Seasonal Malaria Chemoprevention Programme Start-Up Guide

Nigeria

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Funded by:

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Abbreviations and Acronyms

ACT	Artemisinin-based Combination Therapy
ADR	Adverse Drug Reaction
AE	Adverse Event
AL	artemether / lumefantrine
AQ	amodiaquine
BMGF	Bill and Melinda Gates Foundation
CCG	Community Care Givers
CHW	Community Health Worker
DOT	Directly observed therapy
iCCM	Integrated community case management
HF	Health Facility
HFW	Health Facility Worker
HMIS	Health Management Information Systems
LGA	Local Government Area
LLIN	Long Lasting Insecticidal Net
LMIS	Logistics Management Information System
MDA	Mass drug administration
M&E	Monitoring and Evaluation
MFP	Malaria Focal Person
MOH	Ministry of Health
MS	Medical Store
NAFDAC	National Agency for Food and Drug Administration and Control
NGO	Non-Government Organization
NMCP	National Malaria Control Programme
NMEP	National Malaria Elimination Programmer
PV	Pharmacovigilance
RDT	Rapid Diagnostic Test for malaria
SAE	Serious Adverse Event
SBCC	Social and Behaviour Change Communication
SCM	Supply Chain Management
SMC	Seasonal Malaria Chemoprevention
SMEP	State Malaria Elimination Programme
SP	sulfadoxine / pyrimethamine
TOT	Training of Trainers
WHO	World Health Organization

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- Nigeria Federal Ministry of Health
- National Malaria Elimination Programme of Nigeria
- State Ministry of Health of Katsina and Jigawa States
- State Malaria Elimination Programme for Katsina and Jigawa States

1. OVERVIEW of SMC

1.1 About this Start-Up Guide

In many countries in the Sahel sub-region of Africa, malaria transmission is notably seasonal, with most of the disease burden occurring during a distinct rainy season. In recent years, seasonal malaria chemoprevention (SMC) has emerged as an approach to prevent malaria among children aged 3-59 months in areas where malaria transmission is highly seasonal. SMC involves the administration of monthly treatment courses of a combination of antimalarial drugs with the objective of maintaining therapeutic antimalarial drug concentrations in the blood throughout the period of greatest risk.[1]

The purpose of this Start-Up Guide is to provide the Nigeria National and State Malaria Elimination Programmes, implementing partners, and stakeholders with a practical guide to planning, implementing and evaluating a sustainable programme for seasonal malaria chemoprevention (SMC) in northern Nigeria.

This guide contains the processes, procedures, activities and milestones for each phase of the SMC implementation process. The annex contains suggested SMC programme tools, checklists and templates.

Start-Up Guide Objectives

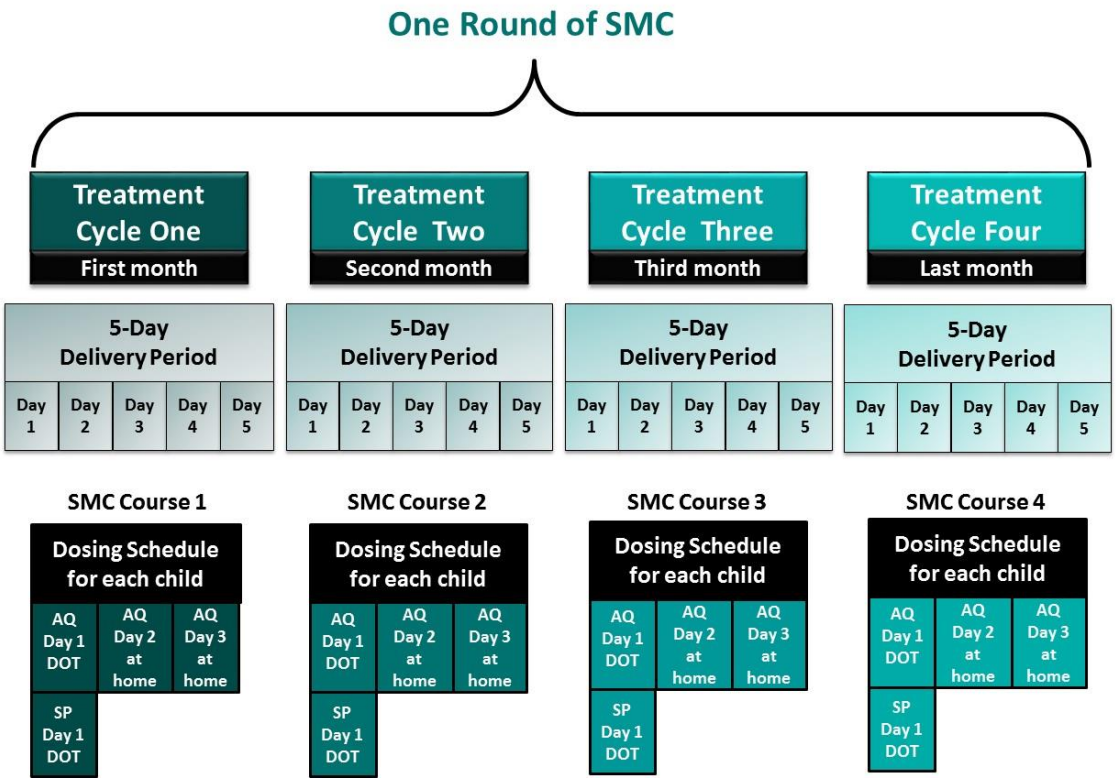
- To understand the phases of the SMC implementation process and be able to develop and execute a workplan for a national SMC programme in northern Nigeria.
- To know what systems need to be in place in order to plan, manage, and coordinate all six core functional areas of SMC.
- To develop and implement an effective SMC micro-plan at the state, LGA and community level.
- To evaluate the impact of the SMC programme on an annual basis in order to drive future micro-planning and funding.

[1] WHO Policy Recommendation: Seasonal Malaria Chemoprevention (SMC) for Plasmodium falciparum malaria control in highly seasonal transmission areas of the Sahel sub-region in Africa. World Health Organization, 2012.

1.2 SMC Glossary of Terms

- **Seasonal Malaria Chemoprevention (SMC)** is the intermittent administration of full preventive treatment courses of antimalarial medicines given during the rainy season to prevent malaria. The objective of SMC is to maintain therapeutic antimalarial medicine concentrations in the blood throughout the period of greatest malarial risk.
- **SMC Drug Administration**—1 dose of sulfadoxine / pyrimethamine and 3 doses of amodiaquine (SP+AQ) given each month for 4 months to children between the ages of 3 to 59 months.
- **SMC Course**—a period of 3 days in which a full course of SP+AQ is given. Each child should take 1 course of SMC drugs each cycle.
- **SMC Cycle**—a 1 month interval between each course of SMC drugs. There are 4 cycles in each round.
- **SMC Delivery Period**—the number of days within each cycle when SP+AQ are distributed to eligible children.
- **SMC Round**—one transmission season consisting of 4 monthly cycles.
- **Community Caregivers**—paid or volunteer community health workers recruited and trained to deliver SMC drugs to eligible children.
- **Door-to-Door Delivery**—drugs distributed by Community Caregivers (CCGs) in the child's home.
- **Fixed-Point Delivery**—central location where SMC drugs are delivered by CCGs.

Figure 1: Illustration of 1 Round of SMC



1.3 What is Seasonal Malaria Chemoprevention?

SMC is defined by the World Health Organization (WHO) as the intermittent administration of full treatment courses of an antimalarial medicine during the malaria season to prevent malarial illness by maintaining therapeutic antimalarial medicine concentrations in the blood throughout the period of greatest malarial risk.

What is the WHO policy recommendation for SMC?

The WHO recommends SMC in areas of highly seasonal malaria transmission across the Sahel sub-region of Africa. A complete treatment course of sulfadoxine-pyrimethamine plus amodiaquine (SP+AQ) should be given to children aged between 3 and 59 months at four monthly intervals, beginning at the start of the transmission season, to a maximum of four doses during the malaria transmission season (provided both drugs retain sufficient antimalarial efficacy).[2]

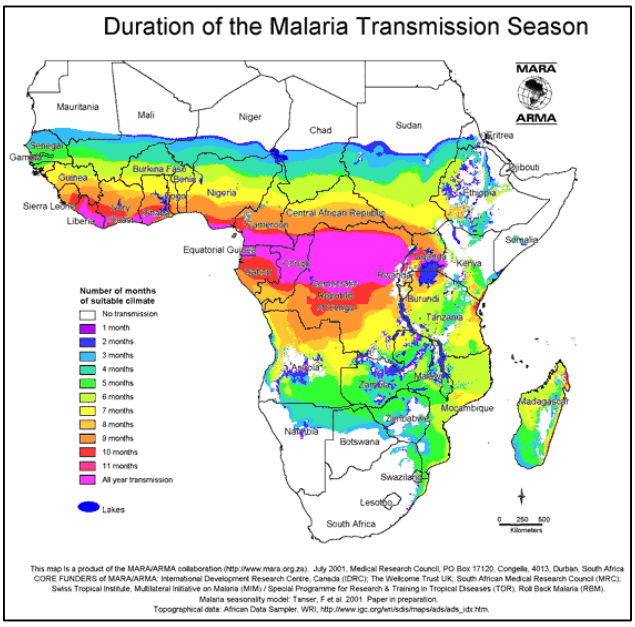
The WHO policy recommendation for SMC is based on the results of seven studies conducted in areas of highly seasonal malaria transmission in the Sahel and sub-Sahel regions of sub-Saharan Africa between 2002 and 2011. Evidence from these studies suggests that SMC with SP+AQ administered monthly for up to 4 months during the malaria transmission season in children aged 3–59 months.

The objective of giving SMC medicines is to maintain an adequate level of anti-malarial medicine concentrations in the blood in order to kill the malaria parasite during the period of high malaria transmission. This intervention should be done in combination with other malaria prevention methods, especially sleeping inside an LLIN every night.

Where is SMC effective?

SMC is effective in areas where malaria transmission lasts less than 4 months.

SMC is recommended in areas of highly seasonal malaria transmission throughout the Sahel and sub-Sahel region from The Gambia and Senegal to parts of Sudan. Key countries include Nigeria, Niger, Burkina Faso and Mali, where approximately 14 million children under five are at risk in areas suitable for this approach.[3]



[2] Ibid.

[3] WHO Seasonal malaria chemoprevention with sulfadoxine–pyrimethamine plus amodiaquine in children: A Field Guide, July 2013

When selecting targeted areas for SMC implementation, the following should be considered:

- Malaria transmission and the majority (> 60%) of clinical malaria cases occur during a short period of about 4 months;
- The clinical attack rate of malaria is greater than 0.1 attack per transmission season in the target age group; and SP and AQ remains efficacious (> 90% efficacy).[4]

What is the target population for SMC?

SMC is indicated for healthy children between the ages of 3 to 59 months.

Children under five are the most vulnerable to malaria illness and likely to die from severe infection. Their growth and development are most affected by repeated attacks of malaria and the development of anaemia.

Approximately 40 million children under five living in the Sahel region can benefit from SMC. It is estimated that 150,000 childhood deaths from malaria can be prevented each year.[5]

What are the expected benefits of SMC?

- ***Prevents approximately 75% of all malaria episodes***
- ***Prevents approximately 75% of severe malaria episodes***
- ***May decrease child mortality by about 1 in 1000***
- ***Probably reduces the incidence of moderately severe anaemia***
- ***Does not result in an increase in clinical malaria cases in the subsequent transmission season after 1 year of SMC, although the consequences of implementing SMC for several years have not yet been evaluated***

WHO Seasonal malaria chemoprevention with sulfadoxine–pyrimethamine plus amodiaquine in children: A Field Guide, July 2013.

[4] WHO Seasonal malaria chemoprevention with sulfadoxine–pyrimethamine plus amodiaquine in children: A Field Guide, July 2013.

[5] Cairns, M. et. Al. Estimating the potential public health impact of seasonal malaria chemoprevention in African children. 2012. Nature Communications. Dol: 10.1038/ncomms187

What are the current recommended SMC prevention treatment drugs?

