one ANC visit, so providers do not have the opportunity to give the second dose. Jhpiego also started tracking IPTp3 and IPTp4 when they were integrated into facility registers as part of the updated national policies in 2016; those rates have also steadily improved from the baseline. Jhpiego will continue to work with the community health volunteers to follow up and encourage pregnant women to adhere to the recommended ANC schedule and thus ensure receipt of all four doses.

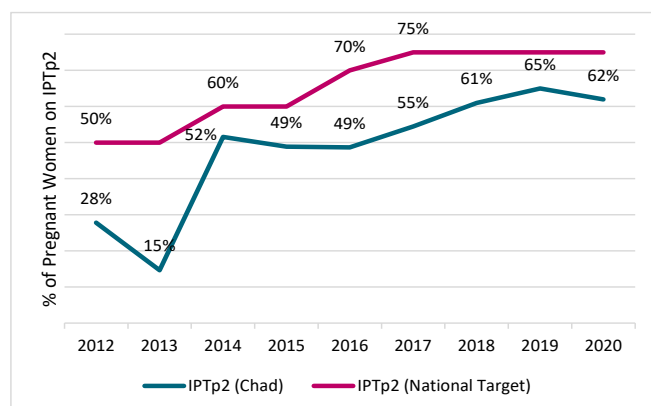
<sup>2</sup>[http://www.who.int/malaria/iptp\\_sp\\_updated\\_policy\\_recommendation\\_en\\_102012.pdf](http://www.who.int/malaria/iptp_sp_updated_policy_recommendation_en_102012.pdf)

<sup>3</sup><http://apps.who.int/iris/bitstream/10665/250796/1/9789241549912-eng.pdf?ua=1>

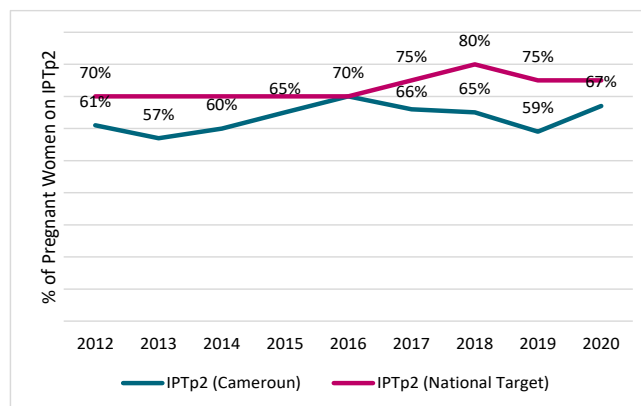


Figure 3. Percentage of pregnant women who received IPTp2 and IPTp3 under direct observation, LOR, Chad, and Kribi, Cameroon, 2012–2020

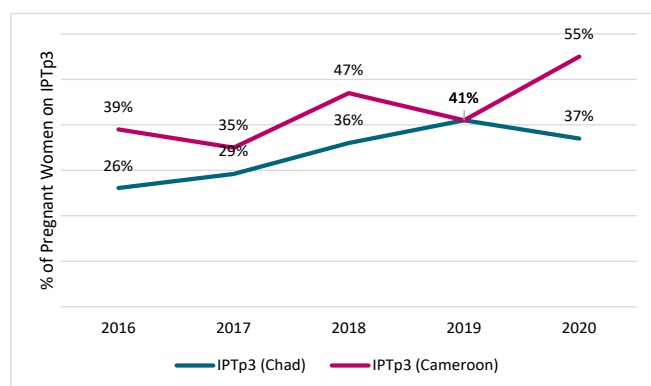
(a) Chad IPTp2 against national target



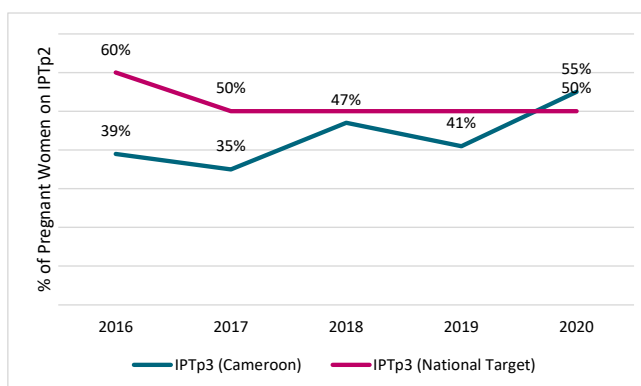
(b) Cameroon IPTp2 against national target



(c) Chad IPTp3 against national target



(d) Cameroon IPTp3 against national target



Note: IPTp3 and IPTp4 data were not collected until 2016 (year 5 of the project)

