







### **Stories of success**

Support to National Malaria Programme



SuNMaP partners:





#### **About SuNMaP**

Support to National Malaria Programme (SuNMaP) is an £89 million UK aid funded project that works with the government and people of Nigeria to strengthen the national effort to control malaria. The programme began in April 2008 and ends in March 2016. Led by Malaria Consortium, SuNMaP was jointly managed by a consortium, including lead partners Health Partners International and GRID Consulting, with nine other implementing partners. SuNMaP was implemented in 10 states across Nigeria, including Anambra, Kano, Niger, Katsina, Ogun, Lagos, Jigawa, Enugu, Kaduna and Yobe.

SuNMaP worked with the Nigerian government's National Malaria Elimination Programme (NMEP) to harmonise donor efforts and funding agencies around national policies and plans for malaria control. Project targets were aligned with the National Malaria Strategic Plan and Global Malaria Action Plan. The project aimed to improve national, state and local government level capacity for the prevention and treatment of malaria.

#### www.malariaconsortium.org/sunmap

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#### **About the success stories**

Since 2008, under the leadership of Malaria Consortium, Support to National Malaria Programme (SuNMaP) was launched with the help of partners, Grid Consulting and Health Partners International. SuNMaP took on the task of improving malaria outcomes and strengthening the health system in Nigeria.

Across 10 states in Nigeria, SuNMaP worked closely with the Nigerian government's National Malaria Elimination Programme, bringing together national and international partners, to support the government to build capacity and improve service delivery for malaria.

On a national scale, the results have been impressive. With over 23,000 health workers trained, 6.6 million doses of sulphadoxine pyrimethamine for intermittent preventive treatment during pregnancy, 11 million doses of artemisinin-based combination therapies for malaria treatment, 200 binocular microscopes, 5.6 million malaria rapid diagnostic kits and 12 million mosquito nets distributed and over 2.2 million mosquito nets sold – resulting in over 48,000 lives saved in 10 states – the impact is clear.

But the effects that these interventions have on the lives of individual Nigerians across the country are not fully captured in these numbers. Their stories, collected here, reflect the many successes achieved by the programme in improving lives and reducing the heavy burden of malaria.



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# Communication and social mobilisation improve prenatal health in Anambra State

For the first time in recent memory, Louisa, a mother of two, marvelled that no member of her family had suffered from malaria in a long time. She also recently had another child – a pregnancy that was free of malaria and other complications.

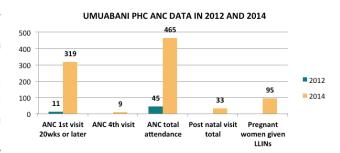
In Louisa's two previous pregnancies, she recalled suffering from malaria. Until 2009, she did not own a mosquito net and members of her family had also regularly had malaria. When she received two long lasting insecticidal nets (LLINs) during a state-wide distribution, she refused to use them. "I only took the nets because they were free and other people also collected them," she said.

During her previous pregnancies, Louisa had seen no need for antenatal care (ANC). When she felt feverish, she just went to the chemist for a mixture of drugs. She had not heard about intermittent preventive treatment in pregnancy (IPTp) with sulphadoxin pyrimethamine (SP).

Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, began operations, including malaria control interventions, in Anambra state in 2008. One of the earliest interventions was an advocacy, communication and social mobilisation campaign. Through these efforts, a number of radio jingles soon began to saturate the airwaves with information on malaria control. Eventually, even Louisa was able to sing along while she learnt how to protect herself and her family from malaria.

Knowledge of malaria and how to prevent it grew in Anambra State. Unprecedented changes in people's attitudes, behaviours, and practices were also seen as a result of the campaign. Louisa was one of many who was convinced: she fished out her two unused LLINs and got her family to start sleeping under them. Within a short period of time, she observed that malaria episodes had gone down in her home. On the rare occasion that malaria struck, it was managed promptly using artemisinin combination therapy which she obtained from the community primary health facility.

When Louisa became pregnant afterwards, she registered for ANC at the health centre and kept all her appointments. She was treated at the health centre, with guidance from facility



staff. She stayed in good health throughout her pregnancy and delivered her child at a primary healthcare centre in 2013.

For someone who initially did not believe in malaria control measures, Louisa became a strong advocate of LLIN use and other malaria prevention practices. She advises her friends to do the same. "I am a beneficiary of the SuNMaP intervention, and it has helped me a lot," she said. "I used the malaria control measures such as nets and treatments, and malaria is no longer a problem in my family. I thank SuNMaP very much and request that they should extend this help to other women."

#### Source: www.dhis2nigeria.org.ng.

The above statistics, which were taken from the Nigerian DHIS 2.0, show that there was a 2,900 percent (29 fold) increase in the number of pregnant women making a first ANC visit , while total ANC attendance rose by over 1,000 percent (>10 fold) increase. Other indicators, including the number of pregnant women making a fourth ANC visit, total postnatal visits and the number receiving LLINs, began showing growth despite their very low numbers in 2012. Similar statistics have been seen in many other centres across Anambra State.



# Community mobilisation in Awgu

On World Malaria Day 2015, Mazi, who lives in Awgu, Enugu State, pledged to support malaria control at home and in the community during a community outreach meeting for parishioners of the Catholic Cathedral of Awgu.

The event, organised by representatives of the Enugu State Malaria Elimination Programme (ESMEP) and Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, provided malaria information and improved uptake of malaria services among pregnant women through faith-based activities.

