NATIONAL MALARIA ELIMINATION PROGRAMME

Federal Ministry of Health, Abuja, Nigeria

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2015 Annual Report for Malaria Programme

FOREWARD

The National Malaria Elimination Programme (NMEP) and its partners in the year 2015 continued to make progress in the war against malaria with the goal of reducing malaria burden to pre-elimination levels and bring

malaria related mortality to zero. NMEP planned and implemented its activities in 2015 with collaboration and technical support from its partners.

The 2015 Annual Report is a comprehensive report of all the activities implemented throughout 2015 by the NMEP. This report provides information on major activities implemented by the programme, success stories, lessons learnt, key challenges and recommendations.

This Annual Report would bring to fore the important work carried out by NMEP to move the country towards elimination of malaria in the year under review and would also contribute to effective knowledge management within and outside NMEP.

I wish to appreciate NMEP staff for their active participation, contributions, and commitment in the preparation of this 2015 Annual Report and SuNMaP for the technical assistant provided.

It is my hope and desire that this document would serve as a reference to all stakeholders working on malaria.

Dr. Nnenna Ezeigwe
National Coordinator
National Malaria Elimination Programme (NMEP)
Federal Ministry of Health

Acronym	Meaning
ACCESS	Achieving Catalytic Expansion of Seasonal Malaria Chemoprophylaxis in Sahel
ACSM	Advocacy Communication and Social Mobilization
ACT	Artemisinin-based Combination Therapy
AA	Arthemeter-Amodiaquine
AL	Artemether-Lumefantrine
AMP	Alliance for Malaria Prevention
ANC	Ante Natal Care
AOP	Annual Operational Plans
ARFH	Association for Reproductive and Family Health
ARM	Annual Review Meeting
AWPs	Annual Work Plans
BCC	Behaviour Change Communication
CCM	Country Coordination Mechanism (GFATM)
CCPN	Centre for Communication Program in Nigeria
CHAI	Clinton Health Access Initiative
CHEW	Community Health Extension Worker
CMA	Commodity Management Audit
CME	Continued Medical Education
CMS	Central Medical Store
CORPs	Community Oriented Resource Persons
DHIS	District Health Information System
DHPRS	Director Health Planning Research and Statistics
DPRS	Department of Planning, Research and Statistics
DQA	Data Quality Assurance
DTET	Drug Therapeutic Efficacy Test
ECOWAS	Economic Community of West African States
EPI	Expanded Programme on Immunization
EQA	External Quality Assurance
EU	European Union
FCT	Federal Capital Territory
FLBs	First Line Buyers
FMOH	Federal Ministry of Health
FMS	Federal Medical Store
GF	Global Fund
GF - NFM	Global Fund – New Funding Model
H/H	Household
HC_3	Health Communication Capacity Collaborative
HCW	Health Care Worker
HMB	Hospitals Management Board
HMIS	Health Management Information System
HSDF	Health Strategy & Delivery Foundation
iCCM	Integrated Community Case Management

Acronym	Meaning
IEC	Information, Education, Communication
IPT_3	Intermittent Preventive Treatment in Pregnancy (third dose)
IPTp	Intermittent Preventive Treatment in Pregnancy
IRS	Indoor Residual Spraying
IRM	Insecticide Resistance Management
ITN	Insecticide Treated Net
IVM	Integrated Vector Management
JCHEW	Junior Community Health Extension Workers
JHU-CCP	Johns Hopkins University – Centre for Communication Programs
LF	Lymphatic Filariasis
LGA	Local Government Area
LLIN	Long-lasting Insecticidal Net
LQAS	Lot Quality Assurance Sampling
LSHC	Leadership in Strategic Health Communication
LSM	Larval Source Management
M & E	Monitoring and Evaluation
MAPS	Malaria Action Programme for States
MNCH	Maternal and Neonatal Child Health
MC	Malaria Consortium
MCLS	Malaria Commodity Logistics System
MDAs	Ministries Departments and Agencies
MDGs	Millennium Development Goals
MiP	Malaria in Pregnancy
MIS	Malaria Indicator Survey
MOH	Ministry of Health
MPH	Masters in Public Health
MPSS	Malaria Parasite Sentinel Surveillance
MTN	Mobile Telecommunication Network
NAFDAC	National Agency for Food and Drug Administration and Control
NAPMED	Nigeria Association of Medicine Dealers
NBS	National Bureau of Statistics
NIFAA	Nigerian Inter-Faith Action Association
NIMR	Nigerian Institute of Medical Research
NMA	Nigerian Medical Association
NMCP	National Malaria Control Programme
NMEP	National Malaria Elimination Programme
NMSP	National Malaria Strategic Plan
NTDs	Neglected Tropical Diseases
OJT	On-the-Job training
NPHCDA	National Primary Health Care Development Agency
NPI	National Programme on Immunization
PCN	Pharmaceutical Society of Nigeria
PCWs	Positive Control Wells

Acronym	Meaning
PHC	Primary Health Care
PMI	President's Malaria Initiative (US)
PPP	Public Private Partnership
PQM	Promoting Quality of Medicine Programme
PR	Principal Recipient
PSM	Procurement and Supply chain Management
QA	Quality Assurance
QC	Quality Control
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Test
RIA	Rapid Impact Assessment
RRP	Recommended Retail Price
SBCC	Social and Behaviour Change Communication
SCMS	State Central Medical Store
SFH	Society for Family Health
SMC	Seasonal Malaria Chemoprophylaxis
SMEP	State Malaria Elimination Programme
SMOH	State Ministry of Health
SOGON	Society for Obstetrics & Gynaecology of Nigeria
SOP	Standard Operating Procedures
SPAQ	Sulfadoxine/Pyrimethamine and Amodiaquine
SP	Sulfadoxine/Pyrimethamine
SR	Sub-Recipient (Global Fund)
SSFFC	Substandard Spurious Falsified Falsely Label Counterfeit Medicines
SuNMaP	Support for National Malaria Programme
T_3	Treat – Test – Tract
TWG	Technical Working Group
UNICEF	United National Children's Fund
USAID	United States Agency for International Development
USP	United States Pharmacopeia
WAHO	West African Health Organisation
WARN	West African Roll Back Malaria Network
WHO	World Health Organization
WMD	World Malaria Day
3PLs	Third Party Logistic Agents

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INTRODUCTION

Malaria remains a major public health problem in many countries of the world including Nigeria. Despite the progress in reducing malaria cases and deaths, it is estimated that 214 million cases of malaria occurred worldwide in 2015, leading to 438 000 malaria deaths[1]. The global burden of mortality is dominated by countries in sub-Saharan Africa, with the Democratic Republic of the Congo and Nigeria together accounting for more than 35% of the global total of estimated malaria deaths[1]. Malaria mortality in under 5 children have decreased significantly and therefore, Malaria is no longer the leading cause of death among children in Sub-Saharan Africa. In 2015, malaria was the fourth highest cause of death, accounting for 10% of child deaths in sub-Saharan Africa[1]. Reductions in malaria deaths have contributed substantially to progress towards achieving the MDG 4 target of reducing the under-5 mortality rate by two thirds between 1990 and 2015. Nevertheless, malaria remains a major killer of children, particularly in sub-Saharan Africa, taking the life of a child every 2 minutes[1].

In Nigeria, malaria transmission remains high and contributes to morbidity and mortality particularly among children under five years and pregnant women. Prior to 2010, over 30% of the population lived in hyper-holoendemic zones of Nigeria while 67% lived in mesoendemic malaria transmission zones. However, the 2010 malaria risk mapping indicates a change in the malaria transmission pattern with about 85% of Nigerians now living in meso-endemic transmission areas while 15% live in hyper-holoendemic areas, with limited areas of hypo-endemicity (Snow et al. 2013). Despite these remarkable decline in the infection risks, the country still have risks of infection that exceed 20% in 2010. The dominant species of malaria parasites in Nigeria is *Plasmodium falciparum* (≈95%) with other species *occurring as* mixed infections (MIS 2010). Recent figure shows progressive decline in P. falciparum prevalence between 2000 and 2010 (Snow et al. 2013)[2].

The NMEP, formally the National Malaria Control Programme (NMCP), was originally set up to function as a disease control unit of the directorate of public health in the Federal Ministry of Health (FMoH). Over the years, it has become a government body responsible for setting Nigeria's malaria programme agenda and development of policies, strategies, guidelines, plans and coordination of efforts for the countries malaria interventions. Coordination principles and initiatives within NMEP and among RBM partnership will enhance the corporate image of the programme. The image of NMEP is further enhanced through Corporate Communication. Corporate Communication refers to professional communication within an organization (internal communication) as well as the communication with relevant other organization (external communication). Its component include the branding of malaria control, use of print media (brochures, Newsletters) electronic media (internet, programmes supported on TV & Radio), exhibitions, and dissemination of results and achievements, production of standardized formatting of frameworks, documents and annual reports. As part of the NMEP's corporate communication responsibility, performance of activities, success stories as well as challenges and recommendations are documented on annual basis. To date, the programme has developed twelve (12) annual reports, spanning 2002-2014. The reports highlight key achievements in the six thematic areas of the NMEP.

Although, 2015 was marred with the country's politics, this has not impacted on the achievement recorded in malaria control activities. The 2015 Annual report succinctly captures achievements recorded in all areas of malaria interventions that form the basis of a major scale up as articulated in the Federal Ministry of Health's National Malaria Strategic Plan (NMSP) 2014 – 2020 and aims to achieve pre-elimination status and reduction of malaria related deaths to near zero by 2020 in Nigeria.

In the year under review, NMEP successfully carried out LLINs replacement campaigns in 9 states that saw the distribution of about 25million nets in Nigeria, developed insecticide resistance management Plan, National guidelines on implementation of IVM approaches, tools and SOPs for NTD-Malaria co-implementation. There was

[1] 2015 World Malaria report (December 2015) available on http://www.who.int/malaria/publications/world-malaria-report-2015/report/en/ accessed on 26th/01/2016

[2] Where prevalence is >75% malaria is ***holo-endemic***; where prevalence is between 51 and 75% malaria is ***hyper-endemic***, where prevalence is between 11 and 50% malaria is ***meso-endemic***, and where prevalence is < 10% malaria is ***hypo-endemic***. Source http://www.mara.org.za/mapsinfo.htm

the Launch and National Dissemination of revised National Guideline and Strategies for the prevention and control of malaria in pregnancy (MIP). Others are On-the-Job training (OJT) on Malaria Case Management, development of training materials for laboratory diagnosis and management of severe malaria. New interventions such as the ICCM AND SMC have taken a centre stage in year 2015. Furthermore, National advocacy tools were reviewed and National radio magazine programme was simplified for easy adaptation and designed to meet state-specific needs. The programme was represented at international conferences/meetings in Benin republic and Gambia. The 13th Annual Review Meeting for State Programme Managers was organized in the last quarter of 2015. The theme was *"Bringing to Light the Perspective of Domestic Financing in Malaria Elimination".* This is carefully selected as a drive to minimize donor dependency for activity implementation. As always annually, the WMD was commemorated with massive sensitization, campaign rallies and the launch of NMSP (2014-2020) whose vision is to have free malaria Nigeria. The programme conducted three major surveys (MIS, Malaria Intervention Assessment Survey, RIA) in the country as well as many capacity building and system strengthening across branches that supported and improved performance for quality and effective malaria intervention.

Some of the success stories recorded in 2015 were the development of a long awaited Insecticide Resistance Management Plan in adherence to WHO recommendation and Harmonization of national guidelines for the implementation of Integrated Vector Management for malaria vector control in Nigeria. Also, the West African Regional Meeting at Cotonou in Benin republic adopted the Nigeria's Business Plan and the successful implementation of three major surveys in the country among others. Generally, insufficient funding appears to be a major challenge across all branches of the NMEP and this has deter the implementation of some pre-planned activities for the year under review. Others include delay in the procurement of commodities for the setting up of six additional vector surveillance sentinel and resistance monitoring sites, inadequate human resource capacity to manage data at sub national levels. The Civil unrest in some parts of the country has impeded commencement, monitoring and tracking progress of implementation as well as poor consumption data for quantification and supply planning. Key recommendations were the dire need of the country to increase domestic financing and harness opportunities from development partners. Provision and prompt disbursement of funds for implementation of Programme activities will go a long way in increasing the scope and coverage of activity implementation in the subsequent years.

The goal of Integrated Vector Management (IVM) is the prevention of malaria and to ensure that at least 80% of targeted population utilizes appropriate preventive measures by 2020. Prevention is one of the key components of malaria control and it provides high impact vector control interventions towards universal access. This is implemented through sustained and improved distribution of Long Lasting Insecticide Nets (LLINs) using a modified mixed-model approach that is focused on both cyclical mass campaigns and continuous distribution targeting all households, rapid scale up of Indoor Residual Spray (IRS) and Larval Source Management (LSM) targeting at least 80% coverage of selected households/Local Government Areas (LGAs), establishment of vector surveillance sentinel sites and capacity building on IVM.

In the period under review, the focus was to prioritize activities in order to address the IVM strategic plan towards malaria prevention in line with the malaria elimination efforts of the country. During this period, staff of the IVM branch of National Malaria Elimination Programme (NMEP), Partners and State Malaria Elimination Programme (SMEP) officers contributed immensely towards the achievement of all the successes recorded.

Table 1: LLINs distributed in 2015 through replacement campaigns

States	Total LLIN Deliveries	No of LLINs Distributed	Reported cases of LLINs loss	Redemption rate for Net Cards (%)	Total LLIN balance after last day of distribution
Abia	1,897,230	1,864,830	0	98.3	32,400
Kaduna	4,176,150	4,050,738	2,807	97.0	122,605
Kano	6,462,750	6,335,262	0	99.0	127,488
Katsina	3,897,400	3,836,839	0	98.4	60,561
Kebbi	2,202,950	2,186,973	0	99.3	15,977
Plateau	2,127,950	2,065,653	0	97.1	62,297
Cross River	2,075,900	1,727,493	2,204	83.2	346,203
Ebonyi	1,547,850	1,475,742	0	95.3	122,108
Zamfara	2,411,400	2,373,621	0	98.4	30,929
Total	26,799,580	25,917,151	5,011		920,568

1.1 Long Lasting Insecticidal Nets (LLINs) Distribution

The distribution of LLINs was carried out through both mass campaigns and routine/continuous strategies.

1.1.1 LLINs Replacement Campaigns

LLINs Replacement Campaigns were conducted and completed in 9 states, namely; Plateau, Katsina, Abia, Kano, Kaduna, Kebbi, Cross Rivers, Ebonyi and Zamfara where about 26 million nets were distributed between January and September 2015 (Table 1).

Furthermore, a post LLIN spot check on Behavioural Change Communication (BCC) was carried out. This is aimed at assessing the LLINs ownership and utilization of nets distributed in Ogun and Sokoto in 2013/2014. The outcome revealed high net hang up and use in most communities. Also, Nigerian Inter-Faith Action Association (NIFAA) conducted an end of campaign monitoring in 6 World Bank supported states to ascertain the level of awareness created through the faith-based community on utilization of LLINs, care and repair.

Table 2: Mapping of States that are due for replacement campaigns in 2016-2017

State	No of LGAs	Population Growth Rate	2015 Projected Population	2016 Projected Population	2017 Projected Population	LLINs Required for Universal Coverage	Year of First Mass Campaign	Year due for Replacement Campaign	Partner Support	Gaps
Adamawa*	21	3	4,097,674	5,285,999	6,818,939	2,936,666	2010	2014*	None	2,936,666
FCT	6	9	3,128,383	6,037,779	11,652,914	3,354,322	2011	2015	None	3,354,322
Bayelsa	8	3	2,203,152	2,864,098	3,723,327	1,591,165	2011		None	1,591,165
Benue	23	3	5,505,157	7,156,704	9,303,715	3,975,947	2011		PMI	0
Borno	27	3	5,608,643	7,515,582	10,070,879	4,175,323	2011		None	4,175,323
Enugu	17	3	4,250,035	5,525,046	7,182,559	3,069,470	2011		None	3,069,470
Kwara	16	3	3,093,734	4,021,854	5,228,410	2,234,363	2011		GF incentive Funding	2,234,363
Lagos	20	3	11,967,747	15,797,426	20,852,602	8,776,348	2011		GF incentive Funding	8,776,348
Taraba	16	3	2,949,614	3,805,002	4,908,453	2,113,890	2011		None	2,113,890
Yobe	17	4	3,164,090	4,271,522	5,766,554	2,373,068	2011		None	2,373,068
Edo	18	3	4,090,392	5,194,798	6,597,393	2,885,999	2012	2016	GF incentive Funding	2,885,999
Imo	27	3	5,224,574	6,896,438	9,103,298	3,831,354	2012		GF incentive Funding	3,831,354
Ondo	18	3	4,489,756	5,836,683	7,587,688	3,242,602	2012		GF incentive Funding	3,242,602
Delta	25	3	5,441,651	7,182,979	9,481,533	5,267,518	2013	2017	None	5,267,518
Kogi	21	3	4,277,682	5,560,987	7,229,283	3,089,437	2013		PMI	0
Osun	30	3	4,545,609	6,000,204	7,920,269	4,016,268	2013		GF incentive Funding	4,016,268
Oyo	33	3	7,554,751	10,123,366	13,565,311	5,624,092	2013		PMI	0
Total	343	3.2	81,592,644	109,076,466	146,993,127	62,557,832				

Summary

1 17 states yet to conduct replacement campaigns which are due between 2014-2017

2 3 states - Oyo, Benue and Kogi will be funded by PMI in 2016

* Adamawa State was due for replacement campaign in 2014 but lacked funding.