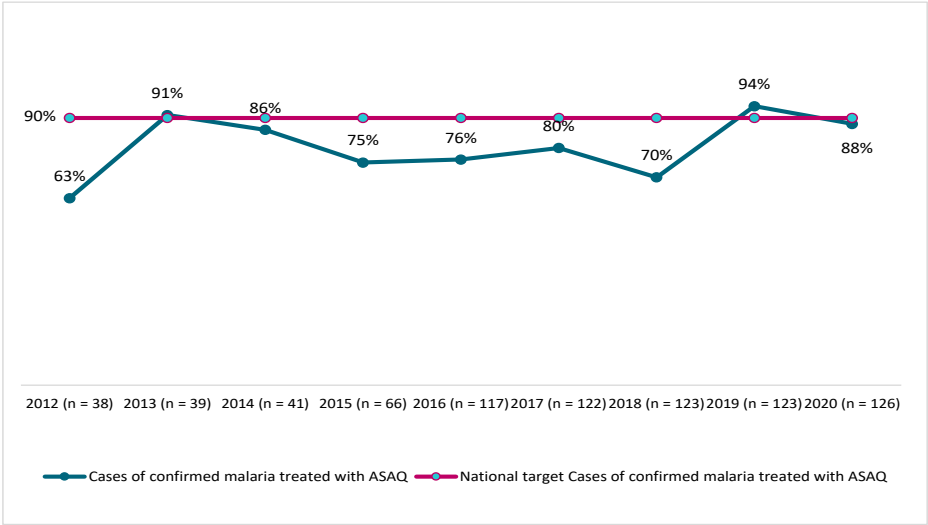




# Increase in the Number of Suspected Malaria Cases Confirmed with Rapid Diagnostic Tests (RDTs) or Microscopy and Treated

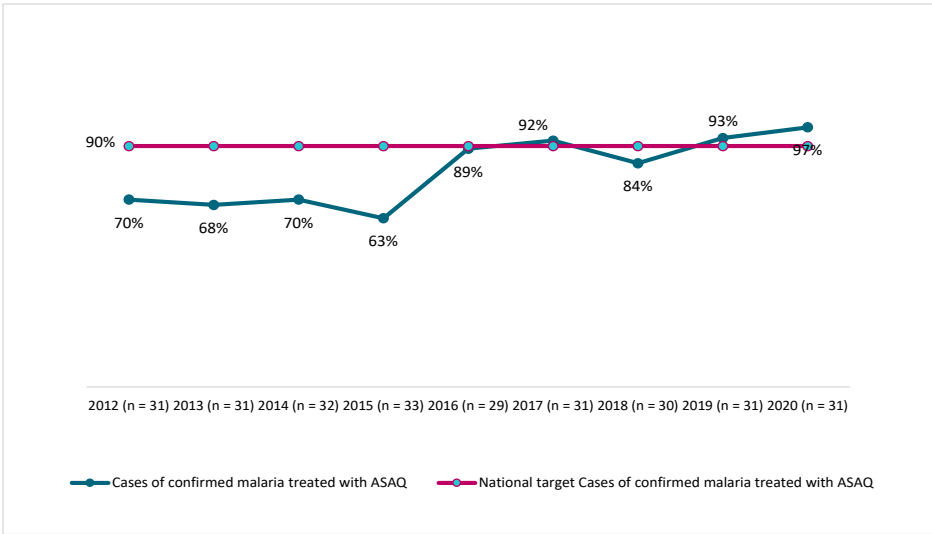
In the LOR of Chad, the number of suspected malaria cases tested and confirmed with RDTs or microscopy increased from 41,453 across 38 facilities in 2012 to 148,694 across 123 facilities in 2020 as the project’s geographic scope expanded in response to the NMCP’s needs, and because of competency-based training aimed at institutionalizing the use of RDTs for patients who present with a fever. The project’s true impact can be seen in the percentage of confirmed malaria cases treated according to national guidelines, which has increased overall in Chad compared to the baseline data collected in 2012 (see Figure 4).

Figure 4. Percentage of cases treated according to national guidelines, LOR, Chad, 2012–2020



Kribi in Cameroon experienced a steadier increase in the percentage of cases treated since 2012 due to less frequent stock-outs of antimalarial medicine (see Figure 5). In Cameroon, where CHWs are allowed by national policy to test and treat patients, project-supported CHWs reached 7,483 patients with a fever, tested 98% (7,331 cases) with RDTs, provided treatment to 95% (5,673 / 5,976 cases) of patients confirmed to have malaria, and referred 1,038 patients to a health center.

Figure 5. Percentage of cases treated according to national guidelines, Kribi, Cameroon, 2012–2020