Studies have shown that although more than 90 percent of pregnant women in Igboland receive antenatal care (ANC), the uptake of intermittent preventive treatment in pregnancy (IPTp) is less than 15 percent. The Awgu Catholic Cathedral has a congregation of more than 5,000 worshippers. A large proportion of them are female, which was why ESMEP and SuNMaP decided to reach out to this community for information about health in pregnancy.

Enugu State has a predominantly Christian population, where about 50 percent are religious Catholics. The clergy are influential leaders who have the respect and dedication of the community. The outreach was one of the awareness raising activities organised for World Malaria Day 2014, during which visits were paid to mosques and churches. Behaviour change communication materials provided simple malaria prevention information. Antimalarial commodities, including long lasting insecticidal nets (LLINs), were also distributed for free.

Parishioners were encouraged to stop using monotherapy medicines such as chloroquine, which have become ineffective, and were informed that artemisinin-based combination therapy is currently the most effective treatment for uncomplicated malaria. The need for pregnant women to take IPTp was also stressed.

Frequently asked questions about malaria control strategies, antimalarial commodities and LLIN side effects were addressed. Participants were taught how to use and maintain LLINs – for example, the need to air an LLIN in the shade for 24 hours before its first use, tucking in the net properly before going to sleep, washing the net when dirty, and mending it when torn. Pregnant women who had never owned a net were provided with one.

A key highlight of the outreach included commitments from the priest in charge and the leader of the womenfolk to remind pregnant women of the need for antenatal care, as well as the involvement of male members of the congregation, such as Mazi. Through these activities, it is hoped that IPTp uptake in Awgu will increase and malaria prevention and control practices will be improved.

# Training on diagnosis equips rural health workers for better management of malaria

In Nigeria, many cases of fever are presumed to be malaria and are treated accordingly. However, this practice can lead to improper treatment, stockouts of antimalarial drugs and the development of drug resistance. In response, Enugu State decided to ensure that cases of malaria were confirmed before the commencement of treatment.

In March 2014, Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, collaborated with the Enugu State Malaria Elimination Programme to organise a two-day training on the use of malaria rapid diagnostic tests (mRDT) for 257 primary health facility workers.

The training emphasised the importance of confirming all suspected malaria cases before treatment. As health workers play a large role in promoting health and wellbeing of rural populations, it was especially important to ensure that they were aware of the importance of diagnosis and proper treatment.

Participants found the training to be timely because of the recent changes in the National Malaria Diagnosis and Treatment Policy. Many of the health workers who were in attendance had not been aware of the policy.

"Before now, I treated all cases of fever with antimalarial, but now I understand that not all fevers are caused by malaria," said Uroko Chidinma, one of the trainees and a nurse at Is Oroto health clinic. "From now on, I will always do a test before I give anybody medication for malaria."

The enthusiastic participants regarded the training highly, with many saying that it was a life-changing experience that had given them the skills they had previously lacked.

With over 41,000 mRDT kits distributed, health facilities are now beginning to confirm malaria cases before treating. In the long run, this should result in a reduction of presumptive treatment



of malaria among health workers in the state. SuNMaP continues to support capacity building for all cadres of health workers in Enugu State for improved health outcomes.



# Seasonal malaria chemoprevention keeps children in school, adults at work

In the local government areas (LGAs) of Roni and Kazaure in Jigawa State, fewer children were diagnosed with malaria in 2014, thanks to a new intervention carried out in the two LGAs.

In March 2012, the World Health Organization (WHO) issued a policy recommendation for a new intervention against *Plasmodium falciparum* malaria in children under five years old. Seasonal malaria chemoprevention (SMC), previously referred to as intermittent preventive treatment in children, is defined as the intermittent administration of full treatment courses of an anti-malarial treatment combination during the malaria season, to prevent illness and death from the disease. SMC is recommended for use in the Sahel regions of Africa where malaria is seasonal but virulent.

In light of the WHO recommendation, the Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK Government, administered SMC to Roni and Kazuere LGAs to complement other malaria control strategies being implemented. A course of the combined anti-malarial drugs Sulfadoxine-Pyrimethamine and Amodiaquine (SP+AQ) was given monthly during the high malaria transmission period of July to October as part of mass drug administration activities for children aged 3-59 months.

Jigawa is one of the nine states in the Sahel region where malaria is highest during the rainy season and immunity to it is low. Children under five are most affected, a situation worsened by poor nutrition.

During the malaria season, school absenteeism due to malaria is high. As a result, parents are not always able to go out to work and household income is reduced. Limited income that ends up being spent on malaria treatment may also have an adverse effect on the wider welfare of the family.

The drug combination was administered to an average of 66,865 children every 28 days during the period. Altogether, 267,461 doses of SP+AQ were given, resulting in a 50 percent reduction in malaria cases compared to 2013. In 2013, 10,714 malaria cases were confirmed in children under five using malaria rapid diagnostic test (mRDT) kits while in 2014, there were 4,308 confirmed cases using mRDTs. This corresponds to a positive health outcome in 2015 where 8,765 children under five were diagnosed with clinical malaria compared to 15, 895 in 2013

As a result of lower incidence of malaria in 2014, school attendance was reported to have improved, and parents spent more time at work, which meant families reduced their dependence on welfare. Related costs - on tests and treatment - also went down. So did hospital attendance.

Acknowledging the impact of the programme, deputy chief Imam of Kazaure, Mallam Sahabi Shehu Bala said: "This intervention has solved the most challenging health problem of our community. Malaria, particularly in children, is one of the biggest health conditions affecting us during the rainy season. It has resulted in a lot of money and time spent on treatment."