Currently the only two drugs recommended by the WHO for SMC are oral sulfadoxine / pyrimethamine (SP) plus amodiaquine (AQ). These drugs were selected because they are both relatively safe, and inexpensive; they do not include artemisinin derivatives, and in clinical trials SP and AQ have demonstrated better protection from malaria in comparison to other drug combinations.[6]

AQ is given daily for three consecutive days at monthly intervals beginning at the start of the malaria transmission season (rainy season), up to a maximum of 4 months. A single dose of SP is also given concomitantly on the first day of each monthly interval. A full course of each drug must be taken in order for SMC to be fully effective.

The dose of SP and AQ is dependent on the age of the child.

- Infants 3 to <12 months: SP 250/12.5 mg and AQ 75 mg
- 12 to 59 months: SP 500/25 mg and AQ 150 mg

SP and the first dose of AQ are usually administered by a community health worker or health facility worker under Direct Observed Therapy (DOT). The 2nd and 3rd doses of AQ are given to the mother to give to the child daily at home.

1.4 SMC in Nigeria

Areas of Nigeria Eligible for SMC

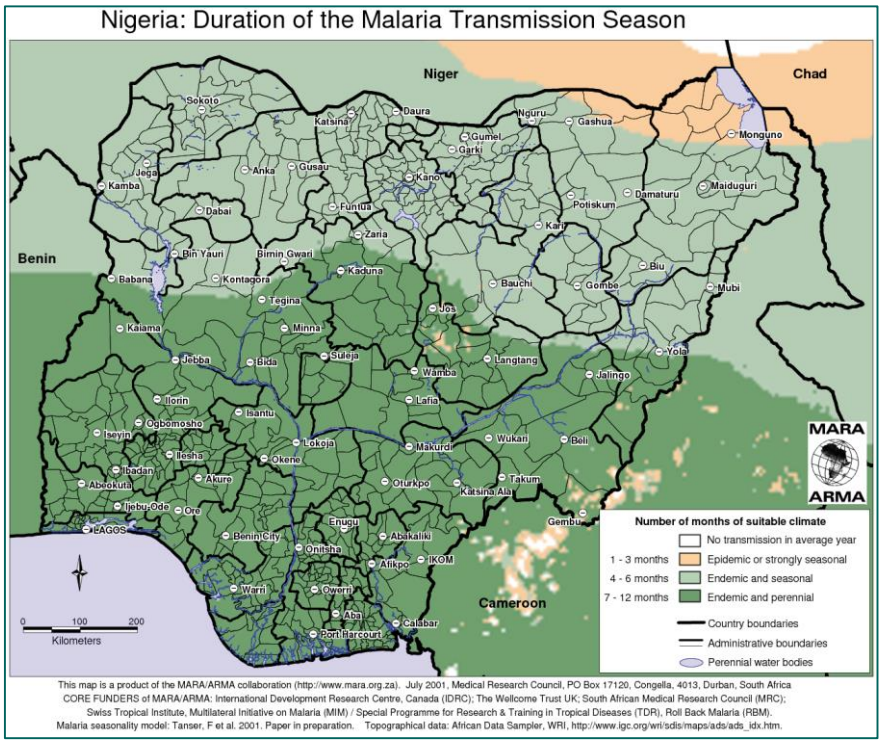
Malaria is transmitted throughout Nigeria, with 97% of Nigerian's living in malaria transmission areas.
Malaria accounts for around 60% of all health centre visits in Nigeria, 30% of hospitalizations, and some 300,000 deaths each year.
Patterns of transmission vary widely across Nigeria, ranging from year-round transmission in the south to three months or less in the north.

With the current Malaria Strategic Plan 2014-2020, the NMEP is adopting the WHO guidelines for seasonal malaria chemoprevention in areas of Nigeria with seasonal transmission of malaria.

Districts within nine of Nigeria's 36 states are eligible for SMC, with approximately 11 million eligible children. All of these states are in Nigeria's far north, in the Sahelian climatic zone. The areas of northern Nigeria where malaria transmission lasts less than four months presents an opportunity for those at risk to benefit from the implementation of SMC. Whereas the feasibility and effectiveness of SMC has been demonstrated elsewhere, the approaches to implementation, which require high coverage levels, have to be contextualised to fit the local setting.

[6] Sokhna C et al. A trial of the efficacy, safety and impact on drug resistance of four drug regimens for seasonal intermittent preventive treatment in Senegalese children. *PLoS One*, 2008, 3: e1471.

Thus there is a need to explore possible approaches in the Nigerian context that will provide effective delivery systems for the eventual scaling up of the intervention to cover areas in northern Nigeria with highly seasonal malaria transmission.

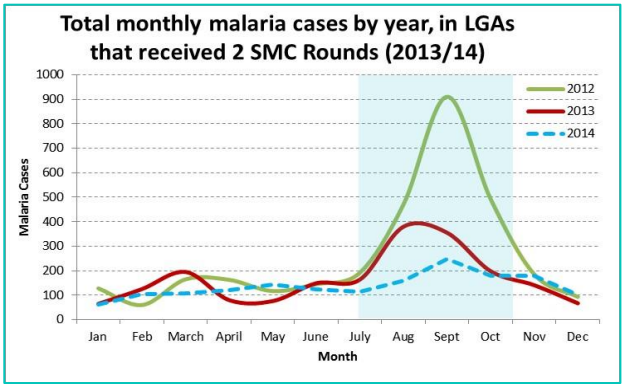


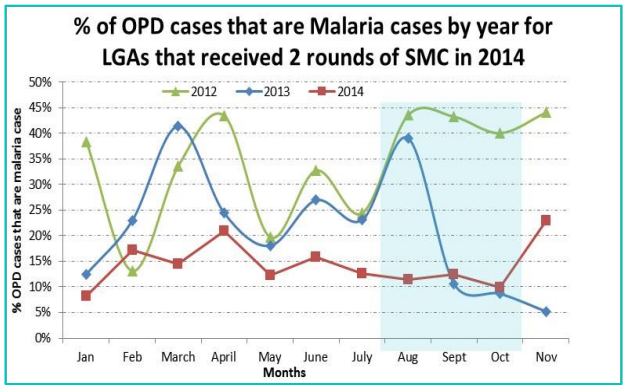
Nigeria's experience with SMC

With funding from the Bill & Melinda Gates Foundation, SMC was introduced by Malaria Consortium and state health authorities in Katsina state in 2013 and the following year in Jigawa state through SuNMaP. Kano State also has experience with SMC in partnership with the Clinton Health Access Initiative (CHAI).

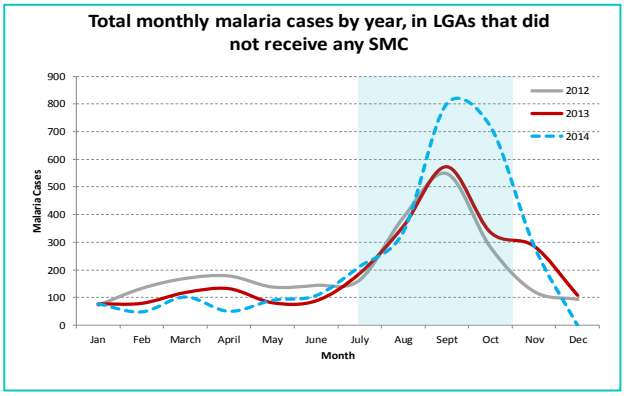
In 2013, over 150,000 children were protected from malaria during the transmission season with monthly doses of SP+AQ. Over 487,000 doses of SP+AQ were distributed in three cycles during the transmission season with average coverage of 85 percent.

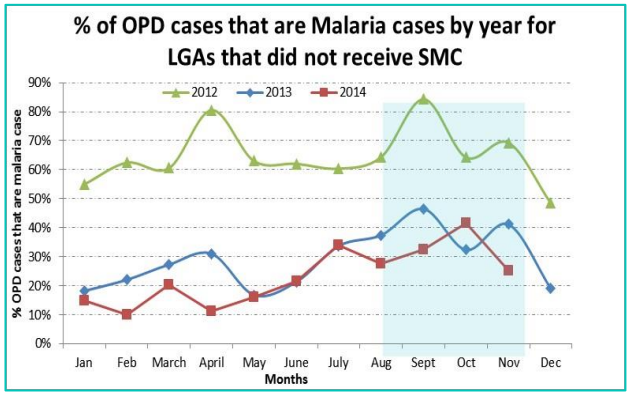
The following graphs depict the progressive impact of SMC on number of reported malaria cases and % of OPD malaria cases over a two year period (2013-2014) in LGAs in Katsina state, as compared to the prior year (2012) before SMC was implemented.[7]





The following graphs depict number of malaria cases and % OPD malaria cases from sentinel sites in LGAs in Katsina state which did not receive SMC over the same three year period (2012-2014).[8]





In 2015-16, the ACCESS-SMC project will support the Nigeria NMEP and its state level counterparts to implement SMC in 17 local government areas (LGAs) of Sokoto and Zamfara states, providing SMC drugs to 792,132 children.[9]

[7] Courtesy of Geoffrey Namara. Senior M&E Specialist, Malaria Consortium. 2014.

[8] Ibid.

[9] http://www.access-smc.org/news/nearly-800-000-children-to-receive-malaria-protection-in-northern-nigeria

2. GETTING STARTED

The National Malaria Elimination Programme (NMEP) is responsible for providing the overarching policy for SMC, and working with states and local governments to execute the implementation framework for an SMC Programme.

Tips for Implementing a Successful SMC Programme Start-Up

1. Ensure policies and funding in place to support the programme.
2. Involve all stakeholders in the planning process and build relationships.
3. Establish which core management systems within in the NMEP need to participate.
4. Determine when SMC needs to be deployed and delivered—*begin with the end in mind.*
5. Initiate early resource mobilization, including commodity quantification, mapping, estimation of needs and procurement.
6. Identify which activities need to be completed.
7. Ensure the activities support the objectives set out by the NMEP.
8. Estimate how long it will take to complete each activity.
9. Estimate the resources required to complete each activity.
10. Identify who will be responsible for ensuring the activity is initiated and completed on time.
11. Sequence the planned activities—linear, concurrent and dependent.
12. Develop an implementation timeline or Gantt chart.
13. Write a risk management plan.
14. Review the schedule regularly and adjust.
15. Document the progress against the workplan.
16. Share outcomes and impact with stakeholders.

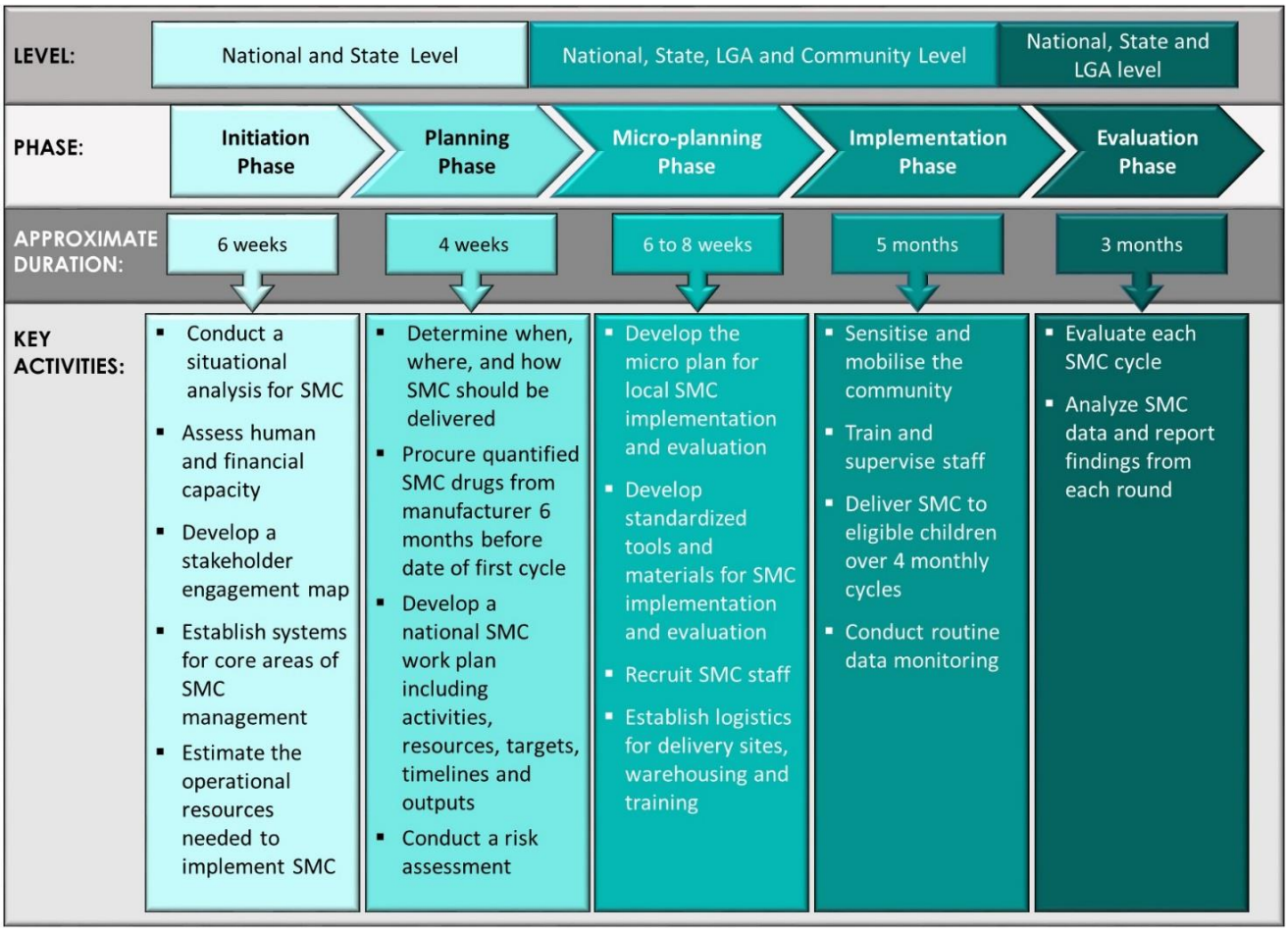
2.1 Five Phases of the SMC Implementation Process