# Strengthened Clinical Capacity of Providers and Supervisors

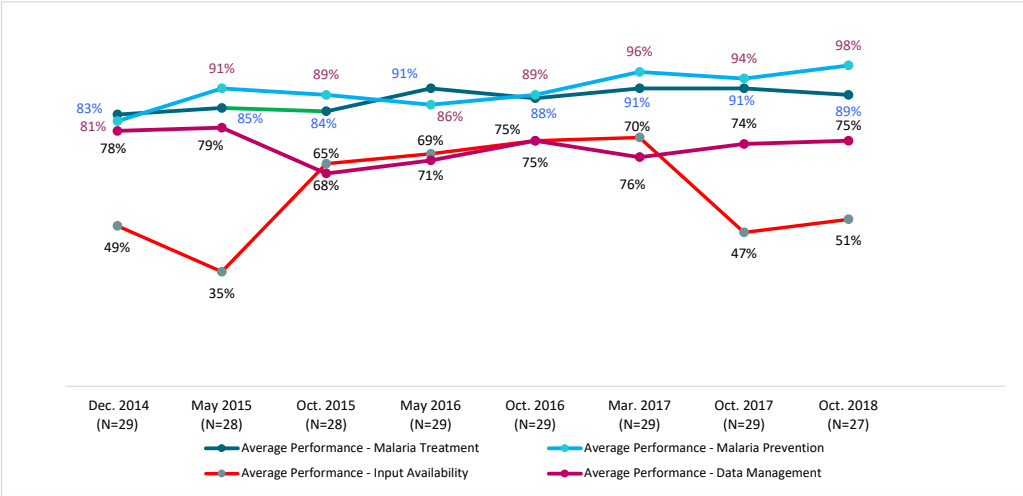
In 2012, 2014, and 2015, Jhpiego trained a pool of regional and district supervisors in both countries and provided ongoing technical support to ensure the implementation of onsite supervision visits for trained providers. Starting in 2016, Jhpiego emphasized sustainability via the transfer of supervisory competencies to strengthen supervisors’ coaching/mentoring skills to maintain and/or improve the performance of service providers and health facilities. To this end, the best practice has been the implementation of periodic data verification and validation meetings, which has enabled facilities and the NMCP to ensure reliable, complete, and timely data via monthly reports. With the goal of transferring the organization of these meetings to the *equipes cadre de district* (ECDs, or district health management teams), Jhpiego developed a performance evaluation tool. Project teams, together with the ECDs, are using the tool to determine how successfully facilities and districts have implemented strategies and tools to enable high-quality provision of malaria services and data use for decision-making. The tool has also enabled ECDs to identify and provide targeted support to low-performing districts and health facilities.

In Cameroon, where the project operated only in Kribi district, Jhpiego periodically accompanied the ECD during onsite supervision at project health facilities to provide real-time technical support. The project also provided post-supervision monitoring to support the ECD in problem-solving and implementing corrective actions for low-performing sites.

In the LOR of Chad, the project team implemented supervision visits of providers to monitor their skills and knowledge retention and to provide continuous technical support to maintain high-quality service provision. Starting in 2016, Jhpiego worked closely with program partners to transfer to UNICEF the responsibilities of being the NMCP’s key programmatic support for training, supervision, and data management activities in the LOR, via a subaward from the United Nations Development Programme (UNDP), the primary recipient for Chad’s Global Fund grant. In July 2018, the UNDP collaborated with the NMCP and partners to transition these activities to the regional and district health management teams. As such, in 2018 Jhpiego transitioned to providing solely technical support to the NMCP, UNDP, and partners—including sharing tools and job aids developed by Jhpiego—for facility-level capacity-building activities, though it continued to support data validation meetings for facilities at the district level.

As a result of the project’s efforts in both countries in assuring regular supervision by district supervisors, the average performance scores of providers assessed in malaria prevention and treatment have improved overall since 2014, and have remained steady for data management, despite the number of sites tripling between 2014 and 2017 (see Figure 6).

Figure 6. Average provider performance scores in malaria prevention and treatment in Kribi, Cameroon, 2014–2018





## Increase in Community Outreach and Services

Throughout the life of the project, Jhpiego-supported CHWs in Kribi, Cameroon, saw 7,483 people with fever and tested 98% of them for malaria. Of those who were confirmed positive for malaria, 95% (5,673 cases) received artemisinin-based combination therapy (ACT). During this same time, the CHWs made 820 home visits, conducted 826 education sessions, and provided malaria messages to more than 36,000 people.

In the LOR of Chad, since 2013, the CHWs conducted sensitization activities within their communities, including conducting household visits to provide health education on malaria transmission and prevention, the use of long-lasting insecticidal bed nets, the importance of IPTp for pregnant women, and the importance of seeking medical care promptly for suspected malaria. These trained CHWs have conducted 28,694 household visits and held 48,427 community health sessions and 31,331 individual sessions. As a result,

- 650,798 people received at least one malaria message,
- 32,271 pregnant women were counseled on malaria prevention and 28,146 were referred to their local health center to attend an ANC clinic to get IPTp, and
- 39,912 children under age five suspected of having malaria were referred to the health center.