#### Malaria chemoprevention success impacts on the community

During the 2014 rainy season, Hajia, a mother of three living in Amaryawa, Roni LGA found that she had more time to be able to do other things as a result of the SMC intervention. She was able to attend more social functions, such as weddings and naming ceremonies, and engage in trade to make better livelihood

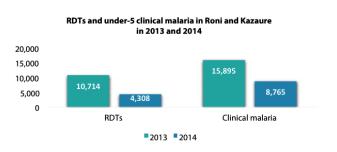
Similarly, Yusuf, a father of four children aged between one and five years old, said he had more time to spend on his farm during the 2014 rainy season. In fact, he said, all in the community felt they were able to engage in other things as their children in their community had a malaria-free rainy season.

#### Success of the intervention seen by health centre staff

The success of this intervention has also led to enthusiasm among health centre staff. According to Mallam Ibrahim Ya'U, a community health officer-in-charge at Amaryawa Basic Health Clinic, the facility observed a sharp decline in the number of children normally treated for malaria during the malaria season.

"As you can see, the facility is [almost] empty except for two people who came today. Prior to the intervention, we saw between 20 and 50 cases daily and up to 800 people every month."

He explained that because of the decline in the occurrence of malaria, which is the single most common cause of outpatient visits to health facilities in Nigeria, the facility has more time to see other patients and engage in outreach activities. These were often a struggle to do previously due to the strain that sudden increase in malaria cases put on the health centre.





### Bringing malaria medication to communities in Kaduna

In Kaduna, the state government has been working with the Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, and Roll Back Malaria partners to assure a steady supply of Sulphadoxime Pyrimethamine (SP) – a drug administered to pregnant women during antenatal care (ANC) sessions to prevent malaria – and other commodities to all health facilities in the state.

In Maraban Jos, a town with a small community of 1,552 in Igabi Local Government Area of Kaduna state, antenatal services were taking place at the primary healthcare centre. Pregnant women and facility staff were having ANC checkups and pregnancy management, as they have done for over a year. On the day, however, word went around that there would be intermittent preventive treatment in pregnancy (IPTp), causing excitement among facility staff and clients.

There was great enthusiasm because the health facility had not had IPTp drugs over the past year due to stock-outs. Most clients had been buying their IPTp medication from patent medicine vendors (PMVs). Facility workers believed that some women may have been skipping their IPTp treatments or getting sub-standard or fake SP tablets.

As the day progressed, logistics workers from Kaduna, the state capital, delivered boxes containing hospital supplies. The delivery included 280 doses of SP tablets shipped to Maraban Jos by SuNMaP, which supplies malaria commodities to Kaduna and is one of the programme's 10 focal states.

"I am happy that the drug is available for me to take today so that my baby and I don't have to suffer from malaria," said Mrs Aisha, who visited the clinic that day. "I have been coming for antenatal care, and the midwife always gave me a prescription to buy the drug at the chemist." Hajiya, the Officer-in-Charge at the primary healthcare centre in Maraban Jos, was equally excited. "We have been experiencing stock-outs of SP tablets since early 2012. This SuNMaP intervention is very timely," she said while administering the drug to pregnant women.

As the women departed the facility, they spread the news within the community, reminding other pregnant women who are not yet due for their ANC appointments to visit the clinic to get their doses.



### Kagoro community embraces testing before treatment

In Kukum-Kagoro, a community in the Kaura local government area of Kaduna state, positive health-seeking behaviour changes are now on the rise. Presumptive treatment of malaria, a once common practice, has been widely replaced by evidence-based treatment.

Douglas, a resident of Kakum-Kagoro, received the result of a free rapid diagnostic test for malaria during an awareness raising campaign. "I used to immediately start treatment for malaria once I felt weak and my body started aching. But now, with this kit, I will make sure I test first when I feel feverish," he said.

In 2012, Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, carried out a community engagement campaign for artemisinin-based combination therapies (ACTs) and malaria rapid diagnostic tests (mRDTs). The intervention focused on practices of presumptive treatment of malaria in the community.

Self-medication is partly a result of poor access to health facilities. The SuNMaP campaign, which took place in 2012, mobilised all in-charges in the primary healthcare facility in Kagoro to participate in the campaign around the use of ACTs and mRDTs.

Community members liked the fact that a diagnosis could be determined in 20 minutes, and that mRDTs were affordable and could be easily accessed through pharmacies and patent medicine vendor shops in the community.

Istifanus, a resident of Fada community said, "I was tested for free. Now, me and my family will always test ourselves before we treat, since I now know it is very easy to find out our malaria status".

This intervention has brought change to all in the community. Patent medicine vendors, who originally sold medicines without diagnosing, now strongly advise testing before treatment. "I now tell my customers to buy the kit and that I will test them, instead of just selling medicine to them first," said Christian, a patent medicine vendor in Machuk community.

Medicine vendors explain that they are able to sell many of the mRDT kits they bought. "Out of the 10 kits that I bought, I have sold seven," says the owner of a medicine store in Fada community. "I advised five customers to test before I gave those drugs, and two customers came to ask for it by themselves," he adds

While some have expressed a desire for the mRDT kit to be subsidised so that it can become more affordable, there is reason to believe that the change in attitude to testing will persist, since influential community heads have welcomed and supported the intervention and have bought mRDT kits



for family members.