States whose replacement campaign dates have passed. Require urgent funding and implementation

States whose replacement campaign dates are due in 2016, so require funding and implementation

States whose replacement campaign is due for 2017

1.1.2 Routine and Continuous LLINs Distribution

LLIN distribution was carried out in states through the health facilities i.e. Ante Natal Care (ANC) targeting pregnant women and Expanded Programme on Immunisation/National Programme on immunization (EPI/NPI) which targets children under five years. As part of this channel of distribution, the routine LLIN distribution was integrated with the annual maternal newborn child health (MNCH) weeks in a number of states in the country.

1.2 Mapping for LLIN replacement campaigns in Nigeria for 2016-2017

Mapping for LLIN replacement campaigns in Nigeria for 2016-2017 was developed. The objective of the mapping was to identify the states that are due for replacement campaign in 2016-2017. The findings are shown in table 2.

1.3 National Report on Entomological Surveillance

WHO/GMP global plan for insecticides resistance management on malaria vector recommends that countries should conduct regular vector surveillance and insecticide resistance monitoring. In response to this recommendation, the NMEP in collaboration with President's Malaria Initiative (PMI) established six (6) sentinel sites for regular vector surveillance and insecticide resistance monitoring in the country where data were generated.

In order to harmonize these data that will culminate into a national report, the NMEP in collaboration with WHO convened a 3-day workshop for national entomological report writing which took place at Nigeria Institute of Medical Research (NIMR), Yaba Lagos State from 5th to 8th October 2015. The objectives of the workshop were:

- To harmonize existing Entomological Surveillance data across the country
- To review the activities and operations at the sentinel sites across the country
- To develop a National report on Entomological Surveillance in Nigeria and
- To articulate recommendations for better entomological surveillance operations in Nigeria.

Fig. 1: Participants at the National report writing on Malaria Vector Surveillance

Participants at the workshop were drawn from the NMEP, Principal Investigators from the six sentinel sites located at universities and research institutes, National Institute of Medical Research and as well as PMI/Abt (Fig.1). The outcome of the workshop was the development of the first draft of the national report and recommendation for capacity building on entomology.

1.4 Insecticide Resistance Management (IRM) Plan

The most important point for managing Insecticide Resistance is for countries to plan and implement an insecticide resistance management plan. This is contained in the global plan for Insecticides Resistance Management in malaria vector that highlights five strategic directions in the short, medium and long term,

including recommendation for countries and major players on malaria vector control to develop an effective IRM Plan. Nigeria is in the process of having an efficient Insecticides Resistance Management Plan in line with WHO recommendations. Therefore, NMEP collaborated with WHO in organizing a 3-day workshop to develop an IRM Plan for the country. The workshop took place at the Nigeria Institute of Medical Research, Yaba, Lagos from 8th to 10th October 2015 (Fig. 2).

The objectives of the workshop were:

- To Review information relevant for the development of a National Insecticide Resistance Management Plan
- To develop IRM Plan for Nigeria
- To come up with a reference document that will guide the monitoring and management of Malaria vector resistance to insecticides
- To highlight next steps

Fig. 2: Participants at the Development of Insecticide Resistance management Plan

Participants at the workshop were drawn from the NMEP, Academia, Research Institutes and other stakeholders on malaria vector control in Nigeria. The outcome of the workshop was the development of the first draft of the IRM plan.

1.5 National Guidelines on IVM

The IVM branch in collaboration with its partners convened a meeting where the existing guidelines on insecticide treated nets (ITNs), IRS and LSM were harmonized into a single national guidelines. The 3-day meeting achieved the harmonization and finalization of national guidelines on the implementation of Integrated Vector management (IVM) approaches.

1.6 Development of a Decision System for Integrated Vector Management (IVM) in Nigeria

This is a tool for selecting appropriate vector control options for States and Implementing Partners. The Specific objectives for the development of a decision system for IVM are;

- To identify challenges/gaps related to selection of appropriate malaria prevention strategies and methods according to local needs
- To develop an approach to address the challenges/gaps in consultation with main stakeholders within the context of global strategies, National IVM strategy, epidemiological considerations and local capacity
- To work out information requirements and systems to obtain the necessary data for decision-making at state and LGA levels
- To formulate a prototype decision-tool for specific scenarios to serve as basis for robust and continuous state and LGA level decision-making process to strengthen malaria prevention and
- To pilot a final report with details of the approach, prototype decision tool and recommendations on its roll-out.

The decision tool will highlight underlying principles and practical considerations for the selection process. The tool will serve as the basis for developing and customising future tools for use in various settings and according to changing requirements of the malaria control and elimination process.

1.7 Indoor Residual Spraying (IRS) and Larval Source Management (LSM)

Indoor Residual Spraying (IRS) and Larval Source Management (LSM) are two key interventions in the current National Malaria Strategic Plans (NMSP) 2014-2020. However, implementation continues to be threatened by weak commitment from government as well as lack of support from Partners. In order to stimulate interests and ensure scale up of these interventions, the NMEP developed a concept note on IRS scale up through Public Private Partnership (PPP) strategy. Furthermore, the LSM Expert Group of the IVM Sub-committee has been reconstituted and strengthened to reposition the implementation of the intervention.

1.8 National Officers Training on Entomological Surveillance reporting

Among the interventions prescribed for the achievement of the current malaria elimination goal include the establishment of malaria entomological surveillance sentinel sites of which data would be generated routinely to inform insecticide susceptibility and resistance status. The NMEP in collaboration with the Nigerian Institute of Medical Research, Lagos, carried out a 5-day training of vector control Officers at the IVM Branch on Entomological Surveillance reporting and Malaria Vector Bionomics in readiness for monitoring and management of insecticide resistance in Nigeria. The training was conducted in September 2015 and eight (8) Officers participated (Figs 3&4). The training had the following objectives:

- To build the capacity of National Vector control Officers on entomological reporting
- To update National Vector Control Officers on malaria vector bionomics
- To train National vector control officers on the monitoring of operations at the entomological surveillance sentinel sites.

Fig. 3: National Officer's Training Participants

Fig. 4: A session during the National Officer's Training

The training was a thoughtful venture and has increased the knowledge of the officers and equipped them as they prepare to provide oversight function, monitoring and evaluation of operations at both the PMI supported and the newly establish sentinel sites supported by the Global Fund.

1.9 Continuous Medical Education on Vector Control for Healthcare Providers

The current malaria elimination goal has 5 objectives that explain massive scale up interventions to ensure reduction of the disease burden in the country. It addresses the core issues related to malaria prevention, intentions of Government regarding engagement of partners and private sector participation at all levels. Also, it is a continuous capacity building of healthcare providers on integrated community malaria prevention approaches in the face of the changing malaria vector behaviours amongst other things. In view of the need to continuously equip the health care providers and ensure the implementation of effective Integrated Vector Management (IVM) approached at community level, the IVM branch of the NMEP in collaboration with the GF carried out a continuous capacity building programme for healthcare providers at state and LGA levels in the 24 high malaria burden states.

The training held in four different venues in the Southern and Northern zones namely; Anambra, Lagos, Kaduna and Kano States. The target audiences were the state Malaria Programme Managers, Vector Control Officers, 4 lecturers, 4 students of college of health Sciences and 4 MPH students in University/Teaching hospitals from each of the 24 high malaria burden states. The objectives of the training were:

- To update the health care providers on the current malaria vector bionomics
- To equip the health care providers on effective malaria prevention approaches which could be adopted at the community level and
- To educate the health care providers on the roles of the community on malaria prevention and control.

1.10 Training of State Malaria Elimination Officers, LGA Malaria Focal Persons South West States on IVM Strategies

The IVM branch in collaboration with the WHO provided technical support during the WHO supported training of the South West Malaria Control Officers at the state and LGA levels on Integrated Vector Management (IVM) strategies. The training took place in Ibadan, Oyo state and had State Malaria Programme and Vector Control Officers as well as the LGA malaria focal persons in attendance. The objective of the training was to build the capacity of the Officers on effective implementation of IVM interventions for maximum impact. A total of 36 persons were trained.

Table 3: Number of Health Care Workers trained on Integrated Vector Management (IVM) strategies.

Awka zone	No. Trained	Lagos Zone	No. Trained	Kaduna Zone	No. Trained	Kano zone	No. Trained
Imo,	14	Lagos	1	Niger	14	Kano	14
Cross River,	14	Ogun	14	Kogi	14	Kebbi	14
Rivers,	13	Oyo	14	Benue	14	Zamfara	14
Akwa-Ibom,	13	Ondo	14	Bauchi	14	Katsina	14
Edo	13	Ekiti	14	Kwara	14	Sokoto	14
Anambra	14	Osun	14	Kaduna	14	Jigawa	14

Total	93		83		96		96

1.11 Training of State Malaria Elimination Officers, LGA Malaria Focal Persons and Principal Investigators in South West States on Malaria Vector Surveillance

The WHO is supporting the establishment of malaria vector sentinel sites in the southwest states of Oyo and Ogun State. In view of the above, WHO supported a capacity building workshop on Malaria Surveillance and IRM for State and LGA malaria Programme officers in the South Western States. The IVM branch provided technical support during the 3-day training that took place in December 2015. The outcome of the training was 36 trained persons on malaria vector surveillance.

1.12 Training of Trainers on LLIN Routine/Continuous Distribution

The National Malaria Elimination Programme (NMEP) and Partners have developed comprehensive guidelines on Continuous Distribution of LLINs that provide information on a step-by-step process on how to implement any channel/approach. These channels include ANC, EPI, school-based distribution, community distribution, retail outlets and MNCH week. The NMEP in collaboration with Global Fund carried out training on the Implementation of routine/Continuous Distribution Channels/approaches using the guidelines for State Malaria Elimination Programmes and Secondary Recipients (SRs) for six states, namely; Akwa-Ibom, Anambra, Bauchi, Jigawa, Kano and Rivers, from 15th to 19th September 2015 in Calabar, Cross River State. 25 persons benefitted from the training.

This is to enable participants gain lessons from the experience of Cross River state that had already commenced the implementation of LLINs continuous distribution using some of the channels as prescribed in the national guidelines.

Fig. 5: Training on LLINs continuous distribution

The key outcomes of the training were:

- Capacity of participants built on effective coordination and implementation of routine/continuous LLIN distribution activities
- Capacity of the participants built on planning for scaling up and sustaining LLIN distribution in Nigeria
- Finalize state specific continuous distribution strategies
- Consensus on operational approaches in the national drive toward ensuring maintenance of high LLIN coverage to sustain the gains from the universal campaign and
- Capacity of states and SRs built on LLIN quantification for routine/continuous distribution using NetCalc tool.

1.13 Malaria-Neglected Tropical Diseases (NTDs) Co-implementation

Both malaria and Lymphatic Filariasis (LF) are transmitted by *Anopheles gambiae.* This has provided opportunity for co-implementation of activities for the two programmes. Consequently, the Federal Ministry of Health developed a guideline in 2013 and piloted in 2014. One of the recommendations of the pilot trial was the need to expand the co-implementation of malaria-LF to Malaria-Neglected Tropical Diseases (NTDs) in order to accommodate other components of NTDs. In response to this, a harmonization meeting was held between NMEP and NTD Divisions of the Department of Public Health and partners. The meeting identified the following activities that could be co-implemented;

- Routine Morbidity Management. (Diagnosis, treatment and referral at the Health Facilities and Community levels)
- Routine/Periodic Preventive interventions. (MDAs, Demand creation, LSM and IRS, Mass Campaign, Community and Schools distribution of LLIN)
- Health Systems Issues (Referral, Evaluation, PSM and Surveillance).

Consequently, a 2-day stakeholders' meeting was held in November 2015 to review, harmonize and develop the tools and Standard Operating Procedures (SOPs) for the co-implementation.

The outcome of the meeting was the development of the following documents;

- SOPs for Malaria-NTDs implementation
- Rollout plan for Malaria-NTDs implementation
- Implementation Tool for Malaria-NTDs implementation

CASE MANAGEMENT

The Case management and drug Policy branch of the NMEP is saddled with the responsibility of providing universal access to parasitological confirmation of malaria, ensuring the effective treatment of uncomplicated and severe malaria with appropriate anti-malarial medicines, as well as building the capacity of health care providers at all levels on malaria-related interventions. In addition to the above, this technical branch is responsible for developing and updating the National Malaria policy and guidelines on treatment and diagnosis, ensuring the efficacy of anti-malarial medicines and collaborates with the National Agency for Food and Drug Administration Control (NAFDAC) on strengthening pharmacovigilance systems for antimalarial medications.

2.1 Launch and National Dissemination of revised National Guideline and Strategies for the prevention and control of malaria in pregnancy (MIP).

The finalization, launch and National dissemination meeting of the revised guideline for MIP was held in June 2015. The activity was supported by PMI/Malaria Action Programme for States (MAPS) and had key stakeholders from the Federal Ministry of Health, Ministry of defence and related MDAs. Others in attendance include the representatives of development partners & the roll back malaria partnership, representatives of professional associations such as Nigerian Medical Association (NMA), Society for Obstetrics & Gynaecology of Nigeria (SOGON), members of the print and electronic media etc. Copies of the guidelines have been printed and dissemination meetings held in some states in the year under review. It is anticipated that dissemination meetings will be held in the remaining states of the Federation in 2016.

2.2 National Malaria in Pregnancy Working Group (MIP WG) meetings

The Quarterly meetings of the National MiP WG were held in January, March, June and October, 2015. The specific objective of the meeting was to discuss various issues pertaining to the scale up of strategy for the prevention and control of MIP. The deliberations were thorough with clear action plans generated. A key output of this process was the development of a National Intermittent Preventive Treatment in pregnancy (IPTp) Call to Action plan for Nigeria with recommended actions, responsible stakeholders and timelines assigned with the aim of improving IPTp uptake in the country. Also, The National MiP WG was able to encourage the establishment of State MiP WGs in 11 states with the support of PMI/MAPS and WHO. Additional State MiP WGs will be inaugurated in 2016 and will serve as an advisory body to the State Ministries of Health on the implementation of MIP activities.

2.3 Stakeholders meeting to review and finalise the guidelines on diagnosis and treatment of malaria

This stakeholders meeting was held at Vine Hotel on 15th – 19th June, 2015. The objectives of the meeting were;

- To update the National Guidelines on Diagnosis and Treatment of malaria in line with the 4th Edition of WHO Treatment Guidelines
- To review Case Management Training Modules for Severe Malaria, Uncomplicated Malaria for PHC as well as Module for Community Management of Malaria in line with the updated Guidelines and
- To finalize the Guidelines for Community Management of Malaria.

The meeting was facilitated by academias from the various universities drawn from each zone of the country. Others in attendance were Implementing Partners including the WHO national program officers. At the end

of the meeting the guideline was reviewed, updated and finalised. The guideline can be downloaded from the NMEP website and also currently being printed by the procurement unit.

2.4 National Training of Core Facilitators on the management of severe and uncomplicated malaria

As part of its efforts to improve the management of malaria in the country, the NMEP with support from the Global Fund conducted a 5-day National training of Core facilitators' workshop on the management of severe and uncomplicated malaria from the 6th – 10th of July, 2015. Participants were selected from tertiary health facilities across the country and consisted of senior health care workers mainly medical consultants (Fig. 6). The workshop provided the opportunity to update participants on the current recommendations for management and prevention of uncomplicated and severe malaria as stated in the current National policy and guidelines for diagnosis and treatment of malaria. It also served as an avenue to build the facilitation skills of participants in preparation for the zonal and state-level step down trainings. Leading Professors and scholars with vast experience in Malaria Case management facilitated the training. Notable among them are Prof. Gbenga Mokuolu, Prof. Akin Sowunmi, Prof. Wellington Oyibo, Prof. William Ogala, Dr. Stephen Oguche and Dr. Godwin Ntadom. Representatives of NMEP, Roll Back Malaria partners as well as Global sub-recipients also participated in this activity, which culminated in the training of over 40 National facilitators on Malaria Case management. At the end of the training, the National Coordinator, Dr. Nnenna Ezeigwe presented certificates of attendance and Continuous Medical Education (CME) points were awarded to all the Participants.

Fig. 6: NC NMEP, Head Case Management, Facilitators and Participants at the National Training of Core Facilitators on Malaria Case Management for Senior Healthcare Providers

2.5 Zonal Training of Trainers (ToT) workshop on the management of severe and uncomplicated malaria for senior health care providers

The Case Management Branch of the NMEP with support from the GF conducted 6 zonal training of trainer's workshops on Malaria case management from the 21st – 24th of July, 2015. This aligns with the programme's desire to improve the diagnosis and case management of malaria in Nigeria in line with the recently updated

national guidelines on treatment and diagnosis. The trainings were conducted concurrently at Royal Tropicana Hotel Kano; Hillmat Hotel Ado-Ekiti; Bright Value Resort Enugu State; Zecool Hotel Kaduna; Royal Guest House, College of Technology, Yaba, Lagos and Links Hotel, Owerri. Participants trained comprised of senior health care providers most of whom were medical doctors, senior nurses, pharmacists and laboratory scientists drawn from the public sector in the various states (Fig. 7 & 8). Over 150 participants were trained, thereby forming a pool of trainers who will subsequently facilitate state level workshops or other step down trainings in the future.

The participants were updated on the current recommendations for management and prevention of uncomplicated and severe malaria as stated in the current National policy and guidelines for diagnosis and treatment of malaria, participated in practical demonstrations on the use of RDTs, built their facilitation skills in preparation for state-level step down trainings etc.