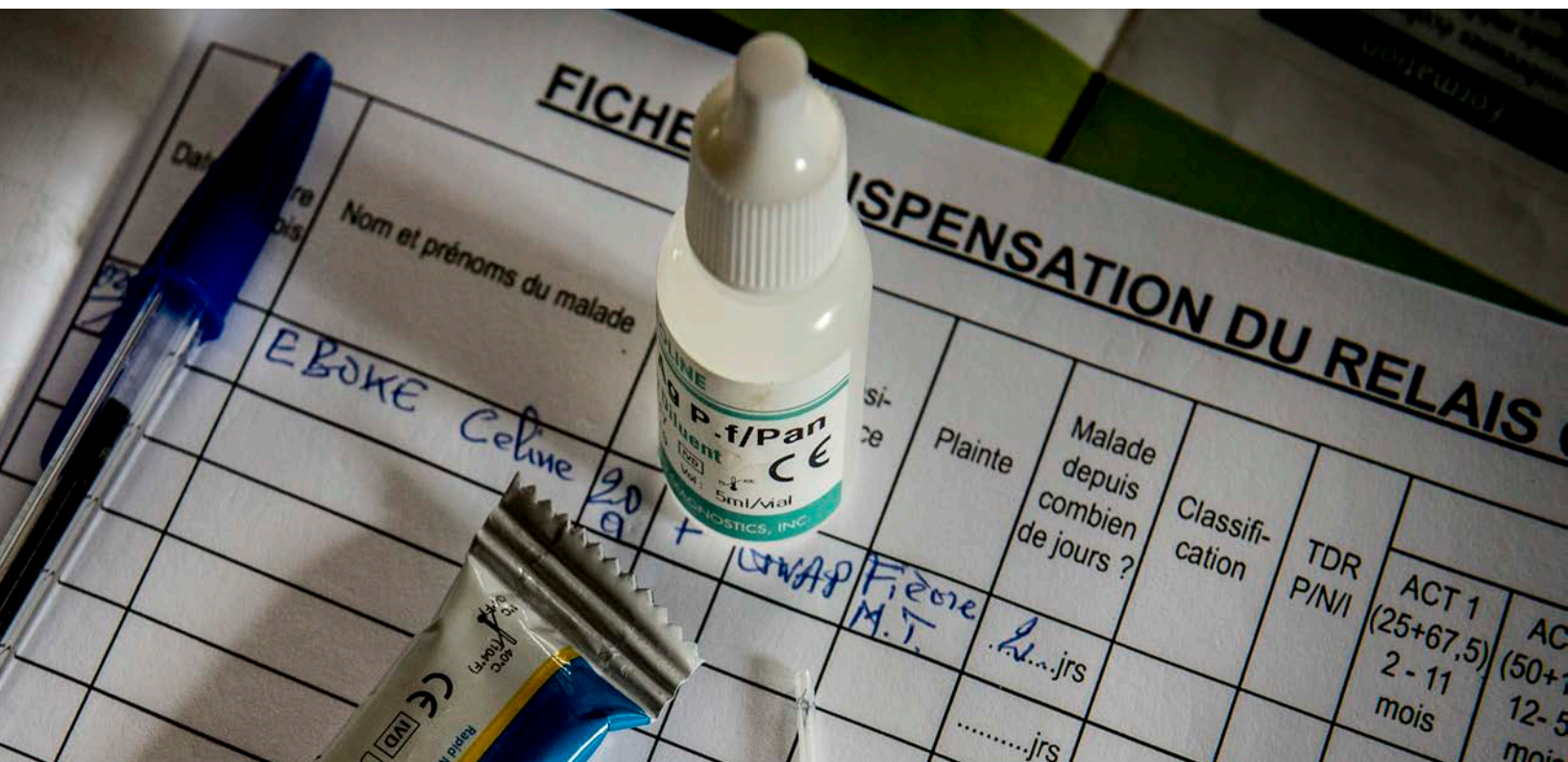


## Development of Evidence-Based, National-Level Tools and Documents

To ensure practices adhere to evidence-based recommendations, Jhpiego supported the NMCPs to update (or create when necessary) the following national-level documents:

- Chad and Cameroon:
  - Training manual on the prevention and treatment of malaria
  - Reference manuals on integrated supervision, data management, commodity management, and data-monitoring posters
  - 2014–2018 National Strategic Plan for Malaria
  - 2019–2023 National Strategic Plan for Malaria
- Chad
  - Training manual for community mobilizers for malaria
  - Reference manual for the prevention and treatment of malaria during pregnancy
  - Guidelines on IPT for pregnant women
  - National supply and inventory management plan
  - Guide for indoor residual spraying (not yet implemented in Chad as part of the national strategy)
- Cameroon
  - Training manual for community health volunteers on home-based prevention and treatment of malaria
  - Integrated Management of Childhood Illnesses at the community level
  - 2019–2023 National Strategic Plan for Malaria

This targeted investment in health systems strengthening has led to stronger, more resilient communities better prepared to fight malaria. Additionally, the project has helped raise awareness of the disease, provided training to health care workers, and distributed lifesaving preventive and treatment tools.