## **Empowering Kano's traditional** birth attendants

Hajia is a traditional birth attendant who caters to the needs of pregnant women in a community of 21,000 people in Nassarawa Local Government Area in Jigirya in Kano State. Hajia was recently trained to be a community care giver (CCG), which expanded her scope of work to include malaria case management and control.

Now, Hajia has the skills to undertake prevention of malaria and management of fever in children and pregnant women in particular. She has also been trained to hold group discussions on malaria to empower other people about malaria.

Hajia is one of 747 CCGs across the state who received training through the Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, and the State Ministry of Health in Kano. The trainings were held in eight clusters for 22 LGAs in the state, and in two cycles annually from 2011 to 2013.

CCGs are a cadre of community service providers selected from the community and trained to work as volunteers in malaria prevention and control. The training of CCGs aimed to increase access to malaria prevention and case management at community level. The training equipped them with knowledge of the signs and symptoms of uncomplicated malaria and the danger signs of severe malaria.

CCGs were also taught prevention of malaria in pregnancy, how to deal with sick community members, and making

referrals to health facilities as necessary. Hajia says the training particularly emphasised the need to start treating malaria within 24 hours, particularly when it concerns children less than five years old.

Management of malaria and other healthcare needs are a challenge in the underserved Jirgiya community because of poverty and poor health access. The only health facility in the area is over-stretched: there are insufficient drugs and service providers. Usually, patent medicine vendors are the first line of treatment for Jirgiya community members. Those who desire orthodox healthcare visit health facilities in neighbouring communities that are about 10 to 16 kilometres away. Many pregnant women rely on traditional birth attendants for antenatal care and delivery.

Following the training, Hajia has conducted community mobilisation in Jigirya Sauna, Badawa, and Kawaje communities. Her knowledge in malaria management had benefitted neighbours, and children who presented with symptoms were quickly given first aid and referred to the hospital in Kano for urgent attention.

There are four trained CCGs in Jirgiya ward, which has seen local capacity to manage cases enhanced. "Now, we know the danger signs of severe malaria. We were also told the importance of preventing malaria in pregnant women. We are ready to enlighten our people, and help them when they get sick," says Hajia.

### Helping to boost government commitment to malaria control

In 2015, the Kano State Government spent 800 million Naira on malaria prevention, control and case management, more than a 5,000 percent increase from the 15 million Naira allocated to the sub-sector in 2011. As a significant public health problem in Kano, this demonstrates the success of state level efforts by stakeholders to ensure the government's commitment to more resources for the prevention and control of the malaria.

The 2015 allocation follows 600 million in 2014, out of which 270 million Naira was expended. In 2011, the 15 million Naira budgeted was not expended. This increase in budget was a culmination of the steady growth of allocations to malaria and has been attributed to and justified by the ability of the State Malaria Eradication Programme to mobilise resources and its ability to plan, implement, and monitor control activities.

The Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, contributed to this through its support to the malaria eradication programme. Before SuNMaP in 2008, the programme had little capacity to plan, implement and monitor activities effectively. In addition, there was no forum for partners to work together in support of the malaria control programme.

To address this, SuNMaP supported the programme by establishing a technical working group of experts to take the lead in planning, implementation and monitoring of malaria control activities. Partners participated in the development of an annual operational plan, which has been reviewed every year since 2009. This plan has guided the planning, implementation and monitoring of malaria control activities in the state and has been successfully used in advocacy activities as a resource mobilisation tool. Through this plan, there has been a gradual increase in malaria activity implementation, resulting in a boost of government funding for malaria control programmes.



### Harmonisation of malaria control efforts in Katsina

As in other parts of Nigeria, malaria is a major public health issue in Katsina State, where it accounts for 11 percent of maternal deaths and 75 percent of out-patient visits in health facilities. In 2008, there were 600,281 malaria cases and 4,103 deaths. However, there has been a reduction in malaria incidence, due to the influx of development partners working to support national malaria control. In 2010, there were 365,189 cases and 2,662 deaths.

As the number of malaria control stakeholders increased, this underlined the need to harmonise efforts to create synergies and prevent wastage of resources. On World Malaria Day 2013, a global day that recognises the world's malaria control efforts, the Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, organised the first Roll Back Malaria (RBM) partners meeting in Katsina state. This meeting was attended by the Permanent Secretary of the State Ministry of Health.

One of the key outcomes of the meeting was an agreement by partners to collaborate and harmonise activities for malaria control and a harmonised workplan following World Malaria Day 2013 was developed as a result of this. All RBM partners shared their individual workplans with the State Malaria Elimination Programme/State Ministry of Health to identify areas where harmonisation opportunities. A harmonised plan was developed for capacity building on National Health Management Information System tools and service delivery training roll out in the state. The State Malaria Elimination Programme Annual Operational Plan for 2015 achieved almost 60 per cent performance and in 2014 achieved an overall performance of 47.5 per cent.

Although it is early days, there is already some change seen in attitudes among stakeholders in the health sector in Katsina, and full participation is already being seen in the harmonisation process. As malaria control partners continue to apply the harmonised plans, it is anticipated that more positive outcomes will be seen in the near future.

## Helping to mobilise communities on net use

In 2010, mother of nine Zainabu received two long lasting insecticidal nets (LLINs) for her family during a net distribution in Katsina State. Seeing how her family has benefitted greatly from using the nets, Zainabu said she felt it was her duty to inform her community of the benefits of LLINS. Zainabu's efforts have helped to increase demand for the nets in Gidan Gamji, a town in Ingawa local government area, during an LLIN replacement campaign in 2015.