Fig. 7: A cross section of participants during one of the zonal training of trainer's workshops held in Enugu state

2.6 National Severe Malaria Stakeholders meeting

The NMEP with support from Clinton Health Access Initiative (CHAI) and Malaria Consortium (MC) organized a 2-day National stakeholders' meeting on severe malaria from the 24th – 25th of November 2015 at Newton Park Hotel, Abuja. The meeting brought together relevant stakeholders and was declared open by the Permanent Secretary Federal Ministry of Health (FMOH), ably represented by the Director of Public Health; Dr Bridget Okoeguale. Other stakeholders present include the Director of Nursing Services, representatives of the: Department of Health Planning Research and Statistics (DHPRS), Department of Hospital Services, Family Health all in the Federal Ministry of Health; representatives of NAFDAC, NPHCDA, NMA, Chief Medical Directors of various Teaching Hospitals from across the country or their representatives, Hospital Management Board representatives from the states, representatives of RBM partners, representatives from Guilin Pharmaceuticals, members of the National Severe Malaria Working Group as well as the National

Severe Malaria Advisory Group. The overall objective was to deliberate on issues pertinent to severe malaria implementation in Nigeria. Several facilitated group discussions were held with a communique presented at the end of the meeting.

Fig. 8: Participants paying attention to the facilitator at the Kaduna venue of the Zonal TOT and a session showing group work by participants

2.7 On-the-Job training (OJT) on Malaria Case Management

As part of its mandate of ensuring best practices and consistent with the National Policy recommendations on case management of malaria, the NMEP through its Case Management Branch conducted an "On-the-Job training" of health care providers in all the 24 Global Fund supported states (Fig. 9). The objectives were to provide current information and mentorship on Malaria Case Management to the health care providers in secondary and primary health care facilities, identify implementation challenges using structured checklist and make recommendations on how to strengthen service delivery and provide malaria interventions more effectively.

The 2015 OJT saw the achievement of conducting OJT in all the 24 GF supported states with 8 states visited in the first 3 quarters. 4 states were repeated in the fourth quarter to cover more LGAs, a total of 108 LGAs were covered, 1,610 health facilities were visited which are mainly Primary Health Centres and Secondary health facilities and importantly, an estimated 4,550 Health workers of various cadres were interacted and updated on malaria case management. Each quarterly OJT is followed with the data collation, analysis and technical report writing. See figure 11 showing the sample of an assessment done during OJT.

Fig. 9: Health workers listening attentively during an OJT session in a Facility

2.8 Case Management subcommittee meetings

Case Management subcommittee meetings were held monthly where implementing partners were invited to deliberate on how to move malaria case management forward in the country, receive updates on activities conducted by NMEP and its partners, discuss planned activities and address challenges/bottlenecks to implementation. The subcommittee also has Working Groups that include the Diagnosis Working Group, Malaria in Pregnancy and Severe Malaria Working Group which regularly update the subcommittee on the progress made in these areas and challenges hampering implementation.

Fig. 10: A health worker being observed and demonstration of techniques for conducting RDT during an OJT in a facility

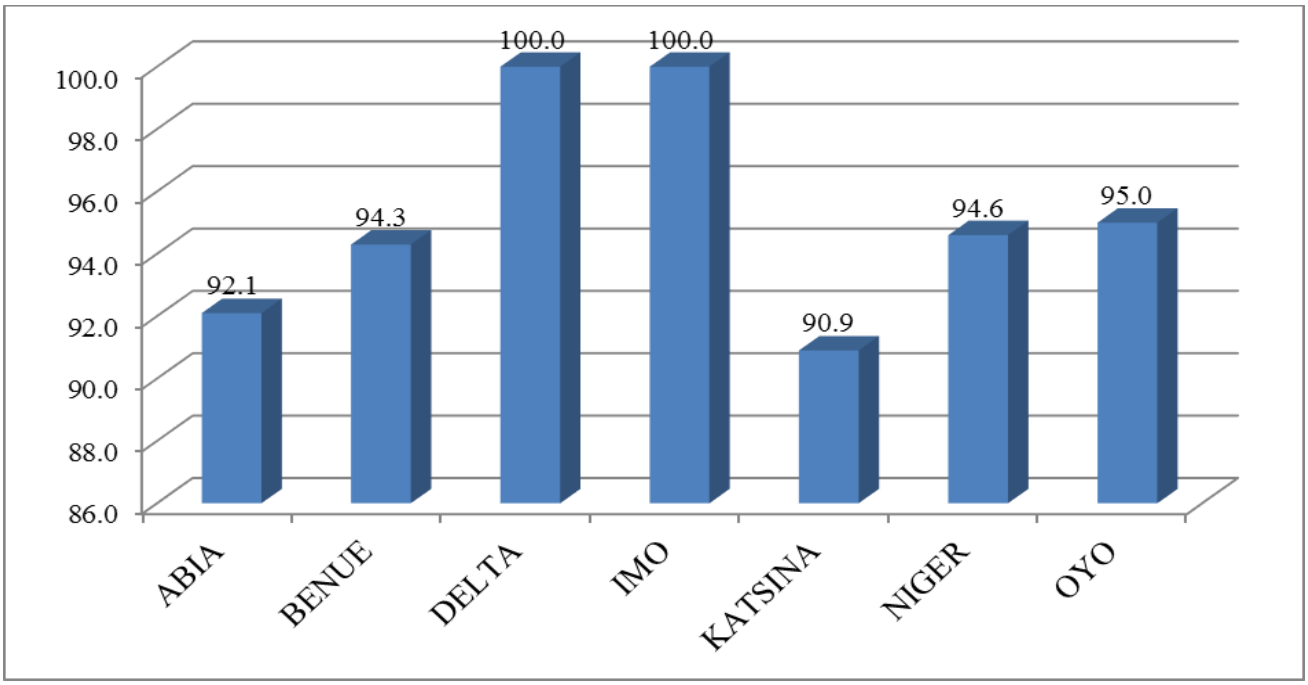


Fig. 11: Proportion of HCWs with correct knowledge of IPTp across 7 States

2.9 Meeting to update training manual on malaria diagnosis

The meeting to update training manual on malaria diagnosis was held concurrently with the stakeholders meeting at Vine Hotel on 15th – 19th June, 2015. The following were the objectives of the meeting;

- To finalize training manuals for malaria microscopy,
- To update training documents for Quality Assurance (QA),
- To finalize training manual for mRDTs and
- To quantify consumables for microscopy.

The meeting had in attendance Partners in the diagnosis working group and other stakeholders on malaria diagnosis such as medical Laboratory Council of Nigeria. Key resolution reached was that the various training manual being used by partners should be harmonised for standardization of training session on mRDT. NMEP should inform Partners on the importance of keying into the harmonised training manuals when finalised.

2.10 Quarterly stakeholders meeting on malaria Diagnosis Quality Assurance.

Quarterly Stakeholders meeting brings together experts, partners as well as the National Programme together to deliberate on issues relating to diagnosis especially, microscopy and the use of rapid diagnostic tests in the country.

The 1st quarter stakeholders' meeting on EQA was held at Global village suites, Koroduma in Nassarawa state on 22nd – 23rd June 2015. The meeting aims were;

- To review the recently developed National EQA Operational Guidelines,
- To identify the way forward in the Implementation of the EQA Operational Guidelines and the framework for the Country,
- To plan diagnostic training activities for the 24 states under GF for 2015 and 2016.

- To review the training materials for malaria diagnosis and
- To develop a minimum package for establishing microscopy site.

The outcome of the meeting was the finalization of the External Quality Assurance (EQA) operational guidelines.

The 2nd quarter stakeholders' meeting was held at the Fresh land Hotels in Mararaba, Nassarawa state from 13th – 14th October, 2015. The purposes were;

- To plan for the roll out of positive control wells (PCWs) for end user Quality control of RDTs with the recent WHO/FIND discovery of the use of recombinant proteins panels
- To discuss the modalities for establishing the National and State QA teams in line with the National QA frame work
- Finalize the Action plan on mRDT EQA Operational Plan and
- Build Consensus on the harmonized mRDT training Manual.

An important achievement of the meeting was the harmonisation of the training manual on mRDT which the partners were urged to utilize accordingly.

2.11 Zonal training of tutors of schools of health technologies

One of the major challenges to diagnosis is the ability of the laboratory scientists to appropriately identify malaria parasites to aid malaria treatment. This has led to the need of training more Medical Laboratory scientist and technicians. The Case management unit of the NMEP and its partners such as USDoD and SuNMAP made a move to address this need. Recently, the CM branch with support from GF commenced Zonal training of Tutors of schools of health technology on Malaria microscopy held in Lagos from 15th – 27th November, 2015 for the southwest zone. At the end of the training, the 30 participants achieve the following;

- 100% malaria parasite detection
- Carry out speciation of all parasites and calculate parasite density as well as
- Trained on Malaria Parasite Sentinel Surveillance.

All participants were classified using WHO Standard Classification method.

2.12 Training workshop for heads of laboratory services of SMOH, HMB, SSH and heads of laboratories from the referral hospital in each LGA on update in malaria diagnosis.

The Training workshop for heads of Laboratory services of SMOH, HMB, SSH and heads of Laboratories from referral hospitals from each LGA took place in the year under review (Fig. 13). The aim of the training was to update Participants' knowledge on Malaria diagnosis for states in the Northeast (Bauchi, Adamawa, Taraba, Yobe, Borno and Gombe states). The training was held in Gombe state with support from WHO. Participants were further trained on the significance of the T3 concept (Test –Treat -Tract) in malaria elimination.

2.13 Integrated Community Case Management (iCCM) capacity building session and quarterly supportive supervision for Community Oriented Resource Persons (CORPs)

Capacity building sessions were held on iCCM in Adamawa and Kebbi states with the collaboration of Association for Reproductive and Family Health (AFRH). ARFH is implementing a component of the EU-UNICEF grant on integrated Community Case Management. The training session commenced with an initial State level TOT on iCCM in both states. Followed by LGA level trainings for Community Oriented Resource

Persons (CORPs) in all the LGAs in the two states. The CORPs were given working Kits and drugs to commence implementation immediately after the trainings. The CORPs were followed with quarterly supportive supervision by both National and state technical officers in Kebbi and Adamawa states to observe and put the CORPs through areas they are having challenges.

Fig. 12: Participants at the Zonal training of tutors of schools of health technologies

2.14 Workshop on development of Integrated Community Case Management (iCCM) BCC materials

The Case Management branch in collaboration with the ACSM branch and the iCCM taskforce organized a 4-day workshop to develop BCC materials for iCCM in Nigeria which was held at Freshland Hotel, Mararaba, Nasarawa State between 9th and 12th June, 2015.The objectives of the workshop were;

- To develop an iCCM communication and demand creation strategy document
- To review existing BCC/IEC materials and tools and
- To build consensus on communication and demand generation platform.

At the end of the workshop, draft BCC materials were developed which were subsequently field-tested and currently being finalised.

2.15 Support of the National Task Force Meeting on iCCM

The case management branch also supported a one-day national task force meeting held at Vines hotel on the 30th September 2015. The task force meeting is a quarterly meeting of all the stakeholders working on iCCM in Nigeria.

2.16 Operational research

The report writing for RDT implementation research in the informal private sector held in Abuja at the Vines Hotel, Durumi. The report and manuscript were finalized and subsequently published in a reputable international journal (Malaria Journal).

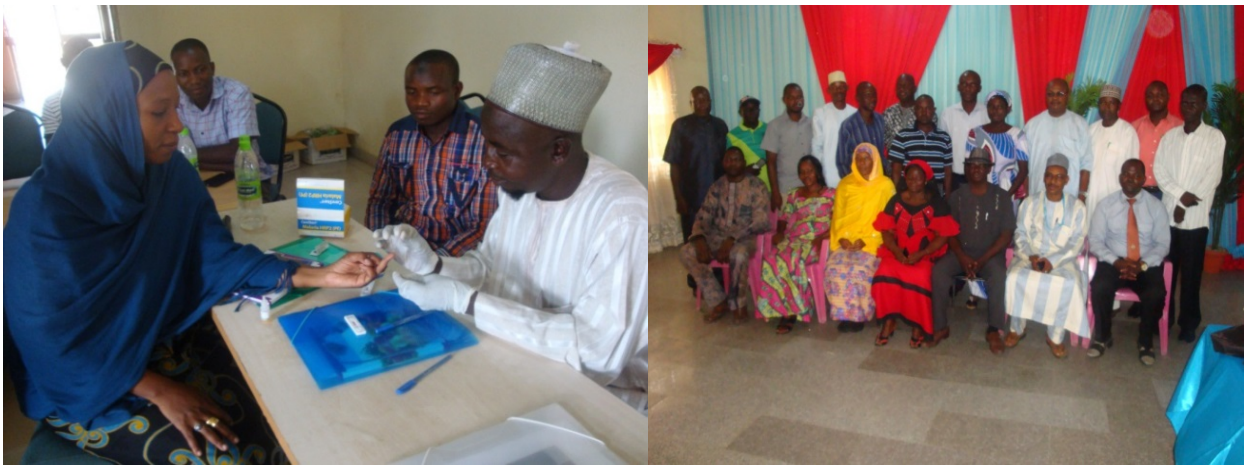


Figure 13: participants and activities carried out at the Training workshop for heads of laboratory services of SMOH, HMB, SSH and heads of laboratories from the referral hospital in each LGA on update in malaria diagnosis

2.17 Drug Therapeutic Efficacy Testing (DTET)

The drug therapeutic efficacy testing was carried out for the recommended ACT (Artemeter-Lumefantrine and Artesunste-Amodiaquine). The DTET for 2015 also included Dihydro-Artemisinin piperaquine. This was conducted in the 8 sentinel sites located in each zone of the country. All the zones have been able recruit desired number of clients for the test and were all followed up accordingly. For the first time a 42 day protocol was used, molecular analysis was also carried out. The activities have been concluded and the report writing is about to commence.

2.18 Quarterly on the job mentoring conducted to Malaria Parasite Sentinel Surveillance sites In the 36 states & the FCT.

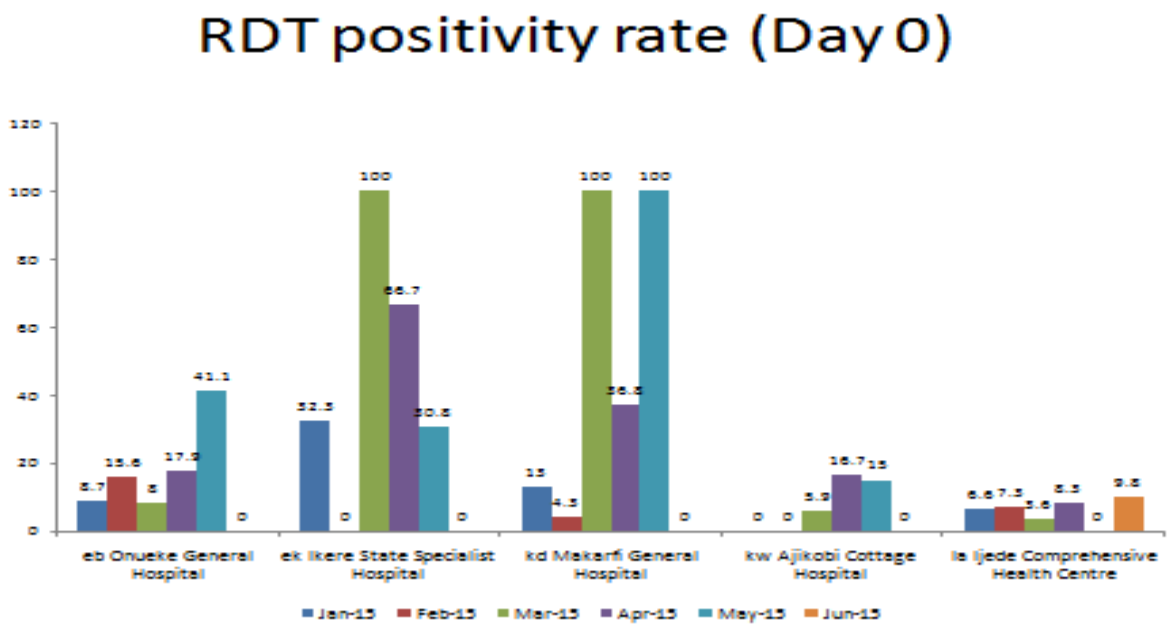
The Malaria Parasite Sentinel Surveillance (MPSS) has been established across the country (one site per state) to continuously and systematically collect daily information from the laboratory on individuals presenting with symptoms of malaria, and follow-up for all confirmed cases following the administration of antimalarial medicines. The sites expected to report malaria activities in the facilities monthly to NMEP. Each site has a well-trained medical laboratory scientist on malaria microscopy and the operational guidelines of MPSS. As part of activities to strengthen and monitor activities of the sites, on the job mentoring was conducted quarterly in all the 37 sites. This activity commenced from June 2015 with the aim of achieving the following;

- To determine the level of implementation of activities within the facilities,
- Solicit the support of the medical officer in-charge on the implementation of MPSS,
- Sensitize the medical officers on importance of day 3 visit by the patients,
  Examine the records and reporting forms for MPSS,
- Re-orientate the medical laboratory scientists and medical officers on the use of data capturing tools,
- Retrieve monthly summary data for June to October, 2015 as well as assess the state of reagents and other materials for diagnosis.