An effective SMC programme is based on a well-defined process which is linked to the seasonality of malaria transmission. There are 5 phases to executing an SMC programme:

1. **Initiation Phase**
2. **Planning Phase (national and state level)**
3. **Micro-Planning Phase (LGA and community level)**
4. **Implementation Phase**
5. **Evaluation Phase**

Because of the seasonal timing of SMC implementation, it is important to begin each phase of the SMC implementation process early enough to be able to plan, procure drugs, complete all of the activities and be able to deliver SMC in time before the rainy season begins. Several key activities, milestones and outputs must be achieved during each phase in order for successful and timely implementation of SMC.

Figure 2: SMC Implementation Process Framework for one round of SMC

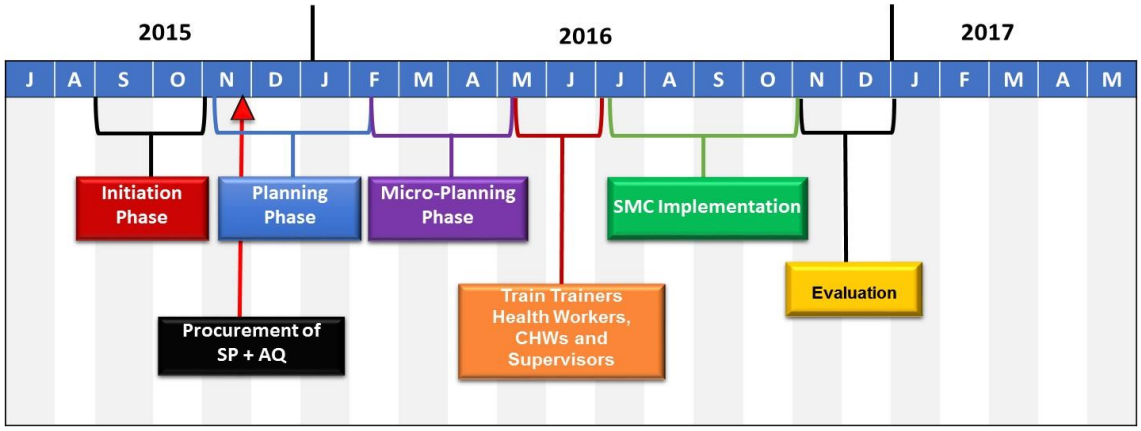


See Annex 1 for an outline of the key activities for each SMC Phase.

2.2 SMC Timeline

Begin with the end in mind. Once the seasonal rainfall patterns in the targeted areas where SMC will be implemented have been determined, an estimated date to begin SMC implementation and drug delivery can be established. Moving backwards, determine the milestones for each phase of SMC.

Figure 3: Sample SMC Timeline

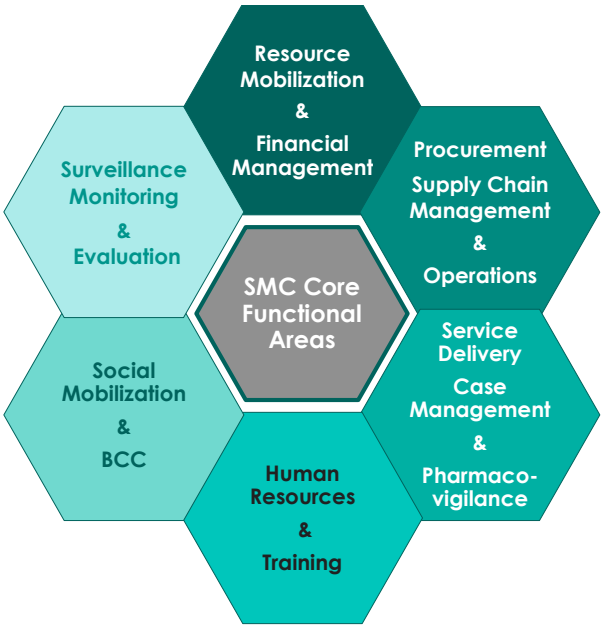


See Annex 2 for the SMC Timeline Planner.

2.3 Core Functional Areas of SMC

The following six core functional areas of SMC should be consistent with the technical working groups existing within the NMEP. Engaging technical focal persons or instituting a steering committee from each of these areas will help to focus SMC activities for each of the five phases of the SMC implementation process. A description of the role of each core functional area can be found in section 3.4.

Figure 4: Core Areas of SMC Planning and implementation



3. SMC INITIATION PHASE

The goal of the SMC initiation phase is to determine the feasibility of implementing SMC at a national level. During the initiation phase information and data needs to be gathered to make a decision whether to adopt SMC in designated areas as a medium or long-term programme. During this phase it is important engage stakeholders and implementing partners, and to establish systems, leadership and management for each the six core functional areas of SMC. During this phase an estimation of resources needed to implement SMC need to be verified in order to determine the viability of SMC.

There are five key activities during this phase. It should not take longer than 6 weeks to complete this phase.

3.1 Conduct a Situational Analysis for SMC

A situational analysis for malaria is an activity conducted within the NMEP as part of the national malaria programme review. During this review a comprehensive analysis of the current burden of disease, demographics, and malaria incidence and transmission patterns are obtained. In addition, an evaluation of the national and state health system and malaria prevention and control initiatives are assessed. In order to guide informed decisions for SMC, a situational analysis for SMC should also be conducted.

See Annex 3 for a List of Information to Obtain in the SMC Situational Analysis.

3.2 Assess Human and Financial Capacity for SMC

A capacity assessment provides an opportunity to determine the numbers, cadres, and types of human resource needed, evaluate existing systems, and determine the costs of SMC at the national, state, and local level. Information collected from the capacity assessment will help to understand existing resources, identify where and what technical assistance is needed, identify what has worked well with previous SMC programs (if any) and guide what remains to be strengthened. The capacity assessment should be a participatory process involving a dialogue with multiple stakeholders.

See Annex 4 for a list of Information to Obtain for the SMC Capacity Assessment.

3.3 Develop a Stakeholder Engagement Map

In order to implement a sustainable national SMC programme it is essential to engage a range of committed stakeholders and implementing partners who are able to actively participate in and influence the decision-making process.

Stakeholders for SMC are the same as those in other malaria or health programmes. They often include policy makers and implementers from both health sectors public involved in malaria control and elimination. Stakeholders for SMC should include members from the NMEP, SMEP, ministry of health (MoH), NAFDAC, donors, international agencies, in-country partners, political and religious leaders, regional and state leaders, procurement and supply chain organisations, community leaders and members of the community.

Careful coordination of relationships with all collaborating stakeholders at all levels is essential to ensuring that all aspects of the SMC workplan is executed smoothly. Once the stakeholder engagement map is completed, invite key stakeholders to an initiation meeting to introduce the SMC programme goals and objectives and to gather input and recommendations.

See Annex 5 and 6 for examples of the Stakeholder Mapping Process and Checklist.

3.4 Establish Systems for Core Functional Areas of SMC

Local ownership of SMC is essential to successful planning and implementation. This can be achieved by establishing technical working groups or steering committees for each core functional area of SMC at both the state and LGA level. The steering committees should each have defined membership and leadership and should be coordinated by the SMC focal person in the NMEP and SMEP.

Resource Mobilization and Financial Management

The role of SMC resource mobilization is to ensure adequate, stable, and predictable financial resources from internal and external donors and to carefully manage available resources for the SMC programme.

The role of the financial management is to develop a realistic budget for efficient planning, delivery and evaluation of 4 SMC cycles, and to administer funds and regularly monitor finances to ensure value for money.

The greatest expense of delivering SMC are the cost of drugs and the incentives paid to health workers. The estimated cost in 2014 for four cycles of SMC in northern Nigeria was $3.77 USD per child/per year.[10] Cost of SMC should be analyzed annually to account for currency exchange rates, cost of drugs and fuel, inflation rate, delivery methods, settings and efficiencies and to determine where costs can be controlled.

[10] Cost Analysis Report of SMC Project in Katsina 2013-2014. Geoffrey Namara, et.al., Malaria Consortium 2015.

Procurement, Supply Chain Management and Operations

Having reliable access to affordable and quality-assured commodities is critical for the success of the SMC programme. An effective procurement and supply chain management (SCM) system must be in place at the national and service delivery level. SCM should follow established principles and be flexible to the varied settings where SMC will be implemented.

The role of procurement and SCM is to plan and manage the logistics of all activities involved in quantifying, ordering, purchasing, importing, transporting, storing, distributing and ensuring quality of SMC commodities, especially drugs. It also includes communicating and coordinating with international procurement agents and regulatory authorities regarding registration of imported SMC drugs, and clearing them with customs officials including waivers for taxes and tariffs.

Service Delivery, Case Management and Pharmacovigilance

The role of service delivery and case management is to ensure the safe delivery of SMC drugs to children at all levels of the health system. This core area is responsible for ensuring policies and standard operating procedures for SMC service delivery are in place, and for communicating and ensuring they are followed by all persons responsible for delivering SMC drugs to eligible children.

Service delivery and case management focal persons should work closely with all other SMC core area focal persons to ensure that SMC drugs are available before the rainy season, that all levels of health facility and community level staff are adequately trained, and that systems are in place before each SMC cycle.

The role of pharmacovigilance (PV) is to monitor the safety of SMC drugs in close collaboration with the National Agency for Food and Drug Administration and Control (NAFDAC). This core area ensures correct pharmacovigilance procedures are followed and all serious adverse events (SAEs) to SMC drugs are reported and appropriately managed.

Human Resources and Training

The role of human resources (HR) and training is to ensure that the right number of people, with the right skills, are ready at the right time, and in the right place to implement the SMC activities correctly and efficiently.

Human resources is primarily responsible for developing policies and standard operating procedures for recruiting, hiring and compensating all staff responsible for caring out SMC activities.

Training is responsible for developing standardized competency-based training materials and ensuring all staff have the required knowledge and skills to perform their responsibilities before, during and after SMC delivery.

Training also ensures that performance-based supervision of the various levels of health workers is implemented to monitor competencies of health facility and community workers.

Training materials should be contextually designed for the local culture, literacy and language. They should also incorporate participative adult learning principles to maximize retention and application of skills.

A standardized instructional design approach should include an outline of who the training is intended for (including a cascade of training), the learning objectives which should be met, how participant learning needs will be determined, a detailed agenda, and the tools which will be used to evaluate knowledge and skills.

It is important to conduct a structured training needs assessment for SMC well in advance to allow time to develop, translate and pre-test materials. The duration of SMC training should include time to practice skills in the classroom. Training should be repeated each year before the beginning of the first SMC cycle.