# Noteworthy Best Practices

## Monitoring Posters

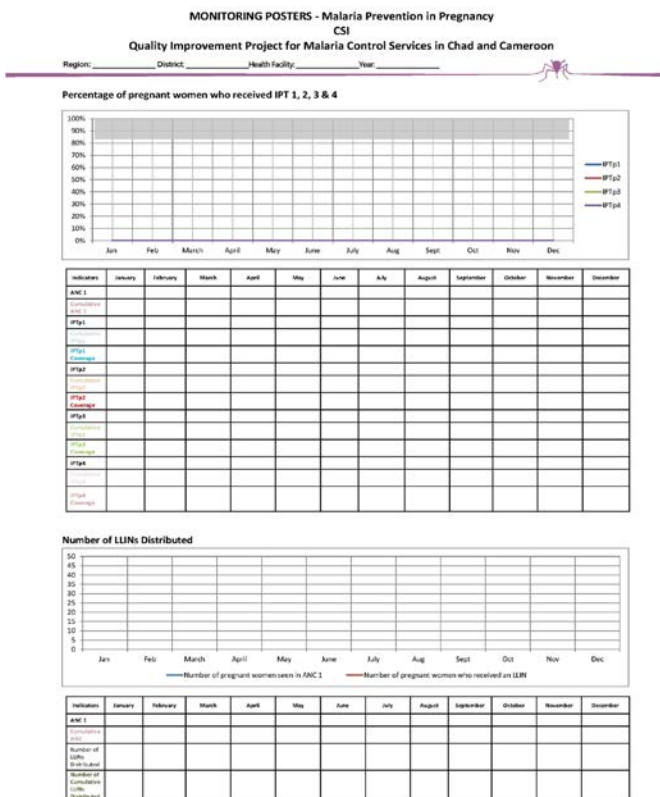
Figure 7. Data monitoring posters piloted in Kribi and used in both Cameroon and Chad



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In 2012, the project provided training on malaria case management according to national guidelines, and subsequent supervision of trained providers revealed shortcomings in data collection and reporting, including data consistency and data verification practices, and in the calculation and interpretation of monitoring indicators at the facility level. To address this problem, in August 2013, the project organized a training session on data management for health care providers and managers of health facilities. Thirty-one health care providers participated. The project also began to provide support for the organization of monthly data verification and validation meetings with all health facility managers in addition to supervision visits.

Parallel to these efforts, the project team continued to reflect on how to involve providers more in the analysis, interpretation, and use of data for decision-making at the operational level. In January 2015, during the project's annual review, the headquarters team presented the first draft of the monitoring posters it had developed to the project team. The posters were discussed and validated with the health district team. In August and September 2015, the first training sessions were conducted on the use of the posters for the analysis, interpretation, and use of data with 35 participants.

In 2016, during the meeting of the project's monitoring committee led by the Ministry of Public Health and the heads of the various departments, the head of the Regional Technical Group for Malaria Control of the Sud

Region stated that the data from the Kribi health district was better than the data of other districts in the region. Comparative analysis of the data extracted from the DHIS2 of the Ministry of Public Health of Cameroon for the period 2018–2020 shows that IPTp3 coverage for the Kribi health district is 47%, 52%, and 60%, respectively, higher than that of the nine other health districts in the South Cameroon region.

The committee members ordered a field assessment mission to identify the reasons for the good quality of the data, and the results showed that the use of the monitoring posters to review, analyze, and interpret the data had facilitated the production of better-quality data by the health care providers. The mission found that all the health facilities visited had monitoring posters visible on the walls of the offices of the health center managers. However, they noted that several providers only used the posters to visualize their own performance and were not aware that they could also use the posters as a decision-making tool. The briefing or orientation on the monitoring posters would therefore have been limited to filling in and interpreting data.

Based on the results of the assessment, they recommended scaling up the use of this tool to the national level. The project team has shared the tool at the national level and the process is underway to scale it up across the country.<sup>4</sup> The latest evaluation mission conducted by an external consultant in September 2021 further confirmed the improved data quality.

<sup>4</sup>This approach was selected by the American Society of Tropical Medicine and Hygiene (ASTMH) team as a good practice and was the subject of a poster presentation at the ASTMH meeting held in Baltimore in 2017.





## Community-Based Approach

Prior to implementing the community approach at the district level, the project held advocacy meetings with community, religious, and administrative leaders to solicit their support for this process. Following these meetings in 2012, a network of 38 CHWs in Kribi and 109 in the LOR of Chad were selected by their communities, in collaboration with the MOH, the Regional Health Delegation of each respective region, the health district officials, and the village health committee presidents. These CHWs were trained to conduct awareness-raising activities within their community, including conducting household visits to provide health education on malaria transmission and prevention, encourage sleeping under insecticide-treated bednets (ITNs), promote IPTp, and influence prompt care-seeking for suspected malaria cases. The CHWs also received materials (i.e., medicines, consultation register, solar lamps, thermometer, flip chart, safety box, etc.) and were supported with regular supervision visits. During the supervision visits, problems were identified, including the frequent expiry of medicines, weakness in the reporting and promptness of data, and the poor quality of the data. In both countries, supervision visits were conducted monthly from 2012 to 2015. As performance improved, the supervision visits were transferred to program partners in Chad, but remained Jhpiego's responsibility in Kribi and gradually moved from a bimonthly frequency (2016 to 2018), to quarterly in 2019.





Across both countries, inconsistencies and data collection delays were reported by the CHWs, and it was determined that their supervisors at primary health facilities would be responsible for inputting the data into the system by the fifth of each month. These shortcomings created significant discrepancies between the national and project databases on community activities. Because CHWs live remotely from the health facility and require money for transportation to complete their responsibilities, they only traveled to the health facilities to file their reports, leaving little time for their supervisors to complete their review prior to sharing the data with the district. In response, the project decided to support monthly data verification and validation meetings between area chiefs and CHWs, reimbursing the CHWs for transportation, and improving the timeliness, quality, and completeness of area chiefs' reporting community activities in the system. In addition, exchange and experience-sharing meetings between district CHWs, supervisors/facility managers, and health district management teams were supported to meet every six months with the project's technical and logistical support.