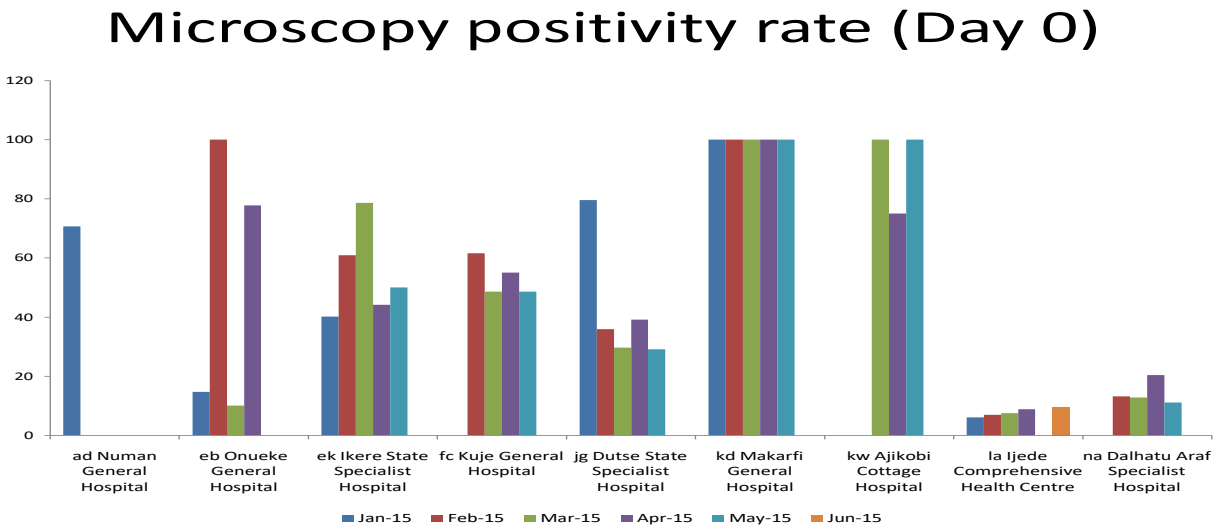
The quarterly mentoring is subsequently followed with data collation, analysis and technical report generation.

Data analysis collected from reporting sites.

Day 0 RDT positivity rate from Jan -May 2015



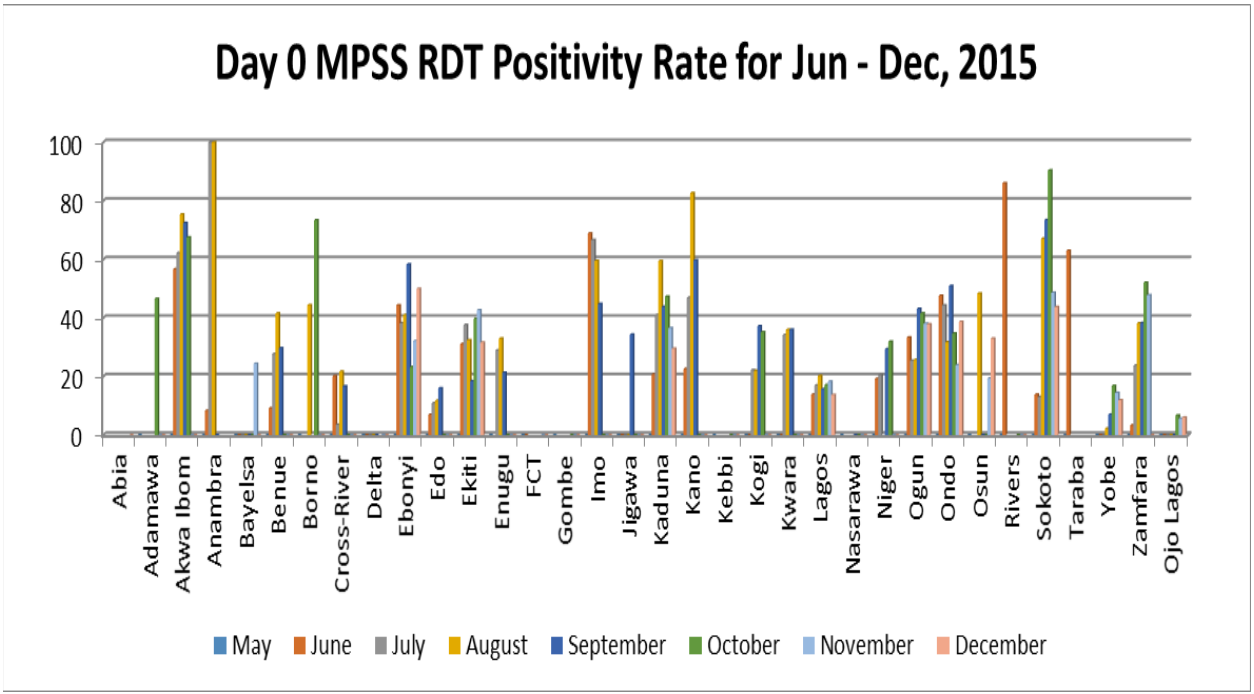
Day 0 microscopy positivity rate from Jan – May, 2015.



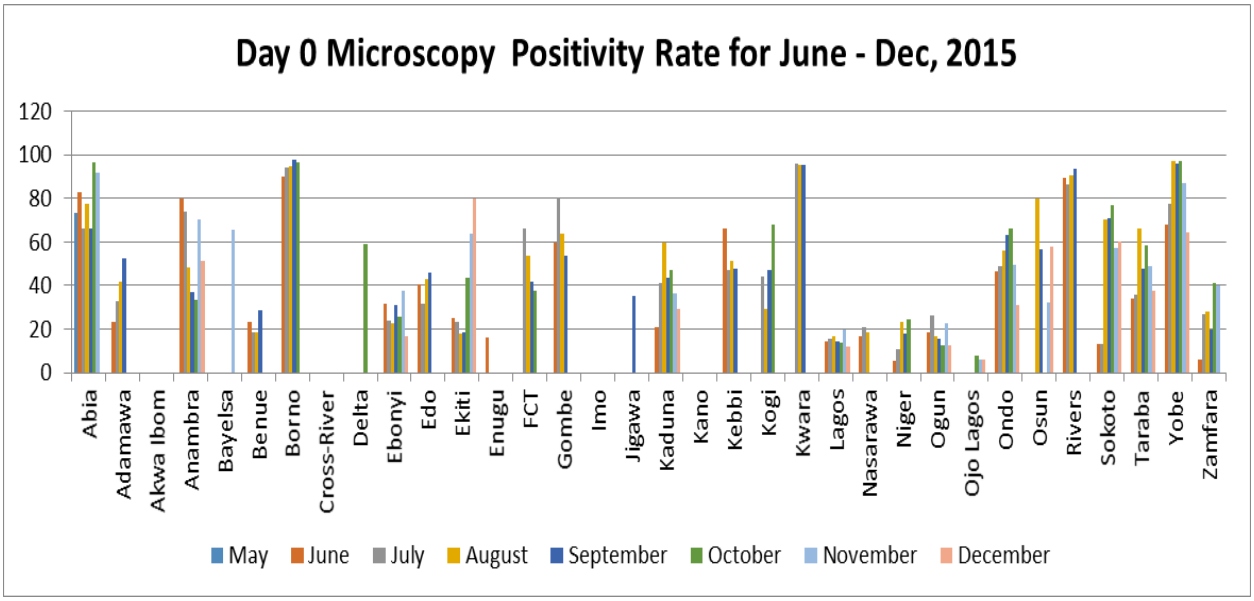
Cases tested positive for malaria by microscopy after day 3 from January to May'15

Facility	Month	Total cases tested by microscopy after day 3 of treatment	Cases tested positive for malaria by microscopy after day 3
na Dalhatu Araf Specialist Hospital	Feb-15	9	0
	Mar-15	7	0
	Apr-15	7	0
	May-15	11	0

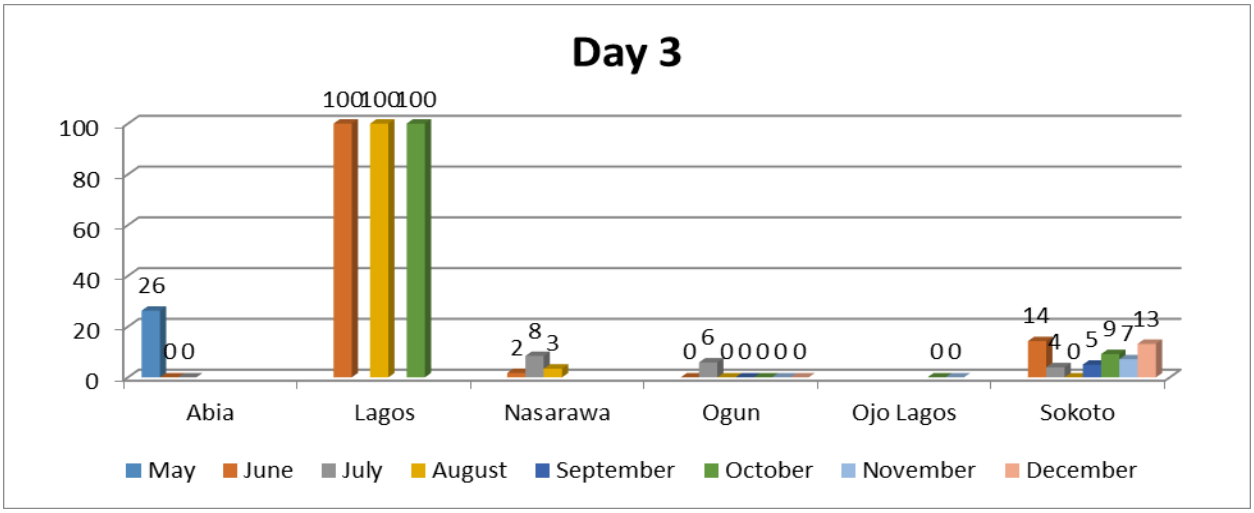
Day 0 RDT positivity rate from June – December, 2015



Day 0 microscopy positivity rate from June – December, 2015



Day 3 positivity rate from June – December'15



2.19 Implementation of Seasonal Malaria Chemoprevention (SMC)

The intervention was implemented in 4 states out of the 9 eligible states for SMC and was highly accepted by the benefitting communities. Achieving Catalytic Expansion of Seasonal Malaria Chemoprevention in the Sahel (ACCESS-SMC) project implemented by MC supported the training of 9,653 personnel of various cadres in Sokoto and Zamfara states (Fig. 14). A total of 3,149,897 SMC drugs were given to 787,474 Children in the two states. The project plans to cover the remaining LGAs in the 2 states in the 2016 Round of SMC.

MC collaboration with Katsina state Ministry of Health Implemented SMC project in 2 LGAs of the state namely Baure and Mashi in 2015 with funding from Bill and Melinda Gates Foundation. It marks the end of

the 3 years project in the state where 4 LGAs benefitted. SuNMaP supported SMC in Kazaure and Roni LGAs of Jigawa state, administering treatments to 43,259 under five children in 2015. The challenges faced in 2015 include low coverage, exit of partners implementing in Jigawa and Katsina State, difficulty in crushing the SPAQ etc.

Fig. 14: A fixed post venue for SMC administration in Sokoto state and the picture beside shows town criers for mobilization.

2.20 Private Sector Co-Payment Mechanism Activities

Three First Line Buyers (FLBs) meetings held in April, July and October 2015 in Lagos. This is aimed at attending to the challenges of FLBs, review FLB assessment carried out during the quarter and generate FLBs report for the semester. Spot check on 23FLBs was held in August and December 2015, most FLBs were found to be compliant.

Also, recommended Retail Price (RRP) workshop took place during the quarter. This is to determine actual cost of ACTs and then fix the RRP. The finding shows that RRP is still N150 per adult dose.

2.21 Survey of the Case Management Unit

ACT Price & Availability Survey data were collected in July 2015 and analysis is currently ongoing. The Survey was in 12 states represented in the 6 geopolitical zones, a total of 600 outlets public & private. The second phase of data collection took place in December 2015. The RDT stability study was held along with the ACT survey in July 2015. Analysis is ongoing. Other surveys ongoing include ACT Retail Audit and Client exit survey is ongoing in 12 states in partnership with SFH.

2.22 Advocacy and BCC Campaigns for Case Management

Workshop on BCC with Manufacturers held in June 2015 to advocate for manufacturers to promote ACT brands and subsequently adverts. The unit with support from SFH organized media round table in Oct 2015 with focus on Diagnosis with 25 media houses in attendance. Also, NMEP /SFH jingles/IEC are on the final stage of procurement. Some of jingles are still running including that of NAFDAC.

2.23 August Meeting for the year 2015

This is a yearly activity done in conjunction with ACSM unit of the programme. It provided the programme with the opportunity of communicating key case management messages at the community level. Also, NMEP promoted the Green leaf Logo, Test before you treat compliance, No use of monotherapies etc

Communities/ Churches in all states where women hold August meeting - Anambra, Ebonyi, Imo, Enugu, Abia, Cross River and Akwa Ibom were visited (Fig. 15). About 3,350 women were in attendance except for churches, where the numbers were too large to count.

Fig. 15: Cross section of women at the meeting august Meetings held in Our Lady of Lourdes Catholic Parish AVU OWERRI WEST LGA IMO State.

ADVOCACY COMMUNICATION AND SOCIAL MOBILISATION

Advocacy Communication and Social Mobilization (ACSM) is a crosscutting branch of NMEP that coordinates NMEP's advocacy efforts for increased malaria funding, and developing strategies for improving utilization of malaria interventions and services across Nigeria.

3.1 Advocacy Toolkit Review Workshop

The ACSM branch of the NMEP with support from Health Communication Capacity Collaborative (HC3) and SuNMaP held a workshop in Akwanga, Nasarawa State for the review of the existing National advocacy toolkit. The objectives of the workshop were to review/update the existing National Malaria Advocacy toolkit to align with the NMSP and reflect the current advocacy plan, develop a new set of Advocacy materials and generate a pre-test ready malaria advocacy materials/toolkit. At the workshop, participants were divided into three groups to come up with advocacy issues based on the current malaria landscape and prioritize these issues. A consultant was engaged to drive this workshop. The consultant and graphic artist are working on the finalized draft tools and will be shared soon so that NMEP can pre-test these tools.

3.2 Substandard and Falsified Malaria Medicines Communication Workshop

This workshop was attended by NMEP, HC3, NAFDAC, SFH, PIPAN, WHO, PCN, NAPPMED, USP etc. The objectives of the workshop were to review what is known about Substandard Spurious Falsified Falsely label Counterfeit medicines (SSFFC) malaria medicine in Nigeria and to create a communication brief for priority audience (Fig. 16). Presentations were made by organizations present. Analysis of the problem of SSFFC in Nigeria was made at group works using the problem tree tool. Priority audiences were also chosen and communication briefs drafted.

Also, the ACSM branch was represented at a 2-day workshop in Accra, Ghana for the SSFFC communication workshop. Participants include representatives from NAFDAC, Tanzania, Senegal, Ghana, Benin, Mozambique, Norvatis, and GSK. Country presentations were made on extend of SSFFC in those countries. The finding shows that the situation is similar among those countries present. Weak regulatory and distribution systems are some of the challenges among others. Discussions centered on the need for improved collaboration between different regulatory and Government agencies, and also harmonizing efforts by stakeholders. Participants broke into groups to review the Nigeria communication briefs, amend and adopt for other countries.

Fig.16: Participants at the SSFFC workshop Abuja

3.3 Training of new ACSM staffs

Health Communication Capacity Collaborative (HC3) organized Communications training course for the new ACSM staff on basics of communication, advocacy and social mobilization. The training was aimed at bringing the new officers up to speed on skills for effective health communication.

Fig. 17: Participants at the LSHC training

3.4 Leadership in strategic health communication (LSHC) training

Centre for Communication Programs Nigeria (CCPN) in collaboration with Johns Hopkins Bloomberg School of Public Health Centre for Communication Programs (JHU.CCP) organized and facilitated the 2015 Leadership in Strategic Health Communication training in Lagos (Fig. 17). The event brought together participants from Nigeria and other African countries. HC3 supported three ACSM staff to attend the training which provided an opportunity to enhance Behaviour Change Communication (BCC) understanding,

knowledge and skills to design, implement, supervise BCC activities in order to create and manage effective results-oriented health programs.

3.5 Radio Magazine Design Workshop

This was also an opportunity to build capacity and technical skills around the Radio Magazine SBCC approach, particularly for the NMEP's ACSM branch and the ACSM subcommittee's Radio Magazine Content Design Team. The workshop provided opportunity also to develop template that will ensure consistency and uniqueness of radio messages and to design a National centrepiece radio magazine programme that can be adapted to meet state-specific needs (Fig. 18).

Fig. 18: Participants at the radio magazine workshop

The Branch held workshops to develop Information Education and Communication (IEC) materials on Case management and IVM. The developed materials were pretested in 5 states, Kaduna, Benue, Akwa-Ibom, Imo, and Ogun States. These materials were pretested using focused groups; Community leaders, Youths, Men, Women and Health Workers (Fig. 19). One rural and one urban LGA were selected for the pretesting in each state. Feedbacks from the groups were used to review and finalize the materials for printing.

Fig. 19: Pretesting sessions with focus groups

3.6 ACSM Subcommittee Meetings

The ACSM branch held nine ACSM Subcommittee meetings in 2015 (Fig. 20). The meeting is a platform for the branch and partners to give regular updates, progress and results of implementation of activities. In 2015, the subcommittee decided to come up with three working group s that form the branch; Advocacy, Social

Mobilization and Communication working groups. These working groups meet once before the subcommittee and give updates to the subcommittee.