Social Mobilization and Behaviour Change Communication

The role of social mobilization and behaviour change communication (SBCC) is to work closely with stakeholders, individuals and communities to support behaviour and social change for optimal and effective uptake of the SMC intervention. One to the primary responsibilities of functional area is to sensitize and mobilize all levels of service delivery staff, political and religious leaders, and community members.

Another role of SBCC is to develop a communication plan that outlines the key SMC messages for the various groups of stakeholders, the media and communication formats which will be used, and how communication materials such as posters and job aids will be designed for the context, language and literacy level of each intended audience. Part of the communication plan should also include how to handle rumours or negative press which could make community members reluctant to participate in an SMC campaign.

Surveillance, Monitoring and Evaluation

Monitoring and evaluation (M&E) of data is an essential and necessary component of all NMEP activities. The primary role of M&E of SMC is to measure the performance of the SMC programme and provide an analysis to determine to what extent SMC programme interventions achieved their intended objectives and targets. In addition to analysing outcomes and impact, M&E examines the processes that were followed to understand how and why interventions led to the results they did, and ideally, what components made a difference and which ones were most effective.

Routine monitoring during SMC is intended to measure the performance of the SMC programme over time to determine how resources are being used, what services are being provided, and how well they are being delivered. SMC monitoring data is collected through data recording tools, regular reporting, surveillance systems and periodic surveys. By periodically reviewing the data progress can be monitored to identify trends and potential barriers or problems, and when possible, adjust the strategy of SMC interventions.

SMC surveillance is conducted by comparing malaria outcomes from catchment areas where SMC is implemented to catchment areas without SMC (sentinel sites).

See Annex 7 for examples of the Core Functions for each Functional Area of SMC.

3.5 Estimate the Resources Needed to Implement SMC

Prior to beginning the planning phase, the last piece of essential data to obtain is a realistic estimation of the resources required to implement SMC in northern Nigeria. This information will be vital to determine the feasibility of SMC and whether any additional resources need to be requisitioned, or if SMC could be implemented in fewer areas.

In addition to the overall costs of commodities and distribution, it is important to determine the costs needed for SMC operations. These include costs for recruiting and hiring field staff, training all levels of health workers, supervisors and CCGs, and resources for communication, M&E and operational research.

The estimated projected cost should also include the projected cost savings from the benefits of prevention of malaria cases and fewer hospitalizations.

See Annex 8 for a sample of the SMC Demand Calculator.

Questions to consider during the initiation phase

- *What is the seasonality of malaria transmission in the country?*
- *What are the rainfall patterns in the country or region?*
- *What is the incidence of malaria in the country or region (transmission intensity)?*
- *Where will SMC be targeted and who will the target population be?*
- *Is there enough of a target population?*
- *Will implementing SMC contribute to the National Malaria Programme goals?*
- *Is there sufficient budget to sustain SMC over a period of several years?*
- *What are the potential delivery mechanisms such as door to door, fixed central location or pairing with other existing community or MDA systems?*
- *What is the efficacy, availability and cost of SP+AQ?*
- *Is there sufficient human resource capacity to implement SMC successfully during each rainy season?*
- *Who will be responsible for carrying out SMC at the National and sub-national level?*
- *Is SP and AQ registered for use, and if not how soon can this be done?*
- *Is SMC supported in the current National Malaria Strategic Plan?*
- *Are there relevant policies, legal documents and guidelines for SMC?*
- *Will the first-line treatment policy for uncomplicated malaria need to be adjusted?*
- *Are there systems in place to provide information on safety and efficacy?*
- *Is the national PV systems sustainable and effective?*
- *Is there a logistics management information system in place able to generate consumption data?*
- *Who should the drug procurement agent be?*
- *Are procurement procedures clear?*
- *Are health facilities currently equipped to manage SP and AQ and deliver SMC?*
- *Are CCGs currently equipped to manage SP and AQ and deliver SMC?*
- *Is it possible to feed data from the point of SMC delivery in the community into LMIS?*
- *When should the first cycle of SMC delivery be implemented?*

Key milestones for this phase

- Steering committee of focal persons for each core area of SMC planning and implementation are appointed with defined written responsibilities.
- SMC situational analysis completed, documented and shared with stakeholders and SMC focal persons.
- Number of children 3-59 months in each state and LGA quantified.
- Capacity assessment for human and financial resources completed and results documented and shared with stakeholders and SMC focal persons.
- Number of human, operational and financial resources required to implement SMC at the national level estimated.
- National taskforce to oversee the process and coordinate stakeholders established.
- Map of key SMC stakeholders is identified, prioritized and objectives and targeted messages developed for each group.
- Funding sources from national and/or local government, private sector and international donors identified and secured.
- Locations for SMC distribution including state, LGA and villages identified.

4. SMC PLANNING PHASE

The goal of the SMC planning phase is to determine if SMC should be implemented, and if so, where, when and how. The planning phase can begin once all of the data from the initiation phase has been collected and analyzed. The outputs from the initiation phase will help to inform the decisions and logical framework for developing an SMC workplan.

A key output of this phase is to develop a 2 to 5 year national SMC workplan which outlines "how" SMC will be achieved in selected areas. The NMEP is responsible for developing the SMC workplan in coordination with other malaria objectives set out by the NMEP. All of the activities during this phase are executed at the national level, but should involve stakeholders from the SMEP and LGAs.

During the planning phase it is vital to procure enough SMC drugs from the manufacturer. With increasing demands for SMC drugs and a limited supply of pre-qualified drug manufacturers, it is best to submit the order as soon as possible. It is can also take up to 6 months in advance of SMC delivery to obtain the needed regulatory approvals, and waivers of taxes and tariffs for drug importation.

The planning phase should be swift and broad to allow enough time to plan the details during the micro-planning phase. There are 4 key activities during this phase.

4.1 Determine When, Where and How SMC will be Delivered

Once all of the data from the initiation phase has been gathered and analyzed a decision to adoption SMC as a national program needs to be made. This should be a collaborative decision involving all relevant stakeholders. An initial planning meeting should conducted at the beginning of this phase. All key stakeholders should be invited, including technical and financial partners, focal persons and steering committee members from each core functional area of SMC, state and LGA health authorities, and community leaders.

The planning meeting should be led by the NMEP with the objective of reviewing the data obtained from the initiation phase and discussing the feasibility of SMC implementation. If it is decided that SMC is a viable programme then an agreement about where, when, and how SMC will be implemented needs to be made. During this meeting elements of the workplan should be discussed and responsibilities for completion of the different sections of the workplan should be assigned and initiated.

4.2 Procure SMC Drugs from Manufacturer

SMC is a time-critical intervention and making sure the drugs are at the point of distribution in time for the rainy season is crucial. As more countries implement SMC,

there is an increased demand for SP+AQ. Currently in 2015, there is only one pharmaceutical manufacturer that produces WHO pre-qualified SP+AQ.

It is therefore, recommended that the procurement process and ordering of SMC drugs begin as early as six (6) months, or earlier, before the planned date of the first SMC cycle.

The first step in the procurement process will be estimating the population of children aged 3 to 59 months in the areas where SMC will be delivered. SP+AQ can be procured in co-blistered packets containing one full course of SMC drugs for each cycle (1 tablet of SP and 3 tablets of AQ).

Since SMC is delivered in two dosage groups: 3 to <12 months and >12 to 59 months, the number of packets for each age group needs to quantified and then multiplied by 4, to cover every cycle. In addition, a buffer stock between 10 -20% should be included to accommodate for loss, re-dosing and treatment of children from neighbouring locations.

The formula for calculating the number of packets needed annually (1 round) for each age group is as follows:

A. Total number of children under 5.	**A**
B. Number of children 3 to <12 months **= (18% of A)**	**B**
C. 10% buffer stock for children 3 to <12 months **= (10% of B)**	**C**
D. Total number of packets for children 3 to <12 months needed for one cycle of SMC **= (B + C)**	**D**
E. Total number of packets for children 3 to <12 months needed for one round of SMC **= (4 x D)**	**E**
F. Number of children >12 to 59 months **= (77% of A)**	**F**
G. 10% buffer stock for children >12 to 59 months **= (10% of F)**	**G**
H. Total number of packets for children >12 to 59 months needed for one cycle of SMC **= (F + G)**	**H**
I. Total number of packets for children >12 to 59 months needed for one round of SMC **= (4 x H)**	**I**

When ordering SMC drugs consider the language, logos, colours for each dosage group and the instructions that will be used on the drug packaging

See Annex 18 for Sample SMC Drug Packaging.

4.2 Develop the National SMC Workplan

The national SMC workplan should include a detailed plan from each SMC core functional area including expected outcomes, targets and a table describing:

- Activities to be undertaken
- Indicators / measurements of completion or success
- Responsible parties for each activity
- Proposed dates of action and completion
- Resources required
- M&E framework

See Annex 9 for a sample Outline of the SMC Workplan

See Annex 10 for suggested Implementation Plan Activities for Each Core Area

4.4 Conduct a Risk Assessment

A risk assessment is a systematic process of identifying potential negative scenarios that may arise before, during or after SMC delivery, and analysing the impact of each scenario on the success of the programme. Possible scenarios may include SMC drugs not arriving in time for distributions, natural disasters, heavy rains or epidemics which could prevent transportation and access to communities or community gatherings.

During the risk assessment the probability of each scenario is discussed and assigned a score based on how likely it is to occur. Then each scenario is scored based on the potential impact it could have. Risks may or may not be within the control of programme implementers, however a contingency plan to prevent and/or address each scenario should be developed the scenarios with highest risk scores.

See Annex 11 for a sample Risk Assessment Tool.

Questions to consider during the planning phase

- *What resources (human, financial or tools) are needed to complete each planning activity?*
- *Who needs to be recruited to complete the activities in this phase?*
- *Who will be responsible for implementing each activity?*
- *What will be expected of them? (roles and responsibilities)*
- *How long will each activity take to complete based on past experience?*
- *When should each activity begin and when must it be completed?*
- *How should progress be tracked and communicated with stakeholders?*
- *What potential barriers or risks exist implementing SMC during the current year?*
- *Who will conduct the trainings?*
- *How and where will training be conducted?*
- *How many trainings are needed in order to train all staff before SMC delivery?*
- *How will supervision be conducted?*
- *When and how will SMC drugs be procured in order to arrive on time?*
- *How will commodities be transported, stored and managed?*
- *What will be done to mobilize local leaders and the community?*
- *What delivered methods will be used in each community (fixed-point or door-to-door)?*
- *How will SMC be monitored?*
- *How will adverse events be monitored, reported and managed?*
- *How will SMC data be evaluated?*
- *What data needs to be collected and in what format?*
- *How much will it cost to deliver SMC per child?*

Key milestones for this phase

- Total number and location of children eligible for SMC quantified for both age groups.
- Estimated percent of buffer stock calculated including allocation for children from visiting LGAs, states or countries.
- Total number of SMC drugs packets quantified and ordered from manufacturer.
- National workplan completed and shared with all stakeholders at the national, state, LGA, and community level.
- Preliminary timeline for SMC implementation developed with start dates for the first cycle identified.
- Human resources, logistics and financial resources required to implement SMC at the state, LGA and local level outlined and quantified.
- Procedures for inventory management, distribution and reconciliation of SMC commodities mapped out.
- Local health facility support and referral centers established and engaged.
- Plan for social mobilization and advocacy campaigns developed.
- Plan for transportation logistics completed.
- Number of trainings needed for each level determined.
- Training plan with budget completed and submitted.
- Risks assessed and a plan for mitigation defined.

5. SMC MICRO-PLANNING PHASE

The goal of the SMC micro-planning phase is to describe all the logistics and elements required to ensure all of the SMC resources, drugs, and materials are available in the correct quantities, in the right place, and at the right time to deliver SMC to eligible children in the communities. Many of the same elements found in the SMC situational analysis and the national SMC workplan will be included in the micro-plan, however the content should be specific to the communities where SMC will be implemented, and contain detailed information. Similarly, the micro-planning process should outline the logistics, budget and specific activities which will be undertaken at the LGA and community level.

Several key activities from the micro-plan should be initiated and prepared during the micro-planning phase in order to be prepared for the implementation phase.