In Cameroon, where CHWs can provide case management and treatment, the project provided drugs and other commodities directly to the CHWs at the beginning of the project, based on the population covered. However, several cases of drug expiration were reported because the population coverage estimates were inaccurate and CHW attendance rates were still low. To address this problem, the project made the stock of drugs available to the heads of the health areas, who in turn would supply the CHWs based on consumption. Still, RDT packaging proved difficult for several CHWs as one pack included 25 boxes with a bottle of diluent. Jhpiego engaged in advocacy with the NMCP to raise this issue, and as a result Cameroon's RDTs are now packaged individually, further demonstrating the project's strong communications and partnership with the government.

The project has provided various incentives to help the CHWs do their work better, including support for the start of the school year and semi-annual bonuses. Regular monitoring through training and continuous updating had a measurable impact. At the community level in Cameroon's Sud Region, the comparative analysis of data from the CHWs on the proportion of fever cases tested at the community level for the period 2018–2020 from DHIS2 revealed that Kribi health district recorded the best scores for the last two years, with 90% and 100%, respectively, of suspected fever cases tested with RDTs. Since 2016, the CHWs have reached about 90,000 people in the Kribi health district and 650,798 people in the LOR of Chad through sensitization activities on malaria prevention and other actions that can protect them from diseases.





# Challenges and Opportunities

Over the life of the project, the identified areas of opportunities for malaria prevention and treatment in both Cameroon and Chad are enhancing performance-based provider evaluations and building supervisory capacity at the health district level. These findings are critical to improving the quality of services offered to the population and sustaining activity monitoring at the operational level.

Challenges for these findings are trained personnel seeking other health district opportunities, leading to a lack of qualified health personnel and minimized provider confidence. Additionally, the frequent stock-outs of ACTs and other commodities at the health facility level exacerbates already overwhelmed health systems. Table 2 highlights the opportunities for growth and change for these challenges.

Table 2. Challenges and opportunities for Cameroon and Chad

Challenges	Opportunities
Trained personnel are transferred to other health districts and are replaced by untrained personnel.	Performance-based evaluation of providers is the key to success in improving the quality of services offered to the population.
Frequent stock-outs of ACTs and other commodities occur at the level of health facilities, including free drugs.	Improved collaboration and coordination between the NMCPs, and the MOHs' central commodity and medicine purchasing units and program partners supporting the procurement of malaria commodities to strengthen the national supply chain tracking system to reduce stock-outs and ensure adequate access of commodities across all levels of the health system.
The lack of qualified personnel in certain health facilities is an obstacle to the implementation of the minimum package of activities and the quality of services.	The establishment and capacity-building of a pool of supervisors at the health district level is a guarantee for the resilience of monitoring activities at the operational level in the framework of improving the quality of care.
Data monitoring posters are used mainly to visualize provider performance level and not as a decision-making tool.	Conduct refresher training and scale up the use of monitoring posters as a data visualization tool to support clinical decision-making at the health facility level.
Poor data collection and verification methods led to poor data quality and a low level of data use for decision-making.	<ul style="list-style-type: none"> <li>• Develop an adequate data archiving system to facilitate research and document sharing with partners.</li> <li>• Organize regular data verification and validation meetings at the district and regional levels to ensure high-quality data prior to consolidation.</li> <li>• Ensure the availability and use of malaria data monitoring posters in all health facilities.</li> <li>• Continued emphasis on training district and regional health management teams who can serve as trainers and supervisors, supporting facility staff to improve data management.</li> </ul>

# Recommendations and Way Forward

After 10 years of program implementation, the project acquired a wealth of experience and expertise, which it has used to propose the recommendations detailed below to the MOHs/NMCPs and program partners in both countries.

## NMCP/MOH/Government:

- Establish a mechanism for institutionalizing CHWs within the health system by creating a regulatory framework for implementation.
- Support the scale-up of a cascade capacity-building approach that focuses on strengthening the supervisory skills of regional and district health teams, so that continuous training of providers is possible.
- Increase focus on supporting commodity management tools and approaches across all levels of the system to reduce the impact of stock-outs of malaria commodities.
- Scale up the data monitoring posters at the national level to support improved data management and data use for decision-making.

## Regional and district officials:

- Take advantage of the various supervisory visits organized in the health district to ensure the appropriate and effective use of the monitoring posters not only to monitor provider performance, but to inform decision-making for clinical services and operations.
- Continue follow-up with the CHWs through the heads of the areas and the availability of drugs at their level.
- The sustainability of the community-based approach will require the integration of CHW activities into the district's planning and budgets. CHWs should receive continual training and support for knowledge retention and motivation to carry out sensitization activities in communities more than 10 kilometers from the health district.