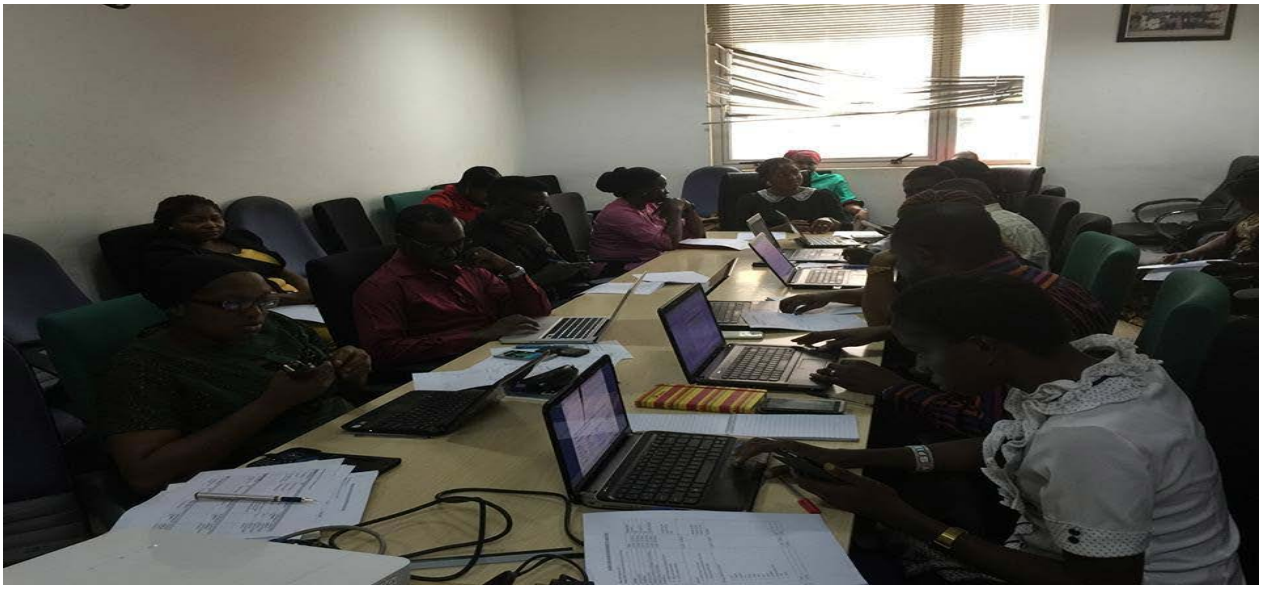


Fig. 20: Members of the ACSM Subcommittee during one of the Subcommittee meeting

3.7 Media Parley

The media chat is a platform through which the NMEP strengthen partnership with the media in order to see themselves as a valuable tool in the fight against Malaria. It also provides an opportunity to awaken the consciousness of the media on the need to bring Malaria interventions to the public light and to showcase the activities and achievements of the programme. ACSM branch held 2 media chat in 2015 in collaboration with its communication partner '*Malaria No More'* (Fig. 21) The first media chat focused on the status of interventions in Nigeria where the programme showcased the achievements made during the LLIN campaigns. The second was a media roundtable event held in Lagos with the objectives of understanding and proffer solutions to challenges of malaria reporting as well as collaboratively, developing a working document to improve malaria reporting across other sectors beyond health.

Fig. 21: Panelist during the media chat on the status of LLINs Interventions in Nigeria

3.8 Malaria Sensitization/August Meeting

NMEP, in collaboration with the Private Sector Co-Payment Mechanism secretariat, embarked on a sensitization outreach to women in the South-East and South-South zones of the country using the August meeting community platform and other similar platforms. NMEP leveraged these platforms to mobilize community support and participation in malaria control/elimination activities (Fig. 22). The various NMEP teams, working closely with the state RBM officers and community mobilizers, facilitated the process of mass mobilization of women against malaria. The women were sensitized on malaria preventive and treatment measures. The states visited were Anambra, Imo, Ebonyi, Enugu, Abia, Cross River and Akwa-Ibom States

3.9 Post LLIN Campaign BCC Activities

In spite of the over 60 million LLINs distributed in Nigeria through mass campaigns (between 2009 and 2013) and through the continuous distribution channels, net use still remains unacceptably low across the country. To change the low net use, NMEP and partners in 2014 adopted a concept of 12-month post LLIN campaign BCC intervention, intended to promote and sustain a culture of net use across the country.

Fig. 22: Malaria sensitization during the August meeting

NIFAA was engaged to work through the inter-faith bodies in Sokoto and Ogun states, disseminating malaria messages in places of worship and creating demand for nets. NMEP also engaged a BCC Consultant firm to implement community based BCC activities that can improve net use in the two States.

Following these BCC interventions, spot checks were carried out to ascertain levels of net hang up and use. In the year under review, the last two quarters spot check in Ogun state showed net use of about 70%. This high net utilization indicates that the Post campaign BCC intervention is yielding the desired results, and plans are on-going to engage more BCC Consultants for the remaining states where LLIN Replacement campaign has taken place between 2014 and 2015.

3.10 Social Mobilization Manual

Malaria Social Mobilization Manual was reviewed; this manual stands to guide processes of all social mobilization activities under the ACSM branch and those implemented by Malaria Partners. The manual is currently undergoing final review and alignment.

3.11 Launch of ACSM Guideline

The NMEP and RBM partners launched the National Malaria Advocacy, Communication and Social Mobilization (ACSM) Guidelines. This material will enhance the capacity of ACSM program planners,

implementers and stakeholders to develop and manage interventions that will contribute toward achievement of national objectives and targets for malaria elimination as set forth in the National Malaria Strategic Plan 2014-2020.

3.12 Private Sector Stakeholders Meeting

The NMEP and Dangote foundation organized a consultation meeting to review the draft strategy with respect to suggested role for the private sector. It also provided a platform for receiving feedback and advice on effectively engaging the local private sector as well as providing concrete steps that the NMEP can follow in order to achieve a more coordinated and sustained effort towards eliminating malaria in Nigeria.

Fig. 23: Participants at the social mobilization workshop

3.13 MIS Messages Development

ACSM branch was saddled with the responsibility of developing messages for NMIS 2015.The content design team of the ASCM subcommittee came together to develop messages and jingles in English, Hausa, Igbo and Yoruba languages. This was aired in all states where the activities were carried out and IEC materials were also distributed.

PROGRAMME MANAGEMENT

This is the coordinating branch in NMEP, it articulates the critical steps and approaches expected of different stakeholders to take responsibility for planning, supervision, resource mobilization, capacity development and other management arrangements for efficient utilization of resources for effective programming.

4.1 Programme Management Subcommittee Meeting

The Programme Management branch conducted eight Programme Management Subcommittee meetings in 2015 with issues bordering on institutional strengthening, coordination at the National and sub-national level. The meeting had in attendance relevant stakeholders and RBM partners.

The meetings served as a forum for assessment and evaluation of quarterly performance of activities in line with the NMEP's annual operational plan, identified gaps and presentation of performance scores of activities by PM branch. Also, annual programmes of NMEP such as AOP development, TWG- meetings, Resource mobilization etc. are initiated and deliberated upon.

4.2 Monthly Departmental Meetings

Department of Public Health organizes monthly meeting for all the divisions under her purview. All the staffs of the department are expected to attend the monthly meeting to enable them keep abreast with the activities of the department and current trends in public health issues.

The participation of NMEP at this meeting was very necessary as key issues bordering on divisional assessment of status of activities' implementation, key challenges and deliberations on possible solutions and way forward were discussed. Updates on Ministry programmes of activities and other administrative issues were also deliberated upon.

4.3 Technical Working Group Meeting

Two Technical Working Group meetings (TWG-Malaria) were held in the year under review. It provided the opportunity to communicate and deliberate on the Human Resource Capacity need for NMEP. Although, the substantive chair is yet to be elected, Programme Director SuNMaP remains the interim chair. Modalities for addressing support to States that have no implementing partners featured. During the TWG meeting in February, the 2015 AOP was adopted. Improvement on consumption data reporting and continuous monitoring of ban on monotherapies by NAFDAC were also deliberated extensively.

4.4 NMEP General Staff Meeting

General staff meeting was held where matters discussed focus on staff welfare, internal coordination, identifying challenges and proffering the ways to mitigate them for effective programming. The meeting also serves as a forum to remind the staff to stick to civil service rules and regulations.

4.5 RBM Partners' Meeting

This is a forum where key information on RBM interventions (report of activities including research findings) are disseminated and feedback from Partners on key activities carried out within the period. It also provides opportunities for leveraging financial and technical support to government authorities at Federal, State and LGA in the area of planning, implementation and evaluation of RBM intervention.

The meeting held in the last quarter of the year and afforded the opportunity for NMEP and partners to present and review programme implementation and identification of major challenges and proffering way forward for effective malaria control.

Some of the resolutions from this meeting includes;

1. Need for additional support which should also include those Health Facilities outside the 17 in each LGA
2. States with less domestic funding ought to be prioritized for support as well as the need for advocacy to state governments.
3. All Health Facilities are accommodated but there is a need for a strategic alliance between the supported ones and the surrogate facilities with proper coordination from NMEP.
4. Hub and spoke model of alliance should be explored. This should be put forward in the proposed M&E and PSM meetings with Partners.
5. Need for integration of appropriate communication for every intervention area to allow for easy scaling up.

4.6 International Conferences/Meetings

Representation was also made at the West Africa Roll Back Malaria Network (WARN) Annual Review meeting held in Cotonou, Benin Republic. The WARN coordinates partner support on technical and operational issues to scale up effective malaria control interventions to 16 West African countries.

The objectives of the meeting included sharing progress made since the last meeting, discuss and share experience on the development of annual work plans (AWP), technical assistance, Concept Note and Grant making process. Best practices and updates from RBM Working groups, WHO, UNICEF and other Partners were exchanged and shared among others.

Some of the outcomes of side meeting with the RBM dwelled on implementation challenges in Nigeria;

- Nigeria recently signed the Global Fund NFM Grant Agreement but funds are not being disbursed to the country. WHO team to meet with the GF Country team to address the issue
- Nigeria is keen to scale up IRS due to considerable interest from the private sectors. In order to provide a clear direction to this, Nigeria would develop a comprehensive IRS plan with technical assistance from RBM Partners.
- Nigeria to review its LLIN distribution strategies, the current mass distribution campaigns are too expensive and not sustainable.

West African Health Organisation (WAHO) meeting brings together the 15 ECOWAS member states, The Islamic Republic of Mauritania as observer, WARN partners, as well as regional and international researchers /experts working in the field of malaria. It was held in Banjul, the Gambia.

Key objectives of the meeting included the discussion and experience sharing on annual work plan development (AWPs), Technical Assistance, and grant making; Updating the regional strategic plan and implementation of action plan, discussion with countries and WAHO on the coordination of malaria control as well as discuss resource mobilization issues to bridge funding gaps.

Resolutions from the meeting among others are;

For ECOWAS Member States

- Countries should ensure that all gap analysis documents are up to date in line with the available funds and the resources yet to be mobilized.
- Countries should ensure they have solid strategic plans with good stratification, and should also be in alignment with global and regional strategic plans for malaria control in the ECOWAS regions.
- Seven countries including Nigeria are listed in the global fund analysis report on weak disbursement rates and are expected to provide clarification to the CCM, WARN and the GF.
- Countries under malaria control with area of pre-elimination should focus on programmatic resources availability aspects.
- Considering the alarming situation of insecticide resistance, researchers and countries are invited to assess and document the levels of resistance and apply WHO recommendations as deemed necessary.
- Countries should organize themselves and create cross-border initiatives for malaria control and elimination in West Africa.
- SMC eligible and implementing countries should harmonize their implementation strategies and plans well ahead of the 2016 campaigns.

For the West African RBM Regional Network WARN & Partners

- Invite PRs/SRs of countries to attend the NMCP meetings and discuss coordination and GF grant implementation issues in countries.
- WARN and its partners should provide support to Sierra Leone and Liberia for the finalization of their GF concept notes.
- Partners should provide support to countries for domestic resources including private sector resource mobilization
- Support countries advocacy actions for malaria control in collaboration with WAHO through setting up of a regional platform which brings together the organized private sector.

4.7 RBM Harmonization Working Group

The purpose of the Harmonization Working Group (HWG) is to implement a formal partnership mechanism to facilitate and harmonize timely support from the RBM Partnership mechanisms to achieve the GMAP targets. The HWG brings together a group of partners who provide support in response to needs at country level identified by the sub-regional networks or other sub-regional or in-country bodies / mechanism.

The meeting held at Entebbe, Uganda in the second quarter of 2015 where NMEP submitted its Programmatic gap analysis for 2016 to 2018 to enable proper resource mobilization.

4.8 Annual Review Meeting for State Programme Managers

The review meeting is an annual programme that provides the opportunity for the State Programme Managers and RBM partners under the leadership of NMEP to present the progress made on malaria control in the states and FCT, and challenges encountered. The programme also serves as a forum to build the capacity of the State RBM Managers, discuss on emerging issues and current trends on malaria control. The theme of the 2015 ARM was ***"Bringing to Light the Perspective of Domestic Financing in Malaria Elimination".***

The objectives of the review meetings were;

- To advocate and mobilize State-level stakeholders for support for malaria elimination in Nigeria
- Develop strategies for efficient resource mobilization and deployment for National and State programmes and provide updates on current technical and programmatic issues including the NMSP 2014-2020
- Review progress made at all levels and support State programmes in identifying gaps, implementation challenges and practical solutions.

The technical sessions aimed at updating as well as building the capacity of the State RBM managers on current best practices were delivered. Speakers were drawn from the academia, RBM stakeholders and the private sector (Fig. 24). All states made presentation on their performance and best performing states emerged and awards given accordingly. Also, there were exhibition by delegates highlighting implementation (malaria control) at the state level.

At the end of the meeting, a communiqué was developed with the under listed recommendations among others:

1. NMEP should re-structure the strategies/interventions in line with subnational stratification by malaria risk as recommended by the new Global Technical Strategy.
2. NMEP, SMEPs and Partners (development and private-sector partners) should prompt the Federal and State Governments to commit and release the counter-part funds required to fulfil the Global Fund NFM condition precedent through intensive high-level advocacy.
3. NMEP, SMEPs and Partners (development and private-sector partners) should advocate for the Federal and State Governments to institute innovative, domestic financing mechanisms (such as 'sin' taxes, community health insurance) specifically for funding malaria programmes in order to ensure sustainability.
4. NMEP should strengthen malaria surveillance to function as a core intervention in line with the recommendations of the new Global Technical Strategy
5. SMEPs should engender State Governments to maintain existing malaria parasite sentinel sites and establish at least one in every State.
6. SMEPs should ensure timely submission of bi-monthly MCLS reports and strengthen PSM Subcommittees at State level.

4.9 2015 World Malaria Day Commemoration

World Malaria Day (WMD) is an international observance commemorated every year on 25 April and recognizes global efforts to control malaria. Nigeria joined the rest of the world to commemorate the 2015 World Malaria Day in its bid to provide awareness on the danger malaria portends as well as advocate for

more resources for malaria control in the country. The day allows for corporations, multinational organizations and grassroots organizations globally to work together to bring awareness to malaria and advocate for policy changes.

Fig. 24: DPH, NC and other dignitaries at the high table during the opening session of the 2015 ARM

The theme for this years' WMD is *"Invest in the Future, Defeat Malaria"* with the slogan *"Your Action Counts".*

Some of the major activities that marked the event include;

- Town hall meeting at Jikwoyi, FCT which showcased activities such as drama on malaria prevention using LLINs and malaria treatment using ACTs, health talks on malaria etc.
- Ministerial press briefing with the launch of NMEP National Malaria Strategic Plan (2014 – 2020) by the Permanent Secretary of the Federal Ministry of Health, Mr. Linus Awute mni.
- Exhibition of various brands of antimalarial products at the event by NMEP and Partners. The Permanent Secretary led the tour of the exhibition stand in the company of other dignitaries in attendance.
- Community countdown aimed at awareness creation and avenue for mass diagnosis and treatment.
- The WMD Grand finale awareness creation rally held on the 27th of April, 2015 in Abuja. It began from Eagle Square through NICON Hilton and terminated at Eagle Square. In attendance were key stakeholders, representatives from line ministries, departments, agencies, commercial partners and members of the organized private sector.

4.10 Configuration of Annual Work Plan tool into an online Roadmap/dashboard tool for Nigeria

In collaboration with the Country Support team of the RBM Partnership and African Region Secretariat, a new Roadmap dashboard online tool was developed. The tool has the capacity to aggregate activities from state to national office and help track implementation of planned activities. Also, it ensures timely reporting and sharing of information on implementation progress made at country level. Two trainings were organized for states and national where six states were initially trained and the remaining 30 states and FCT were subsequently trained. The Objective of Roadmap /dashboard training was to ensure that participants comprehend the coding components of the tool and are able to link the coding components of the roadmap template. At the end of the workshop participants were able to understand and migrate their AOPs into the new dashboard.

4.11 Review of 2015 AOP and 2016 AOP development workshop

Critical to Programme Management coordination role is its ability to develop a work plan yearly as well as take stock of activities implemented over the previous year. NMEP thematic branches in conjunction with SuNMaP successfully conducted a workshop to assess the implementation of the 2015 AOP as well as develop and finalize the 2016 work plan. The forum was also used to further build capacity of staff and deepens their skills and knowledge on work plan review and development processes. A draft has been developed awaiting consensus meeting for approval. States supported by NMEP and partners carried out similar exercise.