The micro-planning phase can take up to six weeks to complete. There are 4 key activities during this phase.

5.1 Develop the Micro-Plan

The micro-plan will be the framework for how SMC will be implemented in each targeted area of the country. It should in include the detailed activities, tools, and timelines for each of the core functional areas of SMC at the LGA and community level.

The micro-plan should be developed annually and should reflect any changes in the national malaria strategy, national SMC workplan, budgets and lesson learned.

Developing the micro-plan is a collaborative and participative process to develop the micro-plan. The SMEP is responsible for coordinating the micro-planning process with LGA and local health officials. Stakeholders and members from the state, LGA and community level should be invited to meet and discuss how the national SMC workplan can be applied in their communities. The objective of the meeting should be to create an actionable road map which specifies what will be done, who will do it, how it will be done, and when it will be completed.

Activities within the micro-plan should include how to order, transport, store, distribute and deliver SMC commodities to communities. It also outlines how resources will be allocated, how training and supervision will be done (who, what, when, where), and how and when communities will be sensitized and mobilized to SMC. Therefore, it is

essential that the content of the micro-plan be comprehensive enough so that SMC deployment is well coordinated and managed.

See Annex 12 for a Sample SMC Budget Planner.
See Annex 13 for a sample Calendar for CCGs

The micro-plan should include the persons responsible for conducting and completing each activity, when each activity will begin and end, detailed logistics of need resources (people, money, materials) and how success will be measured.

Once the micro-plan is completed, it should be shared with the NMEP and pertinent national, state, LGA and community stakeholders. It will be important to use this opportunity to gain cooperation from stakeholders in order to execute SMC smoothly.

Outputs of a successful micro-plan:

- A realistic timetable
- Adequate and appropriately distributed supplies and commodities
- Effective training with clearly defined roles and responsibilities for all levels of staff
- Supportive supervision
- An acceptable payment plan
- A comprehensive community mobilization plan
- Organized SMC delivery methods which correspond with the local context of the communities
- Complete and concise reporting and evaluation

Adapted from Preferred Practices for MDA. ICTC. 2013

5.2 Develop Tools and Materials for SMC Implementation

During the micro-planning phase the design, development, translations and pre-testing of all SMC tools needs to be completed. These include data collection forms, training manuals, job aids, and SBCC communication materials. SMC tools should be standardized to ensure consistency in training, messaging and data collection. The development of some materials can be time consuming, therefore, it is recommended to begin developing the materials early to allow time for review, approval and production.

As with other SMC commodities, the quantity of materials to be produced can be significant. It is recommended that the procurement process begin in ample time to secure vendors who can produce quality materials in a timely manner.

See Annex 14 for a List of Suggested Materials and Tools for SMC

5.3 Recruit Field Staff for SMC

In order to begin the activities outlined in the micro-plan, a field staff of qualified professionals needs to be in place. Individuals with experience implementing or managing malaria control programmes or mass drug administration (MDA) should be recruited. Selection of field staff requires identifying roles and responsibilities and reporting structures. This should be followed with the development of job descriptions or terms of reference (TOR), advertisement of positions, interviews and selection of appropriate candidates. Newly hired staff should be properly trained on SMC and job expectations.

Prior to contracting field staff, it is important to ensure that payment and incentive systems are in place. Subsequent to each SMC cycle, performance management should be conducted to provide feedback on their performance.

5.4 Establish Logistics for Delivery Sites, Supply Chain, and Training

The selection of which delivery method will be used to administer SMC drugs to children will depend on the size of the community, costs, and the distance between households. SMC can be delivered at health facilities or in the community, or a combination of both. There are two types of community-based delivery methods commonly used in SMC:

- → Door-to-door, where SMC drugs administered by CCGs in the child's home.
- → Fixed-point, a central location where SMC drugs are administered by CCGs.

Criteria for selection of which method/s will be used should be carefully evaluated and discussed during the micro-planning process, and again after each cycle to determine which methods worked best. It is recommended that CCGs work in teams and conduct delivery activities based on their skills and literacy.

For door-to-door delivery, identify the households in each catchment area which will be visited by each CCG team and map the course of visits for each day of the cycle.

For fixed-site delivery, identify a place to administer SP+AQ in with sufficient shade/shelter from rain and arrange for tables, chairs or mats. Create a plan for crowd control.

See Annex 15 for Criteria for Selection of SMC Delivery Method.

Developing an effective plan for the supply chain of SMC commodities is crucial to the success of SMC. This should include how drugs will be stored and transported, which medical supply stores will be used, and where drugs will be stored before, during and after each cycle. The plan should also outline the specific steps and documentation for how SMC drugs will be requisitioned and distributed, and how accountability and reconciliation will be manged.

Detailed logistics for conducting all the trainings should be outlined and organized during this phase. These include the number of trainers needed and the number of trainings they will each conduct. The dates of each training and number and cadre of training participants needs to be agreed to, along with a system to communicate the location, dates and time of each training. Training venues large enough to accommodate all participants need to be identified and secured. Lastly, the logistics for distribution of materials, transportation and CCG incentives need to be defined.

Questions to consider during the micro-planning phase

- *What is the exact number of children in each LGA and catchment area targeted for SMC by age groups (3 to 12 months and 12 to 5)?*
- *How many packets of drugs for each age group (including buffer stock) are needed for each LGA, health facility and delivery method?*
- *What are the planned dates for each SMC distribution cycle?*
- *How many children can be administered SMC per day for each delivery method?*
- *How many children ages 3 to 59 months are in each household in the area?*
- *How and when will health facilities and communities be sensitized?*
- *How will referrals be managed?*
- *How many community health workers need to be recruited and trained from each LGA and catchment area?*
- *How will SMC staff be recruitment and by when?*
- *Where is the most suitable location for the fixed delivery?*
- *Where are the households located in each catchment area?*
- *What is the best time of day to visit households?*
- *When and where will training be conducted?*
- *How and when will training, BCC, M&E and other materials be produced or procured?*
- *Where will drugs be stored before each cycle and what will the process be for requisitioning drugs from warehouse before each cycle?*
- *How and when will unused drugs be accounted and returned to the medical store at the end of each cycle.*
- *How and when will BCC messages be communicated?*
- *What procedures will be implemented to ensure security of commodities?*
- *What are the names of the village leaders, Imams and other important persons?*
- *How and when will the community be informed of the dates and location of SMC?*
- *Who will mobilize the community to participate in SMC*
- *How will communities be accessed during heavy rains?*
- *How will remote communities be accessed?*
- *How will nomadic groups and neighbouring communities be manged?*

Key milestones for this phase

- Local implementation procedures developed and communicated.

Procurement and Logistics

- Communities and target population estimates finalized.
- Micro-planning maps developed.
- Route plans developed.
- Detailed supervision plan including communication matrix finalized.
- Health facility support plan finalized.
- Procurement support material completed.
- Risk and issue response plan updated.
- Disbursement schedule developed.
- Local offices and warehousing for supplies established.

Case Management and PV

- List of health facility staff names and phone numbers created.
- PV guidelines and forms distributed.
- Safety monitor in each district/region identified and trained for follow-up of serious adverse event.
- Provision of drugs for AE and SAE management verified.
- Plan for capturing data from hospital inpatient records developed.
- SMC health facility reports developed.

Training and Supervision

- Master Trainers and National Trainers selected and recruited.
- TOTs planned and Trainers invited.
- Supervisors, HFWs, CCGs selected and recruited.
- Field staff from core SMC areas recruited and invited to attend required trainings.
- Trainings for each level planned and participants are invited.
- Training materials, job aids, and forms developed, translated, and pre-tested.

SBCC

- Situational analysis of community needs conducted (lessons learned, behaviour analysis, materials review).
- SBCC coordination mechanisms defined.
- SBCC objectives adapted to local context by country team/NMEP and agreed upon with stakeholders.
- Community advocacy, sensitization and mobilization plan completed.

- SBCC strategy outline to include key phases: advocacy activities, community sensitization meetings, community mobilization activities and list of materials as needed and relevant, and feedback platforms in-between cycles.
- Plan for strategy finalization & materials production developed.
- SBCC strategy finalized and sent out to districts as guidance for micro-planning.
- Communications materials produced and dispatched in advance of CCG training.

M&E

- M&E framework and workplan finalized.
- Data bases developed.
- Data management system rolled out.
- M&E tools and forms developed.
- M&E training materials developed.
- Personnel required for M&E training invited to the training workshop.

6. SMC IMPLEMENTATION PHASE

The implementation phase is the time to put all the planning into action and deliver SMC to children safely, efficiently and cost-effectively. The goal of the SMC implementation phase is to train all SMC staff before the first SMC cycle and to sensitize and mobilize the community (local health officials, political and religious leaders, and members) to safely deploy and deliver SMC medicines over four monthly cycles.

During this phase, routine data is collected and monitored to track trends in SMC systems, processes and service delivery in order to guide subsequent cycles. If sentinel sites have been established, to compare the success of SMC sites to those without SMC.

If the micro-planning process was complete and timely, the implementation phase should run smoothly with minimal mishaps. The implementation phase should begin at least 4 weeks prior to date of the first cycle. There are 4 key activities during this phase.

6.1 Sensitize and Mobilize the Community

Community mobilisation will involve meeting with community leaders to discuss SMC community mobilization and to gather information about the needs of the community.

A primary objective of the SMC mobilisation activities will be to communicate and verify that community leaders understand the purpose of SMC and the ages of children that are eligible to get SMC (3 to 59 months) drugs.

During these discussions it will be important to communicate and sensitize community members to the dates and location for fixed delivery and/or door-to-door delivery.

Prior to each cycle, town criers should be engaged to mobilize the community and announce the localtion and duration of SMC delivery.

What to Communcate during Community Sensitization and Mobilisation Meetings:

- Benefits of SMC.
- Target age group for SMC.
- When SMC should be administered.
- Number of SMC cycles in the round.
- Compliance with a full course, cycles and round.
- Potential adverse events and serious adverse events and action to be taken in the event of a serious adverse event.
- Children receiving SMC are not fully protected and may still get malaria.
- The difference between malaria prevention and treatment.
- Malaria case management.
- The importance of other malaria control strategies (such as long-lasting insecticidal nets).
- Addressing negative rumours.

6.2 Train and Supervise Service Delivery and Field Staff

Implementation of SMC training requires careful preparation and exceptional coordination. All of the trainings for each cadre need to be completed prior to the first cycle of SMC distribution. SMC trainings will primarily be for service delivery staff, supervisors and CCGs, but may also include training SBCC, M&E and inventory management field staff.

As opposed to other community health intervention programmes which train large numbers of CCGs sequentially over an extended period, SMC requires training very large numbers of CCGs and supervisors concurrently, over a short period of 2 to 3 weeks. It is vital during the micro-planning process that the number of trainers, CCGs, health facility workers, supervisors, as well as the number of trainings are accurately quantified.

Quantification of all training participants will also guide the quantity needed for procurement and/or production of training materials, service delivery tools as well as selection and procurement of training venues.

See the Annex 16 for a sample Training Enumeration.
See the Annex 14 for a Suggested List of SMC Training Materials.

The goal of the SMC service delivery trainings is to prepare trainers, health workers, supervisors and CCGs to safely deliver SMC to eligible children. In order to accomplish this they must be able to correctly use the SMC tools and how to safely administer drugs to children. Measuring the skills and performance of CCGs and other training participants is an important component to ensuring quality of SMC service delivery. Performance assessment can be done during training as well as during each cycle using a competency checklist.

The aim of SMC supervision is to assess performance of CCGs and health staff during each cycle, and to provide feedback and identify opportunities for improvement within a supportive environment. Supervisors should be trained how to use the *Competency Checklist* to observe the CCG teams to verify that all SMC activities are being performed correctly.

See the Annex 17 for the CCG Core Competencies for SMC.

6.3 Deliver SMC to Eligible Children

The delivery of SMC is conducted over 4 monthly cycles. The number of days of each cycle will depend on the size of the community and the number of eligible children to be treated; usually between 3 to 5 days.

The first days of the first cycle can often be challenging. Once routine systems are established CCGs will feel comfortable with the process. A team of 2 to 3 CCGs should be assigned to the various delivery tasks including a team leader to ensure tasks are completed. Supervisors should rotate among teams each day of the cycle and be available to provide support.