The net distribution campaigns in 2010 and 2015 were supported by the Support to National Malaria Programme (SuNMaP), with funding from UK aid from the UK government. UK aid has supported malaria control efforts in Katsina State since SuNMaP began working in the State in 2008. SuNMaP provided technical support in 2010, and in 2015 distributed 1 million nets.

Zainabu cared for her LLINs by washing and drying it in a stream near her community. She said that she tends to the nets as she would to a newborn baby – washing and mending them when they tear. She says that some of her children used to have malaria almost every month, and would not be able to go to school. As she stayed at home to take care of them, this meant that she could not go to the market where she sold goods for a living.

However, this all changed after she received the two LLINs at the Gidan Gamji Health Centre in 2010. Straight away, she noticed a drop in malaria episodes in her household. As a result, she became passionate about using the nets. Together with her husband, she decided that her four younger children, who were the most prone to malaria, should be their priority. Although in the beginning they did not like sleeping under the net, Zainabu persisted. Sometimes they would cry, but eventually they would fall asleep, and have better protection from malaria.

"The four children who previously had malaria monthly, did not have the symptoms for three months [since sleeping under the net]," she said. "They didn't have to go to hospital to get treated for malaria." After receiving replacement nets in 2015, she said, "I had been looking forward to another opportunity to get more nets for my family. Today, I thank God that I have received additional nets, which will surely protect more members of my household from malaria".

Zainabu has become a passionate advocate for LLINs, encouraging women to collect nets for their families. She shared her experiences with LLINs and how her family had benefitted. She also became what is known as a 'malaria referral agent', linking members of the community to nearby treatment services. During the distribution of nets, she was present when they were being handed out to community members and she continued to teach proper net use and care.

### Annual operational planning moving malaria focus forward

In 2014, the Katsina State Malaria Eradication Programme (SMEP) received 60 million Nigerian naira from the state government, an unprecedented move that was met with excitement by many, including Dr Abduljalil Abdullahi, the state's Director of Public Health. "This is the first time that the malaria budget has been separated from that of other communicable diseases," Dr Abduljalil said. "This is because malaria has a comprehensive plan that guides its implementation annually."

The process began in 2010, when the Support to National Malaria Programme (SuNMaP), supported by funding from UK aid from the UK government, provided technical assistance to the Katsina State Ministry of Health (SMoH) and Katsina SMEP to develop the state's first costed annual operational plan (AOP) for malaria control. This resulted in the 2011 AOP, which was followed by a new AOP every year.

Each year, the AOP underwent a mid-year review, which assessed the level of implementation against state targets across several thematic areas. The reviews revealed a 44.7 percent performance against targets in 2011; 33 percent in 2012; 56.8 percent in 2013; and 47.5 percent in 2014.

Prior to the adoption of annual operational planning, Katsina SMEP did not have adequate capacity to pursue malaria control activities due to a lack of human resources and sufficient funding. There was heavy dependence on organisations from abroad to plan and fund malaria control in the state.

The Katsina State AOPs for malaria control from 2011 to 2013 formed the basis of a rapid scale-up of interventions to achieve the state's targets for malaria control. In 2014, the focus of the AOP was attaining universal coverage while implementing a mixed model of prevention strategies.

Now, the AOP is a central focus of the Roll Back Malaria initiative in Katsina, as well as used as an advocacy tool to mobilise resources. The resilience of the process over the last four years led to the creation of a specialised budget line for malaria interventions in the state.

The process is also sustainable. Dr Abdullahi noted, "Katsina SMoH and its collaborators have received much capacity building that will enable us to develop subsequent AOPs by ourselves using available resources. We thank SuNMaP for their efforts in this area. In their absence, we are fully equipped to develop AOPs and participate in other planning processes"



# School-based distribution of LLINs paves the way for universal coverage

Results from a pilot distribution of long-lasting insecticidal nets (LLIN) in Somolu Local Government Area (LGA) of Lagos State indicate the use of school-based mechanisms for the continuous distribution of LLINs are a key component for achieving universal coverage. The school net distribution strategy had a 99 percent success rate, while the cumulative success of previous strategies had only reached 50 percent.

Funded by UK aid from the UK government, the Support to National Malaria Programme (SuNMaP) provided financial and logistical assistance to plan and implement the school distributions. The Lagos state ministries of health and education, in addition to a number of their agencies, were involved in the project. SuNMaP also contributed 20,000 nets.

In 2011, 4.2 million LLINs were distributed throughout Lagos state. In 2013, the National Health Survey showed that only 42.9 percent of households owned at least one LLIN. Findings indicated that the policy of only distributing nets to vulnerable groups, such as pregnant women and children under five, would not support a later shift to universal coverage. Under the previous policy, distribution was mostly carried out through routine antenatal and immunisation clinics, as well as during the Maternal Newborn Child Health Week – a biannual event that aims to deliver a range of basic but highly effective interventions to reduce child mortality and improve maternal and child health.

Under the new policy, distribution channels aim to reach everyone, regardless of age or group. The school net distribution strategy, which had previously only been implemented on a smaller scale, was seen to have potential for increasing household coverage and use of nets.

The net distribution in all public primary and secondary schools in the Somolu LGA on 10-13 March 2015 targeted first and fourth year pupils and students (primary classes one and four, and JSS 1 and SS1, Upper Basic Education within Nigeria's education curriculum). This approach was in line with the national guidelines for the distribution of LLINs to schools.