4.12 WHO Annual Work Plan Training

This is a workshop organized by the WHO aimed at training national and State Programmes Managers with the requisite skills and necessary information required to develop and update their respective Annual Operational Plans. Facilitators at the workshop included both in country and other facilitators from the WHO. 36 State Malaria Programme Managers, FCT Programme Manager and NMEP staff members were trained on work plan development.

4.13 Quarterly Review of 2015 Annual Operational Plan performance

Branch performances were assessed quarterly based on planned activities in the work plan for the year under review (Fig. 25). In the four quarters of 2015, average performance of the plan ranged between 39% in ACSM to as much as 68% in Programme Management.

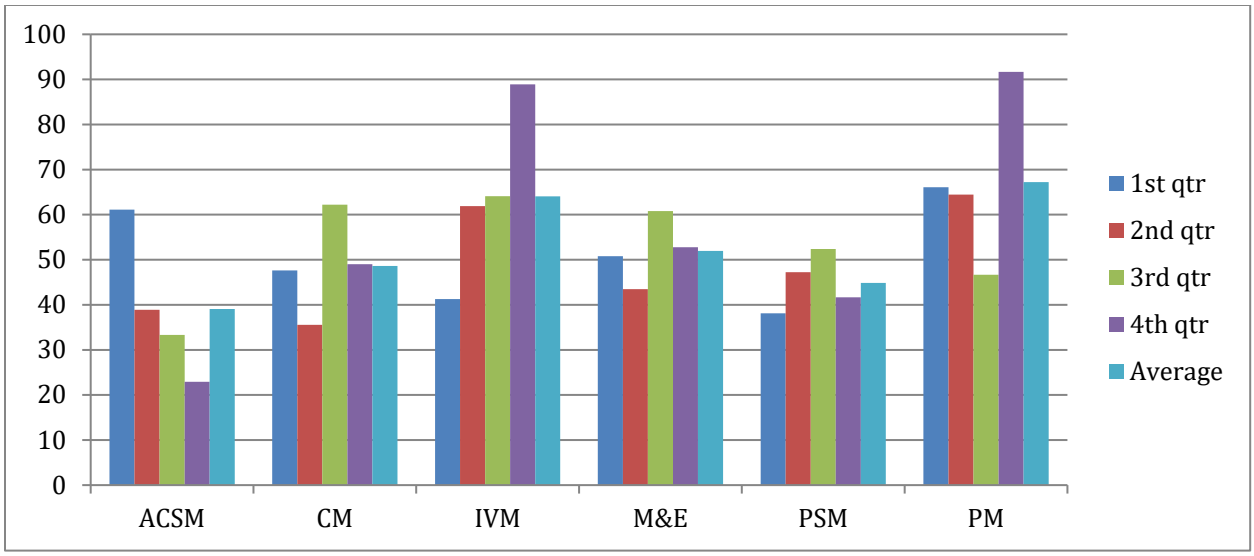


Fig. 15: Review of NMEP 2015 Annual Operational Plan Performance for four quarters of 2015

Major challenges that affected optimal performance by branches were attributed mainly to insufficient funding, delayed signing of the GF NFM Grant and inclusion of activities without funding support in the workplan.

4.14 NMEP PMI Consultative Meeting

The meeting aims at reviewing the progress in implementation of last years' activities, discuss implementation challenges and identify gaps in malaria implementation. The meeting was also leveraged on identify priority activities for 2016 US government funding and the re-programming of additional funds sourced from 2015 funds. Staff of NMEP and PMI attended the meeting.

The branch collects, collates and analyses malaria data as well as develop new knowledge through operations research (OR) to generate evidence upon which policy decisions are taken in relation to options for programme implementation.

5.1 Zonal Training on Data Management by WHO

NMEP in collaboration with WHO conducted zonal trainings of states data managers and relevant subnational officers on monitoring & evaluation. The main objective was to build the capacity of data managers at subnational level, to generate and use data for decision making. The training was conducted between September and November 2015 across all the six geopolitical zones.

5.2 Finalisation of the Reviewed Standard Operating Procedure (SOP) document on data management and Data Quality Assurance (DQA) checklist

The SOP document and DQA checklist was finalized in January 2015. Printing of document has been concluded and distribution to states' and SRs is in progress.

5.3 Analysis of Routine Reporting

On a monthly basis, the M&E branch carries out analysis of routine data from DHIS/states malaria programme. Some of the key findings are indicated in Figures 26 & 27.

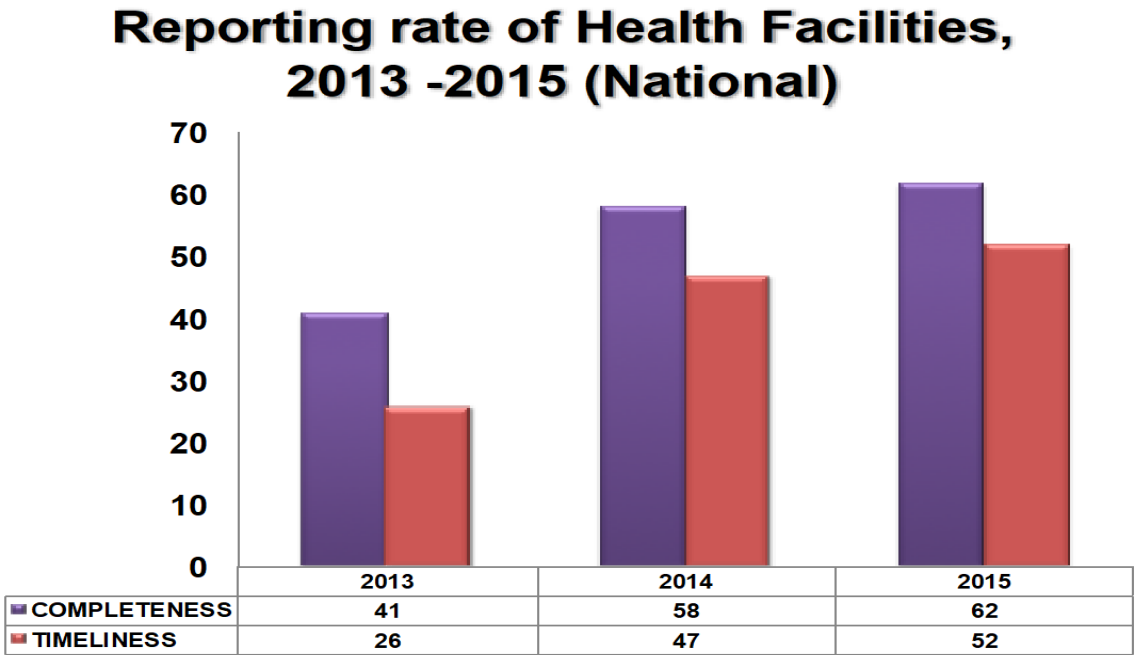
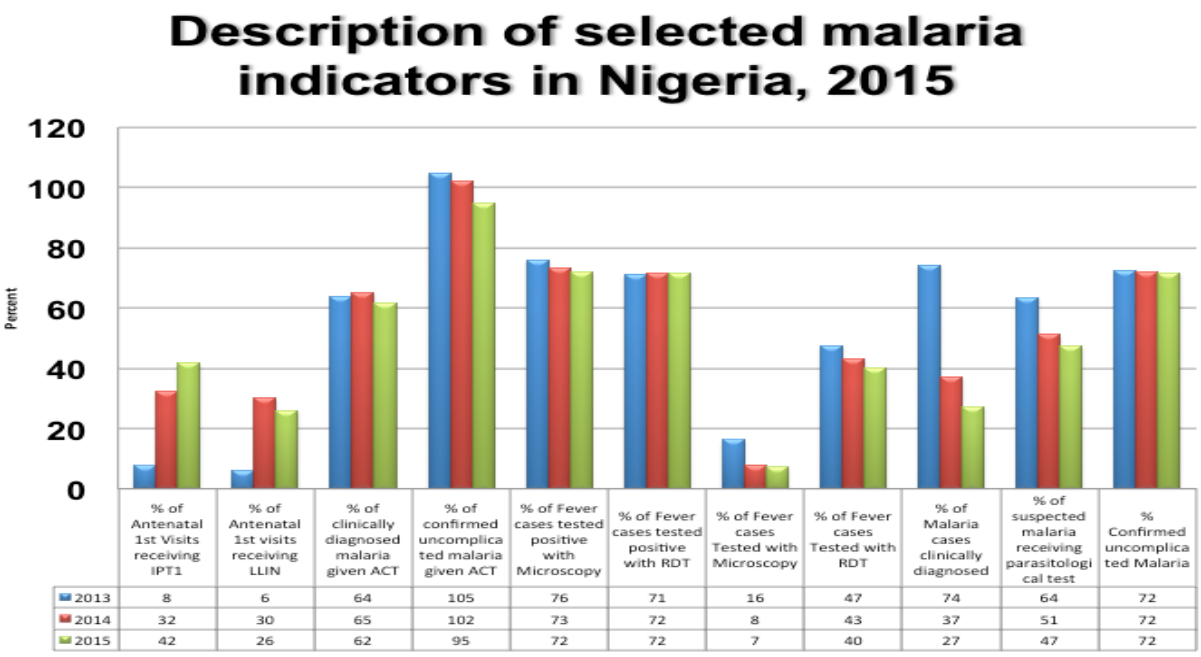


Fig. 26: Reporting rate of Health Facilities (2013-2015)
Source: DHIS2 https://dhis2nigeria.org.ng

5.4 End of Project Malaria Household Survey and Health Facility Assessment Using Lots Quality Assurance Sampling (LQAS)

The M&E Branch of NMEP with support from The World Bank Malaria Booster Project conducted a Household and health facility assessment evaluation survey in six World Bank supported plus Kano and two comparison states using the Lot Quality Assurance Sampling (LQAS) methodology. The World Bank supported States were Jigawa, Bauchi, Gombe, Anambra, Akwa Ibom, and Rivers while the comparison states were Delta and Kaduna. The end line survey was carried out between January and March 2015 as a follow up to a mid-line survey in 2010. Specifically, the survey was aimed at producing information of progress made at the end of the project as reflected in figures 27 & 28.



	% of Antenatal 1st Visits receiving IPT1	% of Antenatal 1st visits receiving LLIN	% of clinically diagnosed malaria given ACT	% of confirmed uncomplicated malaria given ACT	% of Fever cases tested positive with Microscopy	% of Fever cases tested positive with RDT	% of Fever cases Tested with Microscopy	% of Fever cases Tested with RDT	% of Malaria cases clinically diagnosed	% of suspected malaria receiving parasitological test	% Confirmed uncomplicated Malaria
2013	8	6	64	105	76	71	16	47	74	64	72
2014	32	30	65	102	73	72	8	43	37	51	72
2015	42	26	62	95	72	72	7	40	27	47	72

Fig. 27: Description of selected malaria indicators in Nigeria for 2015
Source: DHIS https://dhis2nigeria.org.ng

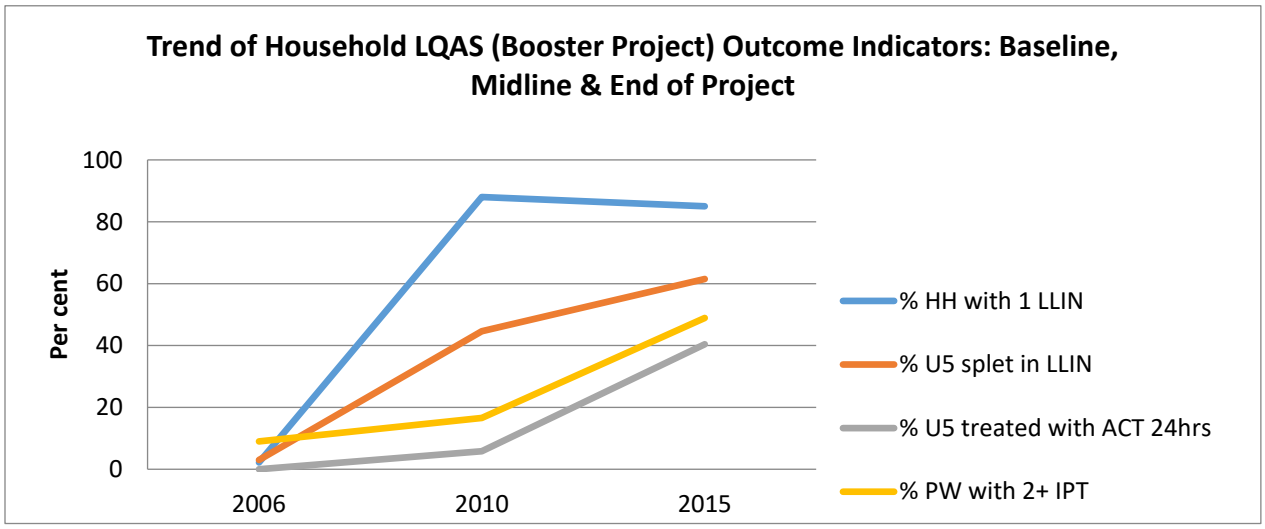


Fig. 28: Trend of Household LQAS (Booster Project) outcome indicators: Baseline, Midline & end of project
Source: NMEP, 2015

5.5 Rapid Impact Assessment (RIA)

The exercise was conducted in March 2015 in 24 states plus FCT with funding support from the GF. The general objectives of RIA were to:

- Use facility-based in-patient and out-patient malaria data from secondary health facilities to document trends in malaria infection from 2003 to 2014

- Demonstrate the use of routine malaria surveillance and logistic data for programme management and evaluation of malarial interventions in Nigeria.

The specific objectives were to collect and analyse outpatient and inpatient data for under 5 years and 5 years and above age groups from 2003 to 2014 from sampled health facilities; collect and analyse state-level intervention activities from 2006 to 2014; and stock out of antimalarial medicines and relate coverage of interventions to the observed trends in malaria cases and deaths from sampled facilities. Some of the findings from the survey are shown in Figures 30 & 31.

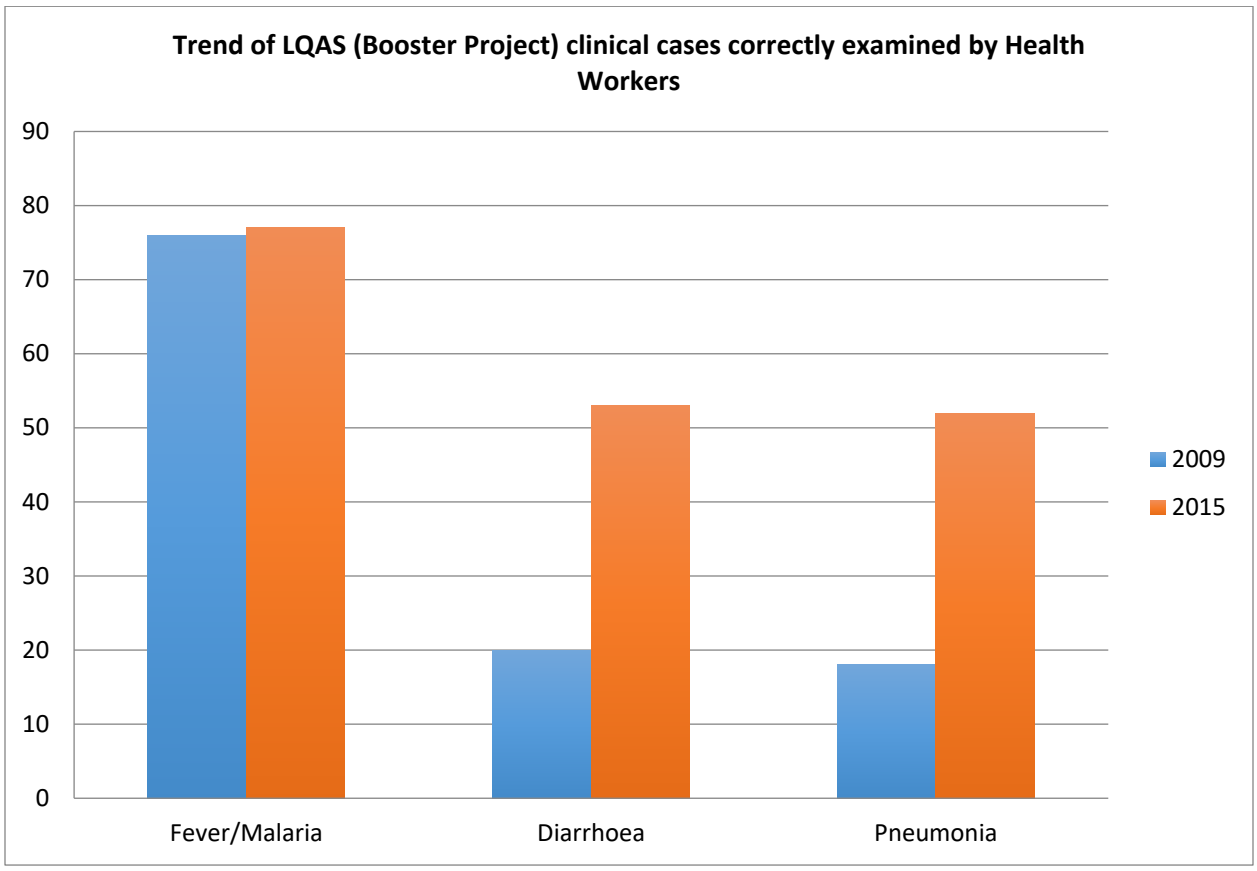


Fig. 29: Trend of LQAS (Booster Project) clinical cases correctly examined by Health Workers
Source: NMEP, 2015