See Annex 19 for a SMC Delivery Checklist.

Prior to each cycle, drug packets for each age group need to be requisitioned, counted and recorded correctly for accountability. This can be done on a daily tally sheet or accountability form.

See Annex 20 for a sample Daily Tally Sheet.

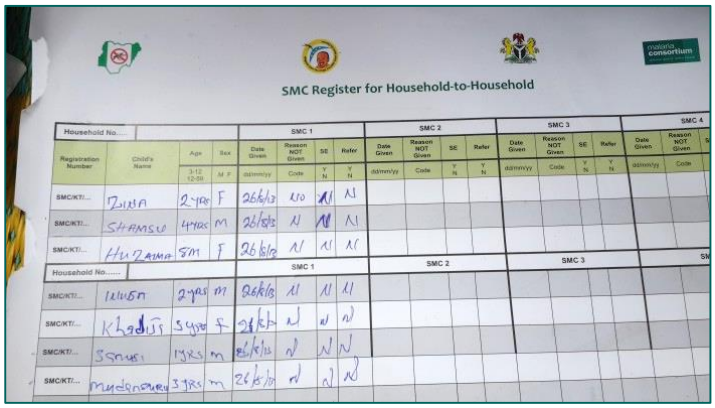
The administration of SMC drugs to children should not be done in a hurry. An assessment of each child to determine eligibility needs to be conducted and recorded. SP and the first dose of AQ should be given under direct observation (DOT). If SP+AQ tablets are not dispersible, they need to be finely crushed in a cup, with a large spoon or in folded paper before mixing with clean water.

After both tablets are administered, children should be recorded in a register and the doses given should be recorded on the daily tally sheet. During this time children should be observed for 30 minutes to ensure no drug reactions occur. Children who are sick or who develop side effects should be referred to the health facility. During this time, mothers and caregivers should be informed of how to give the two remaining doses of AQ at home and what to do if the child becomes sick or develops a possible adverse drug reaction. Mothers should be given a child record card and taught how to record the dates AQ is given each cycle.

At the end of each day of the cycle, the number of drug packets given, wasted and remaining should be tallied and recorded on a daily tally sheet.

See Annex 21 for suggested content of the SMC Job Aid, eligibility criteria and reasons for referral.

6.4 Conduct Routine Data Monitoring



Routine data monitoring is a real-time collection and quick analysis of SMC data conducted during the implementation phase which can proactively identify trends and outliers over time to help improve targeted interventions.

The M&E team from the NMEP and SMEP along with the M&E focal persons for SMC should decide which data should be monitored each cycle and how it will be entered into electronic databases for ease of aggregating the data at the end of each SMC round.

Key milestones for this phase

- Communities are sensitized at least one month before the first cycle and mobilized at the beginning of each cycle.
- Community leaders and members understand the purpose, benefits, and eligibility of SMC.
- All training materials and manuals are printed, produced and/or procured.
- Venues (and lodging if needed) are secured.
- Transportation of trainers and materials is arranged.
- M&E tools and forms printed and supplied to districts and facilities
- M&E staff are trained on data forms, surveys, collection, data entry and monitoring.
- All trainings are delivered for all service delivery levels before the date of each SMC cycle.
- All CCGs and HFWs are well prepared to deliver SMC safely and effectively.
- All CCGs and HFWs have the needed tools to deliver SMC and know how to use them correctly.
- All SMC commodities are available and requisitioned in time for each cycle.
- The full course of the correct dose of SMC drugs is administered to eligible children at the right time.
- All supervisors provide supportive supervision to CCGs and HFWs during SMC delivery.
- Training reports are written and submitted within 5 days of all completed trainings.
- All supervisors provide supportive supervision to CCGs and HFWs during SMC delivery.
- PV forms are available at all health facilities.
- Adverse events identified by CCGs are reported and managed by a health facility worker.
- Referrals are followed -up.
- Potential weaknesses identified through routine data monitoring

7. SMC EVALUATION PHASE

The goal of SMC evaluation phase is to evaluate the successes and challenges during the planning and delivery of each cycle and annual SMC round. During this phase quantitative and qualitative data will be collated from all data sources and analyzed to determine trends and changes in the indicators outlined in the SMC workplan. A complete analysis report, and individual reports, should be submitted to NMEP on an annual basis. The required reports should be outlined in the M&E framework of the workplan. At the end of each round stakeholders at the community, LGA, state and national level should be invited to a meeting to share lessons learned and make recommendations for improvement in the subsequent SMC round the following year.

It can take several months to aggregate and analyze it to be able to produce substantive reports. There are two key activities in this phase.

See Annex 22 for a List of Suggested Indicators for SMC

7.1 Evaluate each SMC Cycle

At the end of each cycle the monitoring data should be aggregated and analyzed to report any trends or barriers which occurred during preparation and delivery of SMC. Some of the trends which are monitored are coverage and availability of drugs, drug stock outs, adverse events, number of children treated each day, number of children who are referred, and community reactions to SMC. The recording tools evaluated include daily tally sheets, patient registers, PV forms, referral forms, and end-of cycle reports completed by supervisors and health facility workers.

Evaluation of data from each cycle should guide any needed changes in processes and procedures and make recommendations for improvement in the subsequent cycles.

7.2 Analyze SMC Data Annually and Report Findings

At the end of each round all data should be collected, aggregated, entered into the database and analyzed. The analyses should strive to answer whether the activities and indicators outlined in the workplan achieved the desired outcomes and impact. Ultimately the analysis should answer whether SMC made a difference preventing cases of malaria and reducing mortality in children under 5.

A cost analysis should also be included which discusses how financial resources were mobilized and whether there was enough resources to cover the expected expenses.

As part of the analysis stakeholders and participants in the SMC implementation should be invited to share lessons learned about processes which worked and did not work, and to make recommendations for improvement the following year. Challenges and best practices should be documented and shared. After all the analyses are completed, written evaluation reports should be submitted to the NMEP.

Questions to consider during the evaluation phase

Planning:

- *How proactive or limited was the participation of the NMEPs, SMEP, local health authorities and implementing partners in the SMC planning and micro-planning process?*
- *How supportive and communicative were the NMEP, SME, local health authorities and implementing partners during SMC planning and implementation? What worked well and what could be improved?*
- *Correct gauging of planning process length*
- *Were assumptions about security, motivation, knowledge & skills, administrative bottlenecks, resources and timelines correct?*
- *Did actual information inform continued review of plans? Were strategies adaptable?*

HR, Training and Supervision:

- *Were there enough qualified staff to implement SMC as planned?*
- *Were the training plans realistic?*
- *Was the time allocated for training time enough for each cadre?*
- *Were CCGs well prepared to deliver SMC?*
- *Where there any gaps or challenges in the participants' ability to learn and retain skills?*
- *Was there enough time to practice and apply new skills during training>*
- *Were the training tools appropriate for each category of participants?*
- *Was appropriate attention given to supervision of CCGs during SMC delivery?*

Procurement and Supply Chain Management:

- *Were the appropriate supply chain logistics for distribution SMC drugs and commodities in place at the beginning of each cycle?*
- *Were the drugs delivered to the sites on time before each cycle? If late, did it affect SMC implementation?*
- *Did the in-country supply chain system work?*
- *Were there any stock-outs of drugs or other supplies?*
- *Were there appropriate mechanisms to re-distribute drugs to places with localised stock outs?*
- *What delivery methods were selected, (fixed point, door-to-door, or mixed)?*
- *Did the selected delivery methods have an impact on results? If so, was it everywhere or with specific ethnicities, demographics, or type of environment (urban vs. rural)?*

Service Delivery and PV:

- *Did any problems arise during drug administration?*
- *Did any adverse events occur during any of the cycles? If, yes, how many were serious adverse events?*
- *How were adverse events managed at the health facilities?*
- *Did the national PV reporting system work?*

M&E:

- *Were the M&E tools appropriate—did they capture what they intended to measure and were they easy to use?*
- *Were the M&E tools used as expected?*
- *Was all required data collected?*
- *Was any key data not collected, missed or unavailable?*
- *Was information during routine monitoring available in a timely manner to allow corrective actions?*

SBCC

- *Were the community sensitization and advocacy communication tools appropriate?*
- *Were the tools useful and effective?*
- *Was participation in SMC as expected, lower or higher?*
- *Which messages were easily conveyed by HW/CCG?*
- *Did community leaders and members understand the SMC messages? If not, which messages were not understood and why?*
- *Which communication channels were most effective in reaching the targeted populations?*

Key milestones for this phase

- Data on children reached and drug distributed collected and summarized on a daily basis.
- All Supervisors, CCGs and HFWs submit the required SMC delivery documentation and reports after each cycle.
- Hospital admissions of < 5 yrs. are captured, coded and reviewed within 1 week (1 month) of SMC cycles.
- Summary PV report are obtained from each health facility.
- Data quality audits conducted during each cycle.
- Data is collated at the LGA and state level after each cycle.
- Data is sent to the national level within 5 days after the end of the cycle.
- Reports are generated and communicated by the M&E functional area at the end of each cycle and round.
- Stakeholders and focal persons from the NMEPs, SMEP, local health authorities and implementing partners are convened after each round to discuss lessons learned, make recommendations for improvement and share best practices.

ANNEX of SMC Tools

Annex 1: Key Activities for Each SMC Phase

Key Initiation Activities:
▪ Conduct a situational analysis for SMC.
▪ Assess human resource and financial capacity and determine where SMC can be implemented.
▪ Map stakeholder engagement.
▪ Establish systems, leadership and membership for each of the core functional areas of SMC.
▪ Quantify the human, logistics and financial resources required to implement SMC at the National level.
Key Planning Activities:
▪ Define and prioritize the objectives, activities, objectives, targets timelines and outputs for each core functional area of SMC.
▪ Develop all required materials and tools needed for implementation, such as training manuals, job aids, data collection forms and SBCC tools.
▪ Define the indicators for SMC monitoring and evaluation and develop an M&E framework.
▪ Prepare a written a 2-5-year national SMC workplan which can be disseminated to national, state and local stakeholders.
Key Micro-Planning Activities:
▪ Quantify the human, logistics and financial resources required to implement SMC at the state, LGA and local level.
▪ Develop standard operating procedures (SOP) to describe the implementation procedures which should be followed locally.
▪ Procure and produce all required materials and tools needed for implementation, such as training manuals, job aids, data collection forms and SBCC tools.
▪ Establish local offices and warehousing for supplies.
▪ Recruit and hire field staff to implement SMC at all levels.
▪ Engage local health facility support and referral centers.
▪ Conduct social mobilization and advocacy campaigns.
Key Implementation Activities:
▪ Orient the town announcers and traditional and religious leaders to mobilize the community to participate in SMC
▪ Train all field staff including trainers, health facility workers, community health workers, supervisors, supply chain managers and data managers.
▪ Manage drug requisition, distribution, accountability and storage.

- Administer drugs to eligible children based on the selected delivery method.
- Manage referrals of sick children at health facilities.
- Monitor, report and manage adverse events.
- Complete and submit the required forms and data collection tools.
- Collect and monitor data sources.

Key Evaluation Activities:

- Collate data collection tools and data sources.
- Analyze and evaluate data.
- Report data based on established SMC indicators.