Altogether, 16,076 LLINs were sent to schools and 15,855 distributed. Only one percent of students and pupils did not receive their nets.

A survey conducted after the distribution found that within two weeks of students receiving nets, 67 percent had hung them up, while 66 percent had used their nets the night before the survey. The survey also concluded that there were slightly more mosquito nets than the number of households, suggesting that all nets given to students were taken home, while some households still had nets that they may have bought themselves or received from a previous distribution campaign.

The school-based LLIN distribution project has proved to be effective in supporting the universal coverage of LLINs and promoting their use. This strategy could be scaled up to cover more LGAs, particularly in states that have high school



caption

attendance rates.

# Billboards bring malaria messages to commuters in Lagos

Abidemi, a photographer based in Lagos, commuted to work every day, spending long hours stuck in traffic. When the Lagos State Government introduced the Bus Rapid Transit (BRT) programme, Abidemi not only found that her time spent travelling had reduced, but also that she was able to learn about malaria while on the bus.

In collaboration with the Support to the National Malaria Programme (SuNMaP) funded by UK aid from the UK government, the Lagos State Ministry of Health (LSMoH) introduced Moving Bill Boards on Malaria (MBBM), a public awareness campaign which sought to increase knowledge and awareness of malaria prevention by branding buses across ten local government areas in Lagos state. As part of the project, LSMoH branded five BRT buses with messages on the control, prevention, and management of malaria. The messages in the adverts included the use of long lasting insecticidal nets (LLINs) to prevent mosquito bites, home management of malaria, and prevention of malaria in pregnancy. It is estimated that 750,000 passengers see the messages while riding the buses every day.

The Lagos BRT programme replaced the public transportation system using *molue* buses. BRT is a public-private programme where high capacity buses run on dedicated lanes. The malaria campaign saw an opportunity to use the BRT buses to create public awareness.

"Usually you find adverts on toothpaste and fruit juice on these buses, but this one on malaria is different. On all outside panels as well as inside the buses, different messages on prevention of malaria among adults, children and pregnant women are displayed," said Abidemi.

"I have learnt from the adverts. For instance, my mum was given an LLIN at the hospital while I bought one for my own use. Initially, we didn't know how to wash and preserve the nets until we saw these adverts on one of the buses."

Mrs Onabuye, a laboratory technician in Lagos, also described the BRT campaign as a useful medium for raising awareness. "The messages have been a constant reminder to me about important things to do to prevent malaria, particularly in pregnancy. This includes early registration for antenatal care and the use of a mosquito net every night," she said.

Mrs Onabuye explained that the messages reminded her to visit an antenatal care clinic where she received a free LLIN.

The MBBM campaign ran from November 2010 to April 2011 (for six months). At the end of the campaign, a study showed a 44 percent increase in commuter knowledge on the use of LLINs between November 2010 (when knowledge was 52.6 percent), and April 2011 (when it reached 96.7 percent).





# Better retail visibility means more nets purchased

Fred, a pharmacist in Alimoso local government area in Lagos state, expressed delight that his sales of long lasting insecticidal nets (LLINs) had been increasing. Whereas he used to stock a batch of ten LLINs once a month, he now renews his supplies from three to four times a month, with a minimum batch size of 25 nets.

"[Before], people would not ask me questions about LLINs, and I would not have had the opportunity to market and sell. Now, the situation is different," he said.

In Lagos State, the Support to National Malaria Programme (SuNMaP) has been working to strengthen the market for LLINs. In Alimoso, for example, many communities have come to depend on free LLINs from distribution campaigns. However, this caused some concern regarding the long term sustainability of LLINs as well as raised questions about the challenges of providing free LLINs. The hope was that after free distribution campaigns for free LLINs, the public would be more inclined to purchase LLINs from local vendors, creating demand and supply.

The low demand for LLINs, however, resulted in retailers refraining from promoting LLINs. The low visibility in turn caused low demand. As a result of this cycle, universal coverage remained challenging in Lagos state.

A survey co-funded by SuNMaP revealed that to increase the availability of LLINs, there was a need to increase the visibility of LLINs to potential customers and for retailers to market them over other vector control measures.

In response, SuNMaP developed an intervention in partnership with Teta Pharmaceuticals in 2012 that trained and worked with the Association of Community Pharmacists of Nigeria to strengthen LLIN retail distribution. The specific objectives were to expand SuNMaP's commercial sector partners' retail network; increase retailers' knowledge of LLINs such that they can persuade potential customers of the value of LLINs, and improve product visibility by providing promotional material at point-of-sale. Following a series of workshops, Teta Pharmaceuticals provided retailers with materials such as instore display units, flyers, and pull-up banners.

Following the intervention, it was reported that there was an increase in capacity to deliver LLINs to buyers through retail channels. Sales of LLINs began in 37 pharmacy outlets in Akowonjo, with more than 90,000 LLINs sold between June 2012 and November 2012.





## Driving malaria control efforts

The Niger State Malaria Elimination Programme (SMEP) is a robust programme with a team that leads malaria control efforts in the state. Niger SMEP's recent successes have resulted to a commitment from the state government to match malaria partner's' funding so that Niger SMEP can do more.

Niger SMEP today is a big step away from seven years ago when the programme lacked the capacity to adequately deliver malaria prevention and control in the state. Niger SMEP only had a desk officer and did not have the capacity to deal with the high morbidity and mortality caused by malaria among pregnant women and children under five.

In 2009, the Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, entered Niger State to strengthen the capacity of Niger SMEP staff, provide technical assistance and support state malaria control efforts.