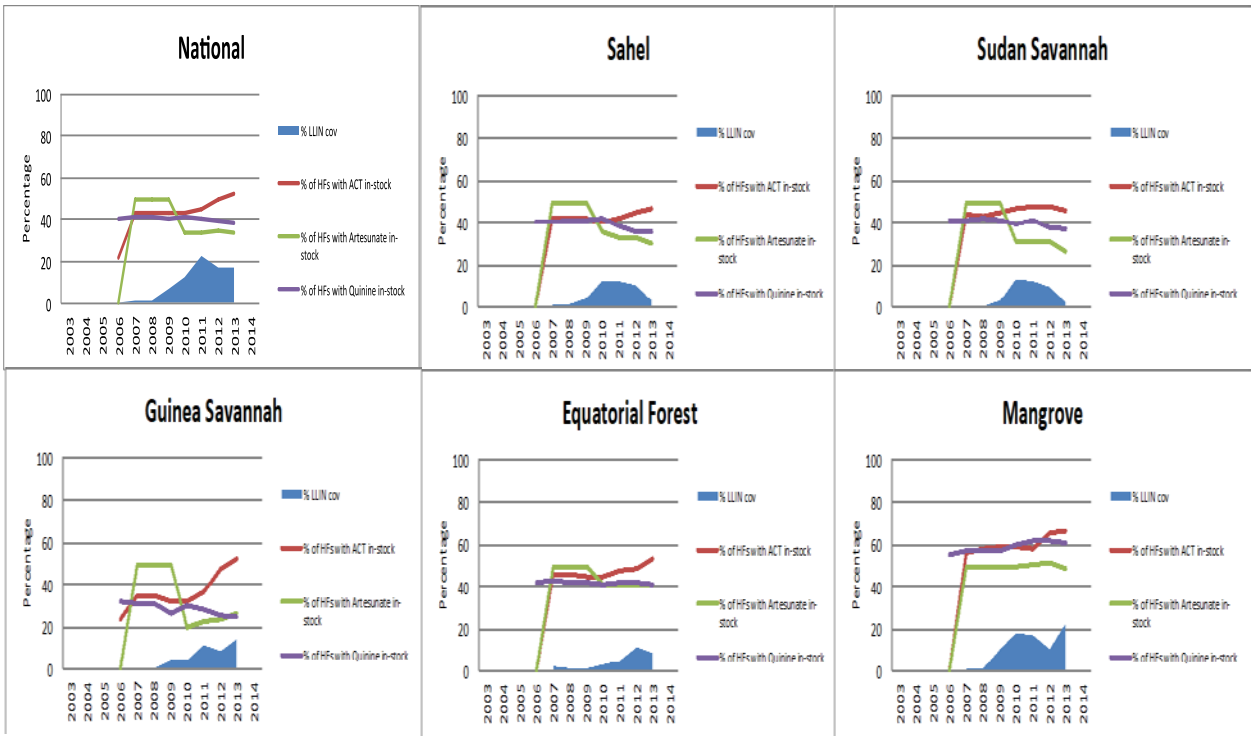


Fig. 30: Summary of malarial Interventions across Ecological zones

At the end of 2014, national coverage of LLIN was 17%, health facilities with stock of ACT were 52%, health facilities with stock of Artesunate were 34% and health facilities with stock of quinine were 38%.

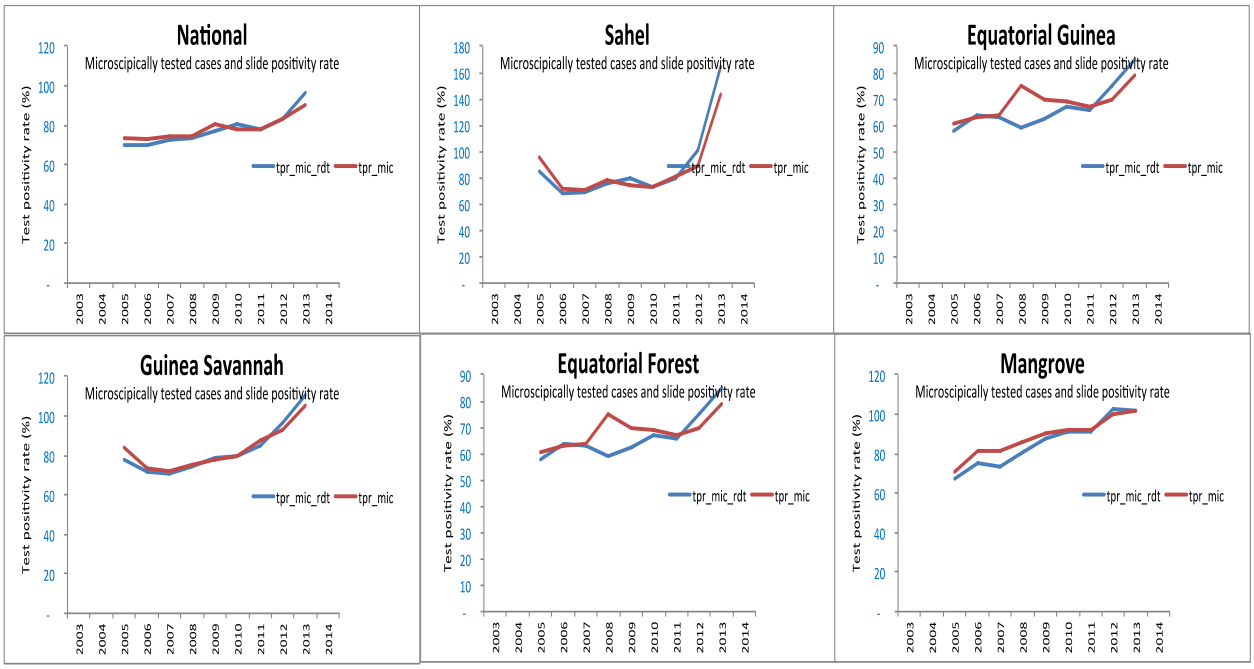


Fig. 31: Trend of Slide Positivity Rate

At the end of 2014, the national slide positivity rate shows an increase from 70% of 2005 level to 95%.

5.6 Nigeria Malaria Indicator Survey 2015

The NMEP conducted the 2015 Nigeria Malaria Indicator Survey (NMIS) in collaboration with National Population Commission (NPopC) and National Bureau of Statistics (NBS) with funding support from the GF, USAID, DfID, and UNICEF. The data collection exercise was conducted between October and November 2015 in all the 36 states and FCT (Fig. 32). The key objectives of the 2015 NMIS were to:

- Measure the extent of ownership and use of mosquito bed nets
- Assess coverage of the program to treat pregnant women to prevent them from getting malaria
- Identify practices used to treat malaria among children under five and the use of specific anti-malarial medications
- Measure the prevalence of malaria and anemia among children age 6-59 months and
- Assess knowledge, attitudes and practices of malaria in the general population.

Preparations for the exercise included the development of a survey protocol with technical input from all partners. The protocol comprised details of the survey, including approach, methodologies and data management. The tool for the survey was adapted, finalized and pre-tested to determine effectiveness and suitability. Training and orientation exercises were conducted for the supervisors, interviewers and national monitors on the tools, assessment methodology and data collection were carried out. Data analysis and report writing are ongoing.

5.7 Assessment on Political economy, Institutions and Outcome of malaria control

NMEP in collaboration with Health Strategy and Delivery Foundation (HSDF) and the Harvard Defeating Malaria Board conducted the study in three states; Cross-Rivers, Niger and Akwa-Ibom states. Three LGAs, one from each of the three senatorial districts in each state were selected. And three PHCs, one from each LGA were selected. The aim was to generate new evidence on the role of data, institutional and political economy in facilitating or constraining informed decision-making and effective control of malaria in Nigeria. Training of data collectors was carried out in June 2015. Data collection and abstraction was done at the LGA and health facilities. The findings of the study are being awaited.

Fig. 32: Lab scientists collecting blood sample during NMIS fieldwork

5.8 Malaria Intervention Assessment Survey

The NMEP in collaboration with USAID/PMI developed research protocol and data collection/collation instruments for the study. The main objective was to document progress in malaria control intervention between 2008 and 2014 in Cross-Rivers, Ebonyi, Nasarawa and Sokoto states. Training of trainers was conducted in December 2015. A step down training and pre testing of tools will be carried out in February 2016.

5.9 Health Management Information System: Community Data Capturing Tools

The first draft has been developed, reviewed and finalized. Training of trainers, printing of tools and deployment will be carried out in 2016.

5.10 Establishment of expert committee on data management

This committee recommended the inclusion of additional data element on HMIS form on DHIS2 platform, which has been accepted by the Department for Planning Research and Statistics (DPRS). The additional data elements are IPT_3 and column on severe malaria.

5.11 Supervisory and Data Quality Assessment visits to 24 GF supported states

The M&E unit coordinated the first and third quarters supervisory & DQA visits to 24 GF supported states between May/June 2015 for the first quarter and December 2015 for the third quarter. During the visit, the programme assessed State and LGA levels programme administration and management of RBM activities, took stock of malaria commodities and other supplies at the States' stores and assessed malaria records and data management, among others. The visit was also used to advocate for increased commitment of State and LGA policy makers to malaria control activities. A key outcome of the visit was that it provided insight into budgetary allocation and funds release for malaria control in the states visited. The percentage of data availability in states' LGAs and health facilities was approximately 50%, percentage data consistency was approximately 39% while percentage data validity range between 30% - 34%.

Significantly, the visit revealed the level of progress made so far in programme implementation, identified the gaps and challenges and provided opportunity to proffer solutions to these issues. Through these regular supervisory/DQA visits, there has been significant improvement in programme implementation in accordance with the state work plans.

5.12 Coordination meeting

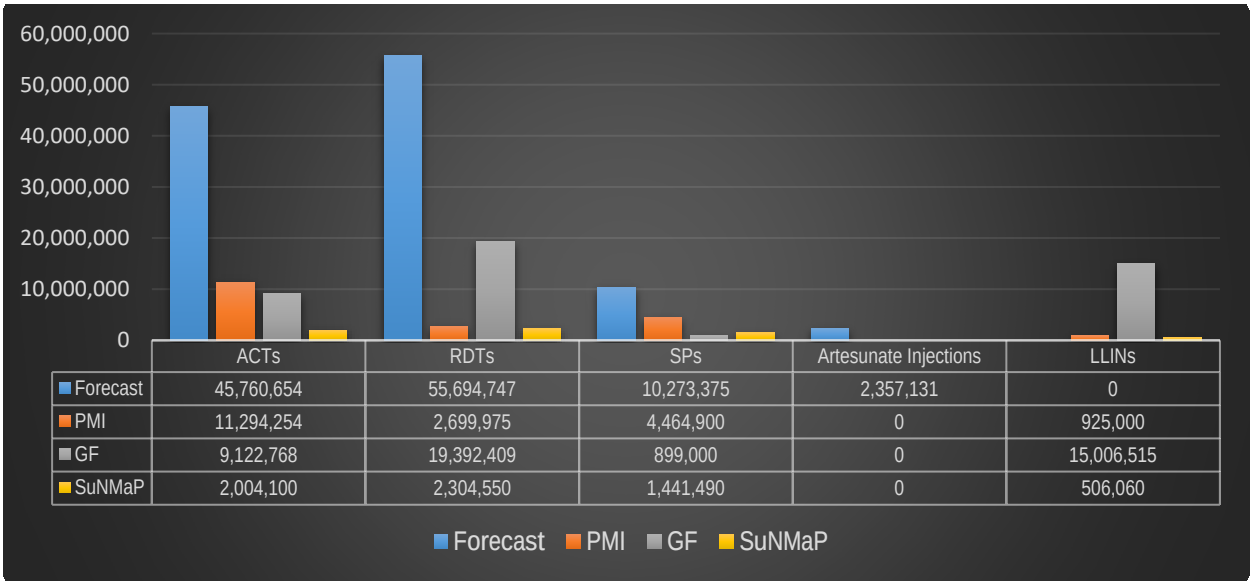
In the year under review, the unit successfully held all the coordination meetings for 2015. Some of them include four M&E in-house meetings, six M&E Subcommittee meetings, several meetings of MIS work-streams, meetings on community case management, meeting of child health stakeholders, meeting with DPRS on data/DHIS as well as coordination meeting with M&E field officers.

The PSM Branch has the responsibility of ensuring the optimization of the logistics system for antimalarial in collaboration with relevant agencies. The PSM Branch aims to support the NMEP in procuring quality-assured medicines and other health products in sufficient quantities, reduce cost inefficiencies and to ensure the reliability and security of the distribution system. It also aims to ensure the rational use of antimalarial medicines when they eventually get to the users-whether as providers or patients.

6.1 Procurement and Distribution of Malaria Commodities

6.1.1 Procurement

The NMEP through its partners has procured and distributed Malaria commodities across the country to the 24 high burden States (Fig. 33). However, the NMEP Logistics system ensures regular supply of Malaria commodities. The Global Fund procured commodities through the Voluntary Pooled Procurement VPP for efficient fund utilization. The table below shows the quantities of malaria commodities forecasted, procured and distributed.



	ACTs	RDTs	SPs	Artesunate Injections	LLINs
Forecast	45,760,654	55,694,747	10,273,375	2,357,131	0
PMI	11,294,254	2,699,975	4,464,900	0	925,000
GF	9,122,768	19,392,409	899,000	0	15,006,515
SuNMaP	2,004,100	2,304,550	1,441,490	0	506,060

Fig. 33: Quantities of Malaria commodities forecasted and procured.

6.1.2 Distribution

To ensure an efficient and effective distribution of antimalarial commodities, NMEP engaged the service of four (4) third party Logistic Agents (3PLs) (AXIOS, GHLI, Riders for Health and MDS) each for both long haul (federal medical stores to State central medical stores) and last mile (State central medical stores to health facilities) distribution of Malaria commodities across the supply chain. The objective being to promote timely accessibility of safe, effective and quality antimalarial medicines and commodities at all levels of health care delivery. Fig. 34 shows the total malaria commodities distributed in 2015.

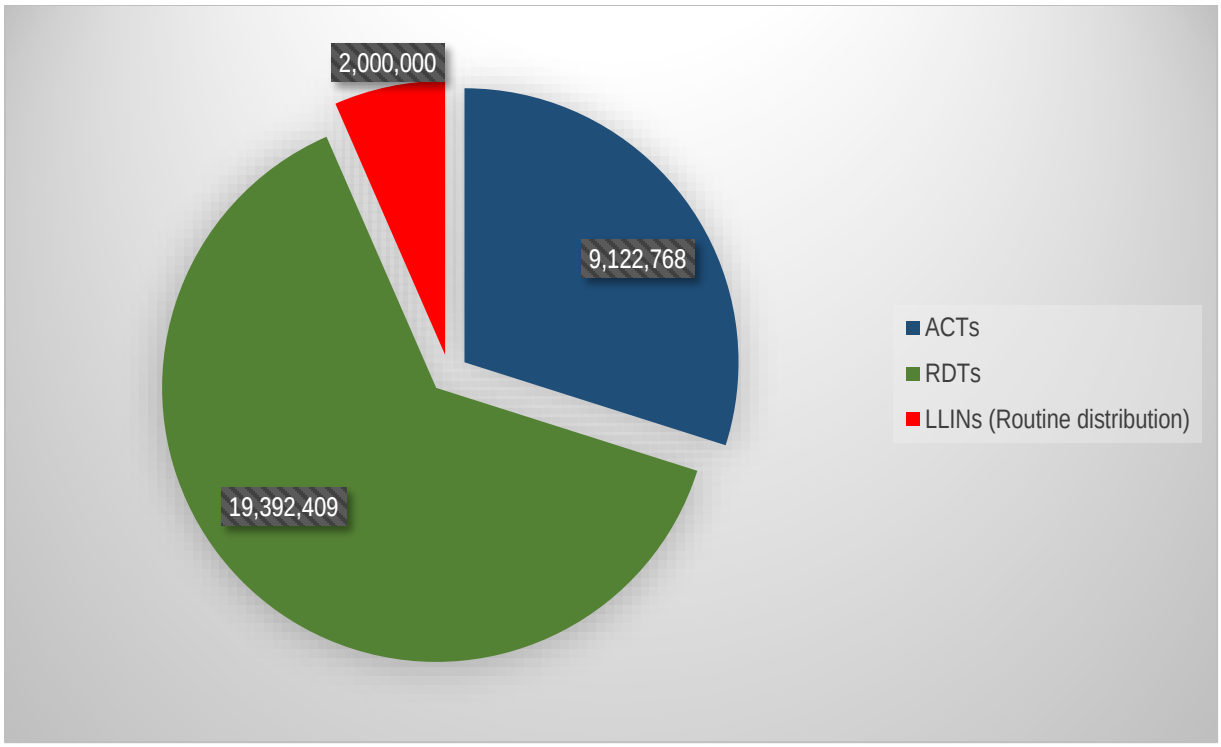


Fig. 34: Total quantities of ACTs, RDTs and LLINs distributed

6.2 Malaria Commodity Logistics System

In other to strengthen the Malaria Commodity Logistics system (MCLS) in the GF supported States, Logistics officers were engaged and trained on MCLS. The engagement is to support the State logistic team and to ensure effective inventory control of malaria commodities.

NMEP also organized MCLS orientation workshop for the following officers:

- State Sub-Recipient and State program officers- 30 participants in September,2015
- PSM logistics officers – 20 participants in July, 2015
- Master trainers – 47 participants in June, 2015.

The purpose of the workshop was to identify gaps in the implementation of MCLS Standard Operating System as well as improve reporting across the States, LGAs and health facilities.