Annex 2: SMC Timeline Planner

		PLANNING									IMPLEMENTATION												
		Months																					
		Month -1									Month 0				Month 1				Month 2				
		-6	-5	-4	-3	-2	week 1	week 2	week 3	week 4	week 1	week 2	week 3	week 4	week 1	week 2	week 3	week 4	week 1	week 2	week 3	week 4	
Budget Planning		x	x	x																			
Resources Mobilization		x	x	x	x	x																	
Sensitization & Advocacy																							
	National level				x	x	x	x	x	x													
	Sensitization campaigns in villages								for round 1				for round 2				for round 3						
Procurement and supply chain management																							
	Quantification of drug required		x	x																			
	Drug orders			x	x																		
	Drugs (SP - AQ) distributed to district level						x																
	Drugs (SP- AQ) distributed to CHWs							x	x				x	x			x	x					
Trainings																							
	District level						x	x															
	Community health workers								x	x													
Distribution of SMC											round 1				round 2				round 3				
	Catch-ups at health post										x				x				x				
	Return unused drugs to health centre											x				x				x			
	Reporting card sent collected											x				x				x			

Annex 3: Information to Obtain for SMC Situational Analysis

Malaria Situation Content
▪ Burden of malaria.
▪ Transmission and rainfall patterns.
▪ Incidence of malaria nationally and by region (transmission intensity).
▪ Reported incidence from surveillance and trends over time.
▪ Overall and area-specific distribution of malaria incidence per month during a year.
▪ Proportion of malaria cases that occur during the high transmission season.
▪ Monthly distribution of malaria in various parts of the country.
▪ Distribution of malaria cases by age group.
▪ Existing malaria prevention and control activities.
▪ Current first- and second-line treatment regimens for uncomplicated malaria.
▪ Description of national malaria control and elimination policy and guidelines.
▪ Description of service delivery programmes at community level, such as integrated community case management, vitamin A supplementation and de-worming.
▪ Level of quality of health care and functionality at the health facility level, for case management of malaria.
▪ Level of quality of care and scope of service delivery at the community level for community case management of malaria, including referral.
▪ Description of the private sector (formal and informal) in relation to the management of malaria in communities.
▪ Description of the quantity, function, financial incentives and support of CCGs.
▪ Existing knowledge, attitudes and care seeking patterns in the community concerning malaria prevention and treatment.
▪ Description of the relationship between the CCGs and the community, including levels of support to and trust in CCGs, and perceived quality of care.
▪ Existing capacity and quality of reporting by CCGs.
SMC Situation Content
▪ Efficacy of SMC in children under 5.
▪ Previous experience with SMC in country.
▪ Reported safety concerns or resistance associated with SMC drugs.
▪ Targeted areas and expected coverage for SMC, including languages, literacy and culture of the area.
▪ Previous experience with immunization campaign's in targeted area.
▪ Population of eligible children under 5 in targeted area.
▪ Reduction in mortality and morbidity of malaria that might be attributable to SMC.
▪ Other interventions with which SMC might be delivered in combination.

- Latest available data on the therapeutic efficacy of SP+AQ.
- Status and documentation of registration for SP+AQ from NAFDAC.
- Process for obtaining waivers for drug importation.
- Feasibility and acceptability of effective is drug delivery using various delivery methods such as community fixed point, via a door to door system, health facility or a combination of each.
- Feasibility of caregivers /mothers to keep simple patient record cards and recognize adverse events.
- Description of most acceptable and far reaching community media campaigns.

Annex 4: Information to Obtain during SMC Capacity Assessment

SMC Capacity Assessment:

- Estimate the human, logistics and financial resources required for SMC implementation.
- Define available human resources for SMC including health facility workers, community health workers and supervisors.
- Describe the existing functional procurement and supply chain management system in the areas targeted for SMC implementation.
- Determine the efficacy, availability and cost of SP+AQ for use in SMC.
- Review the policies, standards and requirements for procurement and importation of drugs and non-drug commodities.
- Identify requirements for drug importation, custom clearance and Immigration waivers.
- Determine lead times for procurement to guarantee delivery of SMC drugs before the first SMC cycle.
- Define the strengths and weaknesses of the existing pharmacovigilance system.
- Describe strategies for advocacy for community and social mobilization.
- Analyze previous experience integrating malaria prevention strategies into the National Malaria Programme or other health programmes.
- Analyze the capacity needed of prior mass drug administration (MDA) interventions or vaccine campaigns.
- Identify funding sources, including national and/or local government, the local private sector and international donors.
- Determine which SMC delivery mechanisms would work best within the context of identified LGAs and communities
- Describe the number and availability of existing National Trainers and determine number of trainers needed conduct all the needed trainings.
- Cross-check facts and numbers with different levels of government and other agencies
- Prioritize and develop a list of short and long term of capacity needs and provide specific recommendations for how to meet them.

Annex 5: Stakeholder Mapping Process

Stakeholder engagement process:

- Establish a taskforce to oversee the process and coordinate stakeholders
- Identify the relevant groups of stakeholders to engage for SMC.
- Identify all SMC stakeholders at national and international levels, including potential funding agencies.
- Identify individual stakeholders and create a list of names and contact details.
- Categorize stakeholders by their level of power, interest and sphere of influence
- Prioritize key stakeholders based on how likely they are to respond and provide support.
- Initiate contact and communication with stakeholders early the SMC planning process to gain their perspectives about SMC.
- Develop a map of key stakeholders and objectives and key messages to target each group of stakeholder.
- Ensure stakeholders are kept informed, consulted and engaged as necessary.
- Maintain regular contact.

Annex 6: Stakeholder Mapping Checklist

Ministry of Health:

Status	Activity or information to be completed	Documentation and notes
☐	Name of Minister:	
☐	Provide and organogram showing where NMEP, Child Health and Community Development are situated within the ministry structure	
☐	When was the SMC policy approved and implemented?	
☐	How is SMC coordinated within the MOH?	
☐	Is there an iCCM Policy in place? What is the scope? Are there iCCM guidelines? How is iCCM coordinated?	
☐	How are malaria activities financed?	
☐	How is nutrition coordinated?	

Ministry of Finance:

Status	Activity or information to be completed	Documentation and notes
☐	Name of Minister:	
☐	Role and extent of country led financing of malaria:	
☐	Does MOF control donor funds?	
☐	Are there any other sources of finance available, or local funds at national, district or provincial level? (e.g. from governors or foundations)	

NMEP:

Status	Activity or information to be completed	Documentation and notes
☐	Name of Programme Manager:	
☐	Name of SMC focus person/persons within the NMEP:	
☐	Name of person/s in charge of BCC/IEC:	
☐	Name of person in charge of M&E:	
☐	Name of person/s in charge of training:	
☐	Name of person/s in charge of Procurement and Supply:	

Child Health Department:

Status	Activity or information to be completed	Documentation and notes
☐	Name of Minister or Head of Department:	
☐	What is the role of CH in SMC?	
☐	Who is in charge of nutrition interventions?	
☐	Levels of stunting in U5:	
☐	Levels of SAM/GAM in U5:	

Regulatory Authority:

Status	Activity or information to be completed	Documentation and notes
☐	Name of contact person:	
☐	What taxes and tariffs exist on imported drugs?	
☐	Are there waivers for child health products?	

Pharmacovigilance:

Status	Activity or information to be completed	Documentation and notes
☐	Is this a separate PV department or is it part of the regulatory authority?	
☐	Name of PV contact person:	
☐	How is PV data collected?	
☐	How are SAEs responded to?	
☐	Is PV data shared outside of the country with an international safety board?	

Donors:

Status	Activity or information to be completed	Documentation and notes
☐	Name of head of CCM:	
☐	What is the GF grant size? Is SMC included in the new funding mechanism?	
☐	Name of DFID in-country representative:	
☐	Name of USAID/PMI in-country representative:	
☐	Name of UNICEF representative:	
☐	List names and contacts of other donors involved in SMC:	

In-Country Partners:

Status	Activity or information to be completed	Documentation and notes
☐	Name of contact person at WHO:	
☐	Names of RBM partners:	
☐	Names of actors implementing SMC in 2015	
☐	Other contact persons in country with a role in SMC:	

Political and Religious Influencers:

Status	Activity or information to be completed	Documentation and notes
☐	Name of State Governor:	
☐	Names of local level political leaders: (LGA /district level)	
☐	Name of State or District Commissioner for Health:	
☐	Contacts for religious leaders:	
☐	Nomad organisations and contact details:	

In-Country SMC Partners:

Status	Activity or information to be completed	Documentation and notes
☐	Name and ole of contact:	
☐		
☐		
☐		
☐		
☐		

Regional SMC Contacts for Technical Support Functions:

Functional Area	Name	Email
Project Management		
Training		
SBCC		
Service delivery		
M&E		
SCM and Regulatory		
Other Drug related issues		

State Level Information:

Status	Activity or information to be completed	Documentation and notes
☐	Names of states and LGAs where SMC will be implemented:	
☐	Information on the state health structure	
☐	Name of state district Health Director:	
☐	Name of person(s) responsible for SMC delivery at the state level:	

LGA Level Information:

Status	Activity or information to be completed	Documentation and notes
☐	Names of LGAs to receive SMC in current year:	
☐	Map of LGAs to receive SMC in current year:	
☐	Name of medical officer/ LGA head of services:	
☐	Number and type of health facilities in the LGA:	
☐	Existing role of CCGs:	
☐	Financial incentives do CCGs receive? (money, phones, boots):	
☐	Other community mass interventions were completed in the previous year, such as net distribution or MDA:	
☐	Name of person responsible for iCCM in the LGA:	

Annex 7: Core Functions of each Area of SMC

Core SMC Functions of Resource Mobilization and Financial Management

- Determining the overall costs of all SMC programme activities including procurement commodities and equipment, storage, transportation, training, labour, incentives, tools goods and services.
- Monitoring budgets, payments and receipts.
- Submitting financial reports on a quarterly basis.
- Developing the financial management workplan for SMC.

Core SMC Functions for Procurement, Supply Chain Management & Ops

- Determining realistic quantification of SMC commodities including buffer stock.
- Selecting reliable suppliers of high-quality products.
- Negotiating procurement contracts and establishing competitive pricing agreements.
- Ensuring transparency in sourcing, pricing and the management of supplies.
- Procuring the quality assured SMC medicines and cost-effective products in the right quantities;
- Understanding drug importation procedures including customs clearing taxes and tariffs associated with waivers and clearance of SMC commodities.
- Determining the logistics for SMC drug procurement process and procure drugs from the manufacturer early to ensure sufficient quantity is available.
- Ensuring timely distribution of SMC commodities to warehouse facilities and delivery to participating health facilities and communities.
- Developing systems for quality control of SMC medicines and commodities.
- Ensuring SMC drugs product packaging is in a language and format that will be understood by community health workers and caregivers.
- Ensuring sufficient time to use the quantity of drugs before they expire.
- Warehousing of SMC commodities including storage space and capacity to house, manage and track SMC commodities.
- Confirming there is enough storage for SMC commodities at the medical stores and health facilities and ensuring the storage conditions and temperature are adequate.
- Managing inventory of SMC supplies and providing an early warning system about potential or actual problems in the supply chain which will affect the timely implementation of SMC each cycle.
- Managing accountability and reconciliation of SMC medicines from health facilities and community health workers at the beginning and end of every SMC cycle.
- Monitoring all procurement and supply chain activities.
- Ensuring existing laws, policies and regulations support the procurement and supply chain of SMC commodities.

- Ensuring standard operating procedures are in place along the supply chain to safeguard against losses during distribution including leakage, theft, wastage, and expiry.
- Establishing a logistics management information system to generate consumption data.
- Developing the procurement and supply chain management workplan for SMC.

Core Functions of Service Delivery, Case Management and PV

- Developing, reviewing and updating SMC case management and pharmacovigilance policies and treatment guidelines.
- Selecting the delivery method(s) for SMC which will provide >95% of eligible children receiving SMC at monthly intervals during the period of highest malaria risk.
- Identifying SMC focal persons at the national and state level.
- Defining the role and responsibilities of all health cadres of health workers implementing SMC.
- Ensuring that treatment of breakthrough malaria infections during the SMC period of does not include either AQ or SP or combination drugs containing either of these medicines, such as AS+AQ.
- Ensuring alternative antimalarial combinations containing neither AQ nor SP are available ○ in areas where SMC is implemented.
- Ensuring there are sufficient numbers of health workers who can be deployed in each area to treat all children over a period of 3–4 days
- Ensuring the existing referral systems can support referrals during each SMC cycle.
- Ensuring all SMC training materials are current and technically accurate.
- Supervising the quality of SMC service delivery provided by health facility workers and community health workers.
- Ensuring patient adherence to completing the 3-day treatment course each cycle to minimize selection of drug resistance.
- Monitoring and reporting the number of confirmed adverse drug reactions to SMC drugs during each cycle and longitudinally.
- Monitoring and reporting the number doses of AQ + SP administered.
- Monitoring and reporting the number of breakthrough malaria infections and their intervals from the last dose of SMC in order to evaluate the impact of SMC intervention.
- Monitoring and reporting changes in the number of severe malaria cases and malaria deaths in children participating in SMC and comparing them to children not participating in SMC.
- Evaluating the impact of SMC intervention at the local, state and national level.
- Developing the case management and pharmacovigilance workplan for SMC.