## Facility managers:

- Continue to implement best practices acquired during this project (use of monitoring posters for data analysis for decision-making, administration of IPTp to all eligible women, quality data reporting, etc.).
- Ensure monitoring of implementation at the CHW level and the availability of commodities and drugs.

## Malaria program partners:

- Jhpiego, other NGOs, and donors to advocate for the MOH and districts to collaborate and address policy for improving human resource management within the health system, which is weakened by the frequent transfer of trained personnel.

Through the Improving the Quality of Malaria Control Services project, Jhpiego has supported the NMCPs of Chad and Cameroon to strengthen their capacity to address the significant challenges impeding malaria eradication in both countries. To ensure the continuity of activities initiated by the project, Jhpiego focused on health systems strengthening initiatives targeting all levels of the health system, including the development and revision of national policies, strategies, and guidelines based on evidence-based practices; capacity-building of regional and district health teams, providers, and CHWs to improve quality of malaria prevention and treatment services; and support for improved data management to ensure access to high-quality data for decision-making.

The lessons learned and successful approaches can be leveraged by future projects to support both countries' pursuit to eradicate malaria and strengthen the health system.



# Success Stories







## Community Health Workers Provide Needed Health Services in Cameroon

—Véronique Massaedoe

*Originally published in 2021*

Mahelet Ritha, from Bongahale village in the South region of Cameroon, is part of a network of 38 community health workers (CHWs) in the Grand Batanga health zone selected by their communities to raise awareness, manage simple cases of malaria, diarrhea and pneumonia, and refer serious cases to surrounding health facilities for additional care.

Since 2011, Jhpiego has supported the Government of Cameroon's efforts in the fight against malaria through the "Improving the Quality of Malaria Control Services" project, funded by the ExxonMobil Foundation. Through the project, Jhpiego provided training to the CHWs and equipped them with antimalarial medications, rapid diagnostic tests (RDTs) for malaria and other essential supplies.

Ritha works closely with Nurse Azambou Giscard, who has overseen the health area's activities since 2016. Jhpiego, in collaboration with the district health management team, provided Giscard with training on effective techniques and logistical support to conduct supervision and monthly meetings.

In 2020, the Grand Batanga CHWs provided RDTs for 197 patients with fever, which showed a 100% confirmation rate for malaria. Of these cases, 92% received treatment according to national guidelines. The CHWs also stressed the importance of using insecticide-treated nets and of pregnant women receiving the fourth dose of intermittent preventive treatment against malaria, contributing to improvements in uptake.

Through the commitment and leadership of CHWs like Ritha and supervisors like Giscard, the Grand Batanga health zone has improved its provision of health care services, especially in the quality of malaria care for pregnant women.





## Transforming Children's Futures in Cameroon Through Quality Malaria Care

—Véronique Massaedoe

*Originally published in 2020*

When five-year-old Princesse, feverish and convulsing, arrived with her worried parents at the Centre Médicale d'Arrondissement (CMA) in the city of Kribi in the Afan-Mabé district of Cameroon, health facility staff immediately tested her for malaria. An examination and positive rapid diagnostic test (RDT) confirmed that Princesse had severe malaria. She received a blood transfusion and injectable artesunate, an antimalaria treatment used in the management of severe malaria, and soon recovered.

Through funding from the ExxonMobil Foundation, Jhpiego is strengthening the capacity of the Cameroonian Ministry of Health, the National Malaria Control Program, health care providers and community health volunteers to provide high-quality malaria prevention and treatment for nearly 1,180,000 people living in 10 malaria-endemic districts along ExxonMobil's 1,070-kilometer pipeline, which includes Kribi. Jhpiego's support includes monitoring posters to help facilities visualize data to make informed decisions for care and treatment.

Jhpiego's efforts—along with her own supervisory skills—have helped Chief Medical Officer Dr. Gaëlle Mondjengue to improve the CMA's quality of care. From January to September 2020, the facility received 421 suspected cases of malaria, 418 of which had an RDT or microscopy done. During this time period, 359 cases of malaria were confirmed, including 192 cases of uncomplicated malaria and 167 cases of severe malaria. All clients received appropriate treatment.

CMA Afan-Mabé offers hope to every patient entering its doors through its use of accurate data to respond to any health challenge that comes its way.



## Joy for Joie and Her Malaria-Free Pregnancy in Goré, Chad

—Moyreou Djimodoum, Joseline Mamadjibeye, Julien Laoundoul and Alisha Horowitz

*Originally published in 2018*

Joie Yombeussem handed her referral form to midwife Guerinrim when they met at the local health center. Joie's trip to the facility from her village of Goré, Chad, about eight kilometers away, came after an unexpected visit from community health worker (CHW) Rahab Nekouanodji, who recommended that Joie, then four months pregnant, go to the health center for antenatal care. Nekouanodji also advised Joie to sleep under an insecticide-treated bed net.

At the facility, midwife Gueri gave Joie treatment to prevent malaria during pregnancy and iron-folic acid to prevent anemia. "They told me that malaria can harm my pregnancy. Since that day, I follow this advice and have had no problems with my pregnancy," Joie said.