6.3 PSM Focused Supportive Supervisory Visits

PSM conducted quarterly supportive supervisory visits to the 24 GF supported states to strengthen the Malaria Commodity Logistics System. This enhances proper inventory control, identify and resolve challenges with management of malaria commodities across all levels. PSM critically collects stock status and analyse for decision-making. Find below are the stock analysed MSV reports for the quarters.

Table 4 : Quantities of ACTs, RDTs and LLINs delivered to states in the year under review

	STATES	ACTs	RDTs	LLINs					
1	Abia	82,604	10,869	-	13	Kaduna	533,884	45,259	115,883
2	Bayelsa	80,349	6,505	-	14	Katsina	346,081	43,735	109,971
3	Benue	159,684	24,970	80,629	15	Kebbi	186,647	24,895	61,729
4	Borno	188,920	16,304	-	16	Kogi	234,563	13,051	62,819
5	Cross River	253,045	11,404	54,838	17	Kwara	215,822	16,882	44,836
6	Delta	181,973	15,768	-	18	Lagos	527,370	57,012	172,751
7	Ebonyi	103,988	8,687	-	19	Nasarawa	88,859	7,081	-
8	Edo	404,736	25,675	61,289	20	Niger	242,720	20,330	74,964
9	Ekiti	70,888	18,047	45,473	21	Ogun	322,972	29,237	71,104
10	Enugu	16,325	12,475	-	22	Ondo	212,953	26,614	65,602
11	FCT	71,590	5,517	-	23	Osun	225,944	18,646	64,770
12	Imo	348,945	37,945	74,448	24	Oyo	278,354	21,738	105,788
25	Plateau	115,082	12,475	-	31	Kano	345,672	54,463	178,204
26	Sokoto	1,700,399	15,217	70,185	32	Anambra	153,613	24,203	79,192
27	Taraba	107,726	8,687	-	33	Rivers	190,149	30,117	98,543

	STATES	ACTs	RDTs	LLINs					
28	Yobe	116,542	9,222	-	34	Bauchi	171,087	26,956	88,200
29	Zamfara	312,590	15,369	62,152	35	Jigawa	160,348	25,264	82,664
30	Adamawa	145,261	12,475	-	36	Akwa Ibom	143,473	22,605	73,965
	TOTAL	9,122,798	19,392,409	2,000,000					

Total Quantities of Malaria Commodities distributed: ACTs=9,122,798; RDTs=19,392,409 and LLIN=2,000,000

Table 5: Stock Status at SCMS and FMS Oshodi For three Quarters.

Zone/State	AL 1	AL 2	AL 3	AL 4	AA 1	AA 2	AA 3	AA 4	SP	RDT
North-Central										
Benue	4,050	360	6,976	600	128	0	0	3,938		33,600
FCT	487	404	1,256	165	4	0	0	0		128
Kwara	1,100	1,760	800	1,020	0	0	0	0		0
Kogi	55,530	21,060	41,970	41,190	43,554	10,425	0	11,250		47,350
Nasarawa	38,180	22,905	21,770	30,958	8,595	5,825	5,000	10,475		33,600
Niger	54,525	43,471	34,520	22,876	35,088	14,579	0	0		132,700
Plateau	11,520	7,200	14,400	0	5,500	3,600	250	250		0
North-East										
Adamawa	16,209	1,168	640	95	158	1,840	0	1,570		1,975
Bauchi										
Borno	87,839	54,646	32,526	56,559	26,450	3,650	0	255		4,100
Gombe										
Taraba	0	0	0	0	0	0	0	0	0	0

Yobe	0	0	0	0	21,388	4,376	1,118	13,304		37,887
North-West										
Jigawa										
Kaduna	20,440	8,280	17,386	25,700	3,000	2,050	8,394	2,096		111,965
Kano										
Katsina	56,732	58,095	14,310	10,438	4,325	72,910	1,935	200		79,025
Sokoto	97,530	10,650	5,266	7,890	53,050	114,975	30,100	4,025		7,625
Kebbi	12,359	84	34,428	12,930	51	0	201	0		52,800
Zamfara	61,230	15,300	13,170	53,520	97,150	112,475	57,475	72,700		207,550
South-East										
Abia	106,870	66,367	9,759	108,280	23,242	15,484	11,045	15,839		106,307
Enugu	87,120	58,950	0	83,910	17,475	12,225	9,250	12,000		95,255
Ebonyi	0	0	0	0	11,500	0	15	0		0
Imo	0	37,000	0	54,000	12,000	8,900	5,400	7,200		48,700
Anambra										
South-South										
Akwa Ibom										
Bayelsa	17,200	7,414	0	0	12,000	2,658	2,223	0		0
Cross River	90,590	61,869	1,598	90,677	19,234	16,379	6,929	3,475		136,425
Delta	78,916	54,243	3,911	97,167	8,056	5,846	6,015	4,771		162,800
Edo	10,987	2,280	0	11,060	0	0	1,300	528		99,300
Rivers										
South-West										
Ekiti	153,450	305,280	68,250	82,000	22,975	35,400	0	12,000		69,950
Lagos	150,591	88,251	75,305	1,700	117,704	78,046	3,910	16,861		247,325

Ogun	43,743	23,685	0	28,648	34,030	15,550	2,410	7,441		64,800
Ondo	0	0	0	0	17,230	3,500	0	0		0
Osun	1,925	1,560	350	11,317	5,048	3,744	365	0		0
Oyo	40,814	30,399	33,099	47,119	40,380	9,707	3,700	14,559		19,525
Federal Level										
FMS Oshodi	1,422,425	1,176,488	11,434	270,114	16,622	35,600	7,400	308,998	-	57,838

Stock on Hand as at 31st March 2015.

State CMS stock levels of commodities above reflect all stock available irrespective of funder/donor

Fig. 35: Field Trip of Newly Recruited logistics officers

6.4 Supply Plan Review

The Supply Plan review meeting was held to review quantification and to collate consumption data as well as quantities of commodities supplied; this is to ensure regular supply and avoid stock out of commodities across all levels of the supply chain. Two meetings were held; one in Benue State and the other in Imo State.

6.5 Commodity Management Audit for LLINs

The Commodity Management Audit (CMA) for Long Lasting Insecticidal Nets (LLINs) was conducted to track/audit the quantities of LLINs distributed in States during net campaign. With support from Global Fund (GF) two consultants from Alliance for Malaria Prevention (AMP) were engaged to train the Core CMA Team (of 10 officers) drawn from NMEP, SuNMaP, and other partners while three firms were also engaged and trained to carry out the audit in the States. The CMA took place in 17 out of 18 States mapped out for the exercise.

6.6 Quality Assurance

Samples of ACTs were collected from three States (Abia, Kaduna and Oyo) and Federal Medical Stores, Oshodi, Lagos for Quality Assurance. This was done in collaboration with NAFDAC and the samples were taken to a WHO certified Laboratory in Singapore for analysis. The results of analysis show that the ACTs samples complied with international standard of Pharmacopoea.

Also with support from United State Agency for International Development (USAID) through the Promoting Quality of Medicine Programme (PQM), NMEP in collaboration with NAFDAC established antimalarial medicines quality monitoring programme, whose main objective is to generate evidence-based data on the quality of antimalarial medicines available at various levels of the Nigerian market

Fig. 36: Stock Status at SCMS and FMS Oshodi: as at June 2015

Zone/State	AL 1	AL 2	AL 3	AL 4	AA 1	AA 2	AA 3	AA 4	SP	RDT
North-Central										
Benue	23,790	5,580	9,826	24,630	3,503	193	2,125	6,213	0	250,250
FCT	0	0	0	0	0	0	0	0	0	0
Kwara	810	0	390	136	700	0	350	150	0	1,491
Kogi	42,983	22,680	6,630	22,680	10,050	525	3,300	4,525	4,950	142,150
Nasarawa	0	0	0	0	0	0	0	0	0	0
Niger	3,747	0	12	0	6,011	0	0	0	0	214,150
Plateau	0	0	0	0	0	0	0	0	0	0
North-East										
Adamawa	0	0	0	0	0	0	0	0	0	0
Bauchi	19,204	22,010	41,374	52,310	13,655	4,527	14,360	3,647	0	673,892
Borno	0	0	0	0	0	0	0	0	0	0
Gombe										
Taraba	0	0	0	0	0	0	0	0	0	0
Yobe	0	0	0	0	0	0	0	0	0	0
North-West										
Jigawa	17,999	20,628	38,777	49,027	12,797	4,243	13,459	3,418	0	631,593
Kaduna	73,677	35,078	8,352	58,059	25,815	9,617	7,017	6,592	0	537,515
Kano	38,801	44,469	83,594	105,690	27,588	9,147	29,014	7,369	0	1,361,566
Katsina	72,050	37,090	6,050	50,110	7,125	0	780	411	0	41,044
Sokoto	35,490	19,170	57,330	63,930	45,750	28,575	41,900	21,650	0	17,800
Kebbi	39,250	87,055	7,435	74,131	47,819	27,693	30,568	47,017	329,500	357,775
Zamfara	43,533	28,056	114,730	110,972	62,918	47,188	56,167	13,770	0	318,525

South-East										
Abia	0	0	0	0	0	0	0	0	0	0
Enugu	0	0	0	0	0	0	0	0	0	0
Ebonyi	0	0	0	0	0	0	0	0	0	0
Imo	25,460	20,703	3,028	33,947	19,550	5,650	12,125	4,597	0	0
Anambra	17220	19740	29580	54508	12250	4050	12875	3275	73940	24192
South-South										
Akwa Ibom	314010	508830	39270	187620	0	0	2975	1600	851725	586600
Bayelsa	0	0	0	0	0	0	0	0	0	0
Cross River	695	1,511	150	805	19,184	2,275	4,500	2,200	0	2,472
Delta	0	0	0	0	0	0	0	0	0	0
Edo	48,369	58,460	5,670	42,080	14,689	0	4,311	5,651	0	343,905
Rivers	21,456	24,590	46,226	58,445	15,256	5,058	16,044	3,075	500,000	1,838,941
South-West										
Ekiti	19,751	9,480	2,130	12,180	9,275	9,175	2,350	6,800	0	229,794
Lagos	65,880	48,382	43,380	57,690	76,004	31,308	600	195	211,900	354,200
Ogun	85,722	46,832	5,819	63,785	50,147	21,797	13,489	12,438	0	429,300
Ondo	27,540	3,960	0	2,860	0	375	0	0	0	16,638
Osun	50,931	24,945	2,571	32,506	13,455	8,262	3,548	4,254	1,492	334,225
Oyo	90,058	54,626	15,799	49,893	26,551	14,326	9,161	7,414	308,800	556,775
Federal Level										
FMS Oshodi	818,230	499,080	938,182	593,040	309,625	131,025	162,675	129,850	0	315,097

Stock on hand as at September, 2015

Zone/State	AL 1	AL 2	AL 3	AL 4	AA 1	AA 2	AA 3	AA 4	SP	RDT
North-Central										
Benue	23,790	5,580	9,826	24,630	3,503	193	2,125	6,213	0	250,250
FCT	0	0	0	0	0	0	0	0	0	0
Kwara	29,430	12,880	5,400	17,368	7,850	1,950	3,725	3,375	0	8,725
Kogi	51,803	58,590	16,740	33,360	15,200	15,675	23,850	38,350	153,750	205,650
Nasarawa	0	0	0	0	0	0	0	0	0	0
Niger	248	259	0	0	0	0	0	0	0	12,675
Plateau	0	0	0	0	0	0	0	0	0	0
North-East										
Adamawa	0	0	0	0	0	0	0	0	0	0
Bauchi	19,204	22,010	41,374	52,310	13,655	4,527	14,360	3,647	0	673,892
Borno	0	0	0	0	0	0	0	0	0	0
Gombe										
Taraba	0	0	0	0	0	0	0	0	0	0
Yobe	0	0	0	0	0	0	0	0	0	0
North-West										
Jigawa	0	0	19,080	21,800	7,450	1,675	9,100	1,950	0	629,500
Kaduna	61,973	28,110	7,430	49,200	25,800	9,600	7,000	6,600	447,000	19,050
Kano	38,801	44,469	83,594	105,690	27,588	9,147	29,014	7,369	0	1,361,566
Katsina	72,050	37,090	6,050	50,110	7,125	5,540	780	411	0	41,044
Sokoto	35,460	19,170	57,330	63,930	45,750	28,575	41,900	21,650	0	17,800
Kebbi	39,250	87,055	7,435	74,131	47,819	27,693	30,568	47,017	329,500	357,775
Zamfara	1,470	1,737	2,413	1,257	498	1,290	851	694	2,918	8,721
South-East										
Abia	0	0	0	0	0	0	0	0	0	0
Enugu	0	0	0	0	0	0	0	0	0	0
Ebonyi	0	0	0	0	0	0	0	0	0	0
Imo	25,540	20,800	3,048	33,874	19,431	5,776	12,196	4,689	0	599,350
Anambra	436	500	9112	23808	310	112	326	84	73940	484200
South-South										
Akwa Ibom	328290	507060	111360	226980	41175	9375	18550	4150	852300	1147375
Bayelsa	0	0	0	0	0	0	0	0	0	0
Cross River	64,070	47,070	13,410	54,300	30,634	17,175	12,100	16,650	837	430,225
Delta	0	0	0	0	0	0	0	0	0	0
Edo	35,100	49,980	6,360	34,710	13,150	0	3,125	3,500	0	408,050
Rivers	21,456	24,590	46,226	58,445	15,256	5,058	16,044	3,075	500,000	1,838,941
South-West										
Ekiti	19,751	9,480	2,130	12,180	9,275	9,175	2,350	6,800	0	229,794
Lagos	53,880	18,270	35,910	73,830	70,599	24,907	0	0	173,830	289,700
Ogun	37,400	18,650	2,184	27,102	16,474	6,440	11,070	4,910	0	471,200
Ondo	15,630	2,630	0	1,220	0	50	0	0	0	15,812
Osun	50,931	24,945	2,571	32,506	13,455	8,262	3,548	4,254	1,492	334,225
Oyo	39,408	3,955	8	3	9,651	1	11	14	0	672,400
Federal Level										
FMS Oshodi	667,440	512,490	948,688	1,779,240	0	0	21,604	23,204	0	472,578

Figure 16: CMA Training at Bolton White Hotel

7.1 Success Stories

I. Development of a long awaited Insecticide Resistance Management Plan in adherence to WHO recommendation and Harmonization of national guidelines for the implementation of Integrated Vector Management for malaria vector control in Nigeria.
II. Development of SOPs, and Tool for Malaria-NTDs co-implementation as one of the best practices in programme implementation in Nigeria.
III. The ACSM branch of NMEP in collaboration with Partners for the first time developed messages and jingles for National Malaria Indicator Survey (NMIS) and developed ACSM guidelines that is user-friendly with colour codes for easy reference to each section
IV. Malaria theme song ***'play your part'*** by 2 Face Idibia, Sani Danja and Eve was launched in 2015 and is being aired across the country
V. The West African Regional Meeting at Cotonou in Benin republic adopted the Nigeria's Business Plan for other countries.
VI. The NMEP had successfully implemented three major surveys in the country
VII. Establishment of Antimalarial Medicines Quality Monitoring programme for malaria medicines in circulation in the Nigerian market has been boost in 2015. The survey yielded 3.6% proportion of failure rate as compared to the Truscan 2010 survey of 19.6% of failure rate. Also all malaria products sampled throughout the supply chain passed QA tests.

7.2 Challenges

1. Insufficient funding is a major challenge across all branches of the NMEP and this has deterred the implementation of some pre-planned activities for the year under review.
2. Delays in the procurement of commodities for the setting up of six additional vector surveillance sentinel and resistance monitoring sites.
3. Inadequate human resource capacity to manage data at sub national levels
4. Delay in the payment of campaign personnel at state level as well as procurement of implementation tools for routine/continuous LLINs distribution
5. The Programme lack the technical and financial support for training on M&E (Data Management) to build capacity of data managers on the harmonized DCTs
6. Delay or sometimes lack of data transmission from states especially Secondary Health facilities.
7. Civil unrest in some parts of the country, which has impeded commencement, monitoring and tracking progress of implementation.
8. Inadequate consumption data for quantification and supply planning. As well as delay in the engagement of third Party logistics agents (3PLs) hindered the distribution of commodities across the various levels thereby causing stock out in the States as well as health facilities

7.3 Recommendations

1. Need to increase domestic financing and harness opportunities from development partners
2. Provision and prompt disbursement of funds for implementation of Programme activities
3. Fast track the procurement of LLINs for Routine/Continuous distribution in other 13 States not covered under GF NFM as well as intensify approval for the procurement of LLIN Net Hangers Kit in order to improve utilization
4. Early provision of counterpart funding (Incentive funding for GF for procurement and distribution of LLINs for replacement campaign in Six high burden States
5. Government and Partners support for implementation of IRS and LSM for malaria control through the Public Private Partnership model.
6. Periodic refresher training and capacity building of staffs to improve performance
7. Engagement of a dedicated data clerk in health facilities especially those with patient high turnover to support data entry and improve transmission
8. Inclusion of training on HMIS in the curriculum of schools of Health Technology. This is to acquaint CHEW AND JCHEW with requisite skills for data management as they are the dominant HCWs in peripheral hospitals and the custodian of HF data.
9. Use of third party logistics agent for commodities distribution and timely distribution of commodities to health facilities remains key ingredient for maintaining stock in of malaria commodities.
10. Monthly monitoring and supervision by state and LGA team to health facilities must be emphasized and encouraged so as to provide opportunity for OJT to health facility staff.