SuNMaP provided hands-on training, mentoring, and coaching to equip staff with the skills needed for effective policy development and the coordination and implementation of malaria interventions across the state. Partnership building skills and harmonisation of partner efforts were also improved, resulting in an increased leadership role for Niger SMEP. Through training, the potential for programme management, accountability and sustainability were also enhanced.

As the number of staff increased and their capacity strengthened, Niger SMEP's leadership in implementing state and partner malaria control programmes improved. This included the distribution of commodities across the state through a well-coordinated demand-driven, push-pull process that helped to reduce the occurrence of commodity stockouts and wastage, which was previously highly prevalent. Staff capacity for data collection, collation, analysis, interpretation, and reporting also increased and improved substantially.

The Niger SMEP's effective implementation of malaria control and case management efforts has led to significant results. In particular, long lasting insecticidal net ownership increased from 11.4 percent in 2008 to 50.9 percent in 2013 while use of nets increased from 1 percent to 18.4 percent in 2008 and 2013 respectively. The number of pregnant women who took 2+ doses of Sulphadoxin Pyrimethamine – a drug administered to pregnant women during antenatal care (ANC) sessions to prevent malaria – also increased, from 8.7 percent to 34.5 percent in 2008 and 2013 respectively.<sup>1</sup>

<sup>1</sup> National Demographic and Health Survey (NDHS) 2013

# Increasing health awareness in Karabonde community

Alhaji Muhammadu Karabonde is the District Head of Karabonde in Borgu local government area (LGA) of Niger State. At 75 years old, he regards himself to be physically fit, not only owing to an active lifestyle as a farmer but also because he is free from illnesses such as malaria.

"For the past three years I have not been sick; I have not taken any drugs for any ailment," says Alhaji Muhammadu. "I eat well and for exercise, I walk to my farm instead of driving my car or riding a motorcycle. No one in my family has complained of any sickness from malaria because we sleep under our nets every night."

According to Alhaji Muhammadu, he used to experience several episodes of malaria yearly. During the high season, many community members also suffered from malaria. However, since 2010, the community has seen a decrease in malaria episodes, owing to the Support to National Malaria Programme (SuNMaP) interventions in Karabonde.

SuNMaP, funded by UK aid from the UK government, partnered with Niger State Ministry of Health in 2010 to deliver long lasting insecticidal nests (LLINs) to health facilities for routine distribution to pregnant women during their first antenatal

care visit. The project continued to support the provision of LLINs to pregnant women attending antenatal care clinics. As a result, health awareness increased in the community. Many in Karabonde, such as Alhaji Muhammadu, started using LLINs and benefiting from its use.

In addition, pregnant women increasingly used antenatal care services in the primary health centre. Routine health facility summary data for the Borgu local government area in 2011 to 2013 showed a 40 percent increase in primary health care attendance, while ANC attendance increased by 6 percent in the same period. Uptake of intermittent preventive therapy by pregnant women was also high, with 34.5 percent of pregnant women taking 2+ doses of Sulphadoxine Pyrimethamine for intermittent preventive therapy. Since SuNMaP interventions, attendance records at the health centre showed that outpatient utilisation, normally due to malaria, had reduced.

### Malaria rapid diagnostic test use in Kpagungu primary healthcare centre

Mrs Amina is a community health extension worker at the Kpakungu Primary Health Centre in Minna, Niger State. The workload is heavy at the health facility, but according to Amina, the use of malaria rapid diagnostic tests (mRDTs) to confirm malaria has helped ease the workload.

Kpakungu primary healthcare centre (PHC) was established to help alleviate the heavy patient flow at Minna General Hospital. Kpakungu PHC is a fully equipped centre with a functional laboratory and qualified staff to carry out tests required for primary-level care. One of the most important tests carried out in the facility is an mRDT to confirm whether patients have malaria. According to Amina, 80 percent of visits to Kpakungu PHC are malaria-related, and the majority of them are children under five. On average, the facility sees 200-250 patients daily.

The use of mRDTs to diagnose malaria was introduced in Niger State in 2012. The Support to National Malaria Programme (SuNMaP), funded by UK aid from the UK government, supplied mRDTs to 375 health facilities and has since supplied mRDTs to a further 555 health facilities.

To generate demand for mRDTs, radio jingles in English, Hausa, Nupe, and Gbagyi languages were produced and aired on Radio Niger, Minna. The jingles encouraged people with malaria-like symptoms to be tested before receiving treatment. As a result, more people sought to have an mRDT in either a public and private health facility.

Before her transfer to Kpakungu, Amina says she worked in a facility that relied on microscopy to confirm malaria. "This was usually slow, time consuming, and was an extra expense on the part of the patients," she explains.

According to Amina, with mRDT, diagnosis and drug prescription is quicker. Currently, mRDT is free, and health workers believe it is reliable and that they have gained confidence and respect from patients. Rational use of antimalarials following an mRDT is better justified, and any wastage on time or resources, which often accompanies presumptive treatment of malaria, is avoided.

"I have worked in several health facilities before, but with the introduction of this device [mRDTs] for testing the presence of malaria in this health facility, it helps us to deliver the appropriate treatment to our patients," Amina says.

"It is my hope that after the exit of SuNMaP and the other partners presently supporting us with mRDT kits, the Niger State Government will be able to sustain it," she adds.