Goré is in Bébédjia district, one of the malaria-endemic districts in Chad where Jhpiego is strengthening the capacity of the Ministry of Public Health, the National Malaria Control Program, health care providers and CHWs to provide high-quality malaria prevention and treatment. In addition to leading the development of national-level malaria guidelines and manuals and reference materials, Jhpiego has provided skills-building and vital resources for about 100 CHWs in four districts and supported 122 facilities.

Back in her village, Joie showed the CHW her antenatal care booklet, which indicated the doses of malaria prevention treatment she received and follow-up visits scheduled. During these visits, Joie also received counseling on family planning. With the guidance and support of Nekouanodji and Gueri, Joie and her husband can grow their family in the way that is best for them.





## Providing Quality Care to Rural Communities in Kribi, Cameroon

—Eric Tchinda

*Originally published in 2016*

Each week, Mrs. Lilian Kube, one of 38 community health workers (CHWs) trained by Jhpiego with funding from the ExxonMobil Foundation, brings malaria care and education to her community in Socapalm, a health zone in Cameroon's Kribi Health District. She makes home visits, checks in on neighbors who are ill and shares health information wherever she can.

The Socapalm health zone serves approximately 6,000 people across six villages. Despite the prevalence of malaria in the area due to its proximity to the rainforest, access to health services is limited; 62% of the population lives more than five kilometers from the Socapalm health center.

To improve access to services in the Kribi Health District's nine health zones, Jhpiego developed and provided training for a network of 38 CHWs, nominated by their communities at the start of the initiative in 2011. Training included administering and interpreting rapid diagnostic tests (RDTs) for malaria, referring severe cases to the health center, and conducting outreach activities through home visits and community-wide educational talks. In 2016, the CHWs reached 12,331 community members with malaria education and services, conducted 492 community talks, visited 435 households, tested over 99% of community members who presented with a fever (via RDTs), and treated 1,171 cases of simple malaria.

In rural and remote communities, CHWs like Kube are often a lifeline for those who cannot easily access health services.



## Defeating Malaria in Chad with Engaged Private Partner

—Boniface Bonguirada and Heather Harrison

*Originally published in 2014*

When the village of Dokaidilti in southern Chad nominated Pascal Djimandoh Mbaitoubaro to be a malaria prevention worker, the 58-year-old was honored and eager to help his neighbors. As the village community health worker (CHW), Mbaitoubaro would educate neighbors about malaria and its symptoms, promote the use of insecticide-treated bed nets and link families with the local health center for malaria testing and treatment.

Malaria is the leading cause of illness and death in Chad, where an estimated 650,000 malaria cases occur annually. To strengthen services and reduce malaria-related deaths in the country, the Government of Chad partnered with ExxonMobil, Jhpiego, Ronald McDonald House Charities®, health care providers and community members such as Mbaitoubaro.

Since 2011, with support from ExxonMobil, Jhpiego has worked to improve the quality of malaria prevention and treatment at 39 health centers and hospitals in the four districts in Chad where Jhpiego works. Jhpiego's support has contributed to an increase of more than 7,000 diagnostic tests used to confirm malaria cases and an increase from 64% to 77% of confirmed malaria patients who receive effective treatment. Jhpiego also helped increase the percentage of pregnant women who received their first dose of intermittent preventive treatment of malaria from 37% to 77%.

With support from the Ronald McDonald House Charities, Jhpiego provided training to 100 CHWs, like Mbaitoubaro, to provide key malaria messages in the community and improve linkages between residents and health centers. Mbaitoubaro recognizes that this work isn't easy, but with Jhpiego's training, he has the tools to help parents make lifesaving decisions for their children.





## Community Health Workers in Chad Help Defeat Malaria

—Kodjo Morgah, Boniface Bonguirada and Oumarou Gamabe

*Originally published in 2013*

Seamstress Phanuelle Larebe and shopkeeper Juliette Ndoumhorum are working to keep their village in the Eastern Logone Region in Chad safe from malaria. They are among 21 community health workers (CHWs) who volunteered to educate parents on actions they can take to protect their families from malaria. Both women attended a Jhpiego training on how to prevent malaria infection and sickness conducted through Africare and Malaria No More, two community-based efforts supported by the ExxonMobil Foundation.

After participating in the training, CHWs Larebe and Ndoumhorum met with their women's groups and briefed township officials on ways they could support malaria prevention initiatives. The pair spoke at public meetings in 38 of the 48 villages in their township, reaching more than 17,000 people as of February 1, 2013.

"We talked about how malaria is transmitted through mosquito bites and why it is important to sleep under insecticide-treated nets to protect oneself against the mosquitoes," said Larebe, "especially pregnant women and children."

Ndoumhorum added, "We advised parents that in case of fever, especially for children, to go to the health center where they can test for malaria and give effective medication."

The CHWs' visits sensitized people to the risks of malaria and prompted them to act to protect themselves. Eager to build on their success, Larebe and Ndoumhorum look forward to attending additional trainings supported by Jhpiego so they can educate and equip other women's groups with antimalaria messages. "Then we can cover many villages," said Larebe, proudly.