### Renewing confidence in primary health centres

Since 2009, Mrs Abidemi visited the Iberekodo primary health centre in Elega, Abeokuta North Local Government Area (LGA) of Ogun State. She gave birth to her three children in the facility. But in recent years, she noted a positive change in the facility and its staff.

"I visited the clinic regularly, particularly [when I was] pregnant and while I was nursing my children," she said. "I am encouraged to visit this clinic based on the caregivers' good gestures and positive attitudes towards me... I noticed a change [with the relationships with] patients, and they provide their services at any time. They educate us on how to prevent malaria, and they are very important to us in the community."

A 2011 national baseline survey in Nigeria showed that the usage rate of outpatient services was less than two percent, indicating that malaria was not being addressed properly. Many did not go to the health facilities because they either resorted to traditional healers, felt discouraged about the poor behaviour of health workers to clients or were concerned about the quality of care in health facilities.

Iberekodo primary health centre was one of the facilities that the Support to National Malaria Control Programme (SuNMaP), funded by UK aid from the UK government, selected to provide with technical assistance in the form of integrated supportive supervision (ISS) for on-the-job capacity building (OJCB) to strengthen malaria service delivery and programme management in Ogun State.

ISS is a harmonised system of supervision, using a common tool and a reporting format based on indicators collected from several initiatives and other health related programmes. A supervisory team ensures that managers are in the field regularly to check the performance of subordinates and help them to improve on their competencies and outputs. A major objective of the intervention was to boost the level of community trust in primary health centres as a key component of malaria control.

SuNMaP has supported the roll out of ISS/OJCB trainings in half of the LGAs in the state. In all, 264 people were trained across the State Ministry of Health and ten LGAs (ten LGA primary health centre departments, 19 secondary hospitals and 231 primary health centres). This supervisory visit was coordinated by the Department of Planning Research and Statistics (DPRS), State Ministry of Health, and brings together all health intervention programmes, using an integrated approach to supervising health workers and providing on-the-job training.

One of the ISS training beneficiaries was Dr Bakare, Medical Officer of Health for the local government council, who oversees all primary health centres in the LGA. "The ISS training has really improved my relationship with lower staff, and it has helped harmonise interaction between us," he explained. "It has given room for suggestions and ideas, as this has really helped improve service delivery."

He also said that it had made planning for health easier, and that there was now greater public awareness that health facilities in the LGA were accessible. There was also less absenteeism from work due to malaria.

Mrs Ogundoyin is the malaria focal person in Abeokuta North LGA, and she said that ISS is making a difference in service delivery. "Before the training, we used to do supervision, but it was not supportive; it was more of a manager-subordinate relationship. But the way we have been taught to speak to people is different now... Supportive supervision has also created harmony between staff, clients and supervisors."



# Changing attitudes through behaviour change communication

Elizabeth, who lives in Igbeba in Ogun State, visited a primary health centre for the first time when pregnant with her third child.

Elizabeth, who went to traditional birth attendants her whole life, said she repeatedly heard and saw messages encouraging her to use health services available in the nearby primary health centre. She also witnessed several social mobilisation activities through the use of Programme implementing Partners (PIP) who engaged communities in dialogues, rallied and raised awareness through house-to-house visits and radio messages. Pregnant with her third child, she decided to register at the primary health centre in Igbeba. Here, she attended health talks which taught her about services that she had previously been unware of, as well as about behaviours that would help her stay healthy. For example, the use and importance of nets, symptoms of malaria and the safety of using IPT drugs and the intervals at which it should be taken. She recalled receiving intermittent preventive treatment and taking Sulphadoxine Pyrimethamine tablets at the health centre during two of her antenatal care visits. She also received a long-lasting insecticide treated net.

Elizabeth said that during her third pregnancy she did not get malaria, unlike her two previous pregnancies. She had been using the mosquito net and observed that there were fewer malaria episodes in her home. She delivered a healthy boy in the facility.

Many other women have been positively influenced by the public messages and radio jingles about malaria. These were produced and printed or aired with support from the Support to the National Malaria Programme (SuNMaP), funded by UK aid from the UK government. SuNMaP also supplied health

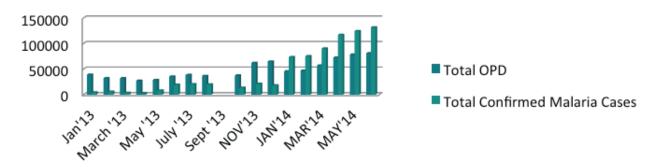
facilities throughout Ogun State with long-lasting insecticide treated nets, intermittent preventive therapy and other antimalarial commodities.

This initiative was part of SuNMaP's work to address negative perceptions toward primary health centres – particularly that they are expensive, that health workers are hostile and that the services they provide are not effective. It also encouraged pregnant women, such as Elizabeth, who used traditional birth attendants, to visit primary health centres for their antenatal care and child delivery.

SuNMaP's intervention also mobilised community-based, faith-based, and civil society organisations to play key roles in initiating and facilitating community dialogues and mobilisation activities on malaria. The behaviour change communication activities include community education through radio jingles, inter-personal communication, printed educational materials, and social mobilisation activities.

Following the intervention, health-seeking behaviour improved, and more people began using public health facilities. Community members, particularly pregnant women, became aware of the benefits of accessing antenatal care services, where some commodities are free. The proportion of women receiving intermittent preventive therapy and long lasting insecticidal nets from public health facilities increased from 25.4 percent in 2011 to 89.8 percent in 2014.

#### State Outpatient Department trends for 2013-2014



Trend of outpatient attendance between 2013-2014