Core Functions of Human Resources and Training

- Developing, reviewing and updating SMC HR and Training policies and guidelines.
- Determining the capacity and total number of each cadre required to implement SMC.
- Determining the gap between the number and competency of existing service delivery staff and number of newly skilled staff needed.
- Determining the budget and cost for human resources and training.
- Writing job descriptions and recruiting field staff and CCGs in a timely manner.
- Determining the number of days of work or % time required from each staff member to dedicate to SMC.
- Determining the total number of people to be trained.
- Developing a training cascade scheme outlining total number of trainings, number and type of participants, duration and location of each training.
- Developing, reviewing and updating SMC training materials for each cadre.
- Estimating the cost of each training and developing a training budget including cost of venue, equipment and production of training materials.
- Training trainers, health facility staff, supervisors and community health workers.
- Training other field staff as needed such as warehouse and commodity managers, M&E staff.
- Evaluating the effectiveness of training and developing performance-based competency assessments for supportive supervision.
- Developing the human resources and training workplan for SMC.

Core Functions of Social Mobilization and BCC

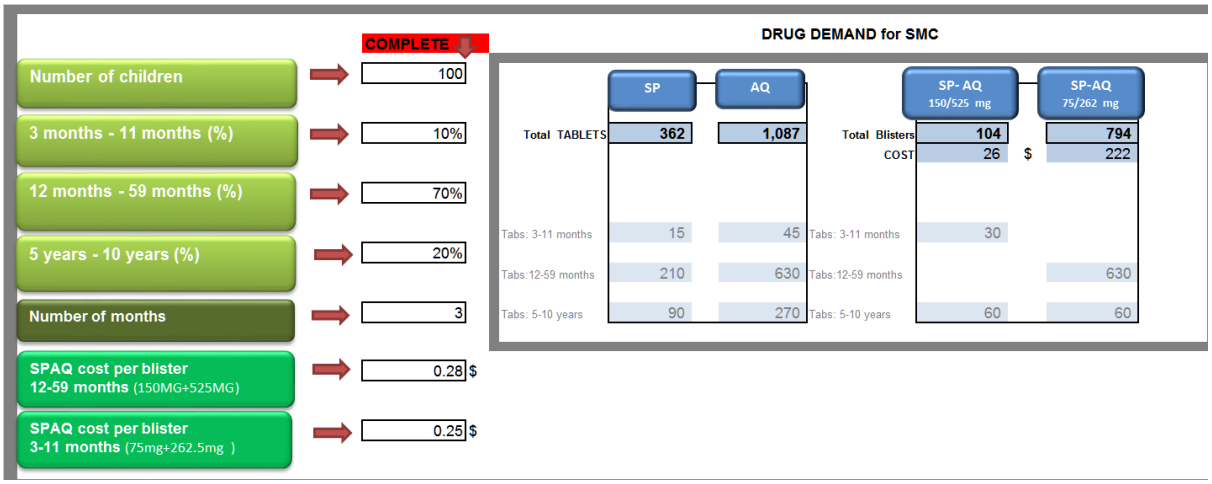
- Appraising the existing National Malaria Communication Strategy and the range of communication opportunities to maximize local ways of communicating.
- Integrating SMC communication activities with other activities for malaria prevention to addresses individual knowledge and behaviour, collective attitudes or norms, societal level policies and regulations.
- Engaging community leaders and members through social mobilisation.
- Mobilizing communities to participate in SMC planning, implementation and evaluation activities.
- Mobilizing leadership and communities to support distribution points or allow distributors in their homes and accept the medicines.
- Providing information in the language the community will understand to reduce risks of misunderstanding and negative perceptions.
- Ensuring stakeholders, communities and caregivers understand what SMC medicine can do, and not do, and the value of SMC for the community
- Including a mix of approaches and platforms in order to advocate for and promote knowledge and understanding about SMC.

- Providing information and education to caregivers and community leaders to ensure adherence to completing a full course SMC medicines and attendance at all cycles.
- Developing a communication strategy outline for SMC
- Developing the SBCC workplan for SMC.

Core Functions of Surveillance, Monitoring and Evaluation

- Developing and updating guidelines and tools for surveillance, monitoring and evaluation of SMC.
- Providing malaria and SMC data for planning purposes.
- Identifying the areas or population groups most likely to benefit from SMC.
- Defining the outcomes and indicators for SMC.
- Developing standardized data collection tools. Including clear instructions for completion.
- Communicating expectations and responsibilities for documenting, reporting and collecting data
- Developing and maintaining databases and training M&E staff in database management, monitoring and surveillance.
- Conducting routine data monitoring each cycle to analyze trends and report major gaps or challenges.
- Collecting data forms periodically and analysing them to ensure the data sources are valid, reliable and timely and provide the data which is intended to measure.
- Storing data in a secure location or database which can be easily retrieved for analysis
- Aggregating and collating data into summarised and standardized formats
- Evaluating the impact of SMC activities on malaria control and prevention outcomes and other malaria and SMC indicators.
- Analysing changes in patterns of disease to assess the impact of SMC measures
- Measuring changes in malaria morbidity and mortality as a result of SMC.
- Contributing to a regional composite database on malaria control and elimination interventions.
- Providing reports on SMC coverage and impact of interventions.
- Documenting data review and analysis procedures.
- Developing the M&E framework for SMC with measurable objectives, targets and activities set out by the National SMC Implementation Plan.
- Integrating SMC data into HMIS systems for sustainability.

Annex 8: SMC Demand Calculator



Annex 9: Outline of the National SMC Workplan

The SMC workplan is a detailed narrative of how to implement the SMC programme. It is usually divided into the following sections:

Executive Summary—a two page summary of how SMC will be implemented including a total annual budget broken down by activities and a summary table of targets to be met each year.

Implementation Plan—A detailed description of each activity. It can include a workplan logic which lays out in table format the timelines, targets and outputs for each activity.

Monitoring and Evaluation Plan—Contains details of the SMC indicators broken down by activity. It also contains a description of the data collection tools which will be developed, database development, the processes which will be followed for gathering and entering data entry and the definitions for how SMC targets will be measured.

Budget—contains both a narrative and spreadsheet of how the budget will be allocated for each activity and over which period.

Management and Staffing—this section contains the estimated number of field staff, health facility workers and CCGs needed to implement SMC effectively including recruitment, retention, roles and responsibilities, reporting and structure, training and supervision.

Annex 10: Implementation Plan Activities for each Core Area of SMC

Procurement and supply chain:

- Description of the roles and responsibilities of all procurement and supply chain staff and consultants responsible for management of SMC commodities.
- Determine which commodities need to be procured and in what quantities.
- Determine the percent of buffer stock will be included in drug procurement.
- How quality assured commodities will be procured.
- How SMC drugs will be packaged and which language.
- How the inventory of commodities will be managed.
- How supply chain staff will be trained and supervised.
- How commodities will be imported.
- How commodities will be transported and warehoused.
- How drug accountability and reconciliation will be managed.
- How delivery schedules will be developed and communicated
- How the supply chain will be monitored.
- How commodity deliveries will be recorded and validated.
- How stock outs will be managed.
- How and when will updates on supply chain be reported.
- How existing procurement and supply chain data collection tools will be reviewed, updated and used.
- Description of data collection tools to be developed and how they will be utilized.
- Description of how SMC commodities will be procured, transported, stored and

Service delivery, case management and PV:

- Description of children who will are eligible and not eligible for SMC.
- Definition of malaria indicators which will used to measure impact of SMC.
- How SMC drugs and commodities will be dispensed and to which cadre of service delivery staff.
- Description of how fever will be assessed and managed and projected recommendations for quantity of RDTs and ACTs.
- Description of the delivery methods (fixed point, door-to-door, integrated into other community services) that will be used to distribute SMC drugs each cycle and who which CCGs will be responsible for administration and registration.
- How SMC drugs will be administered and monitored to ensure patient safety.
- How drug administration will be recorded.
- Description of how and when children should be referred.
- How to manage children who are sick or not eligible for SMC.

- How AEs and SAEs will be monitored, reported and managed.
- How existing service delivery and PV data collection tools and forms will be reviewed, updated and used.
- Description of which service delivery and PV data collection tools and forms need to be developed and how they will be utilized.

HR staffing, training and supervision:

- Definition of selection criteria for each cadre to be recruited and trained to deliver SMC.
- Definition of selection criteria for staff and consultants who will be recruited to develop training tools and deliver training.
- Description of the roles and responsibilities of the trainers, supervisors, health facility workers and community health workers responsible for delivering SMC safely.
- How trainers will be recruited and trained.
- How many of each cadre need to be recruited and trained in order to deliver SMC to the targeted number of children.
- Description of the training cascade including number and duration of trainings for each cadre.
- What SMC content the training will include for each cadre.
- Describe the training methodologies that will be used.
- What language will training be delivered.
- What training materials need to be developed, in what quantities and how they will be pre-tested.
- Define the type of training venues that will be needed.
- Describe how training will be evaluated.

SBCC:

- Definition of selection criteria for staff and consultants who will be recruited to develop BCC tools and deliver BCC messages.
- Description of the roles and responsibilities of all BCC staff.
- How various groups who will be targeted for community sensitisation and BCC.
- Description of the communication and media strategies which will be used for each audience.
- How key BCC messages about SMC will be developed, pre-tested, and delivered to the community and in which languages.
- What communication tools will be developed and what quantity will be produced.
- What logos will be used and where.

M&E:

- Definition of all the SMC indicators which will be measured.
- Definition of selection criteria for staff and consultants who will be recruited to collect data, implement surveys, enter data and analyze data.
- Description of the roles and responsibilities of all M&E staff.

- Definition of which existing the data collection tools will be used and what indicators they will measure.
- Definition of which the data collection tools need to be developed, what they will include and what indicators they will measure.
- Description of how the flow of data from various sources will be captured.
- Definition of how the electronic database will be developed and managed.
- Description of Describe how data will be collected, stored, analyzed and shared with stakeholders.
- Description of how data managers and data entry staff will be trained.
- Description of the sentinel sites which will be used to compare impact of SMC on reduction of malaria cases.
- Description of how resistance to SP+AQ will be measured using case control patients.

SMC Budget:

- Total planned budget year over year.
- How funds will be allocated and over what period.
- Description of the funding sources and financial forecast to implement 4 cycles of SMC per child and for total estimated number of children to be treated.
- Description of the roles and responsibilities of all financial staff responsible for managing and distributing monies for SMC.
- Description of levels of financial accountability and lines of authority.
- Description of how finances will be managed and which fiscal policies and procedures will be followed for compliance and prevention of fraud and waste.

Estimated budget for:

- Procurement of drugs and other commodities
- Human resources and incentives
- Infrastructure and equipment
- Transportation and storage of supplies and commodities
- Training at all levels including human resources, lodging, transportation and per diems
- Production of tools and procurement of supplies for training, PV, case management, BCC, SCM and M&E
- Supervision at agreed intervals
- Communication, advocacy, media and outreach
- Pharmacovigilance

Annex 11: Risk Analysis Tool

Begin by discussing an listing all the possible scenarios which you anticipate could prevent the SMC Programme from being a success at a national, regional, state and local level; i.e.,

elections, political unrest, rainy season begins earlier than expected, shipment of SMC drugs is delayed.

After the list is exhausted, assign a number to each scenario by deciding **how likely you believe it will happen**:

1. Rare
2. Not Likely
3. Moderate
4. Likely
5. Almost certain

Then assign a number to the **level of impact it will have on the success of the programme:**

1. Insignificant
2. Minor
3. Moderate
4. Major
5. Catastrophic

Add the two numbers (likelihood plus impact) together to get a **risk score.** Compare the risk score for each scenario to the *Risk Score Chart* to determine which risks scored high (red colour) and which ones scored moderate (yellow colour).

Discuss what can be done to prevent or avoid each red and yellow risk from becoming a reality.

Risks Identified for SMC	Likelihood	Impact	Score	Risk Prevention measures
	1. Rare 2. Not Likely 3. Moderate 4. Likely 5. Almost certain	1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic		
1.				
2.				
3.				
4.				
5.				

Risk Score Chart

		IMPACT				
		Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
LIKELIHOOD	5 Almost certain	4	7	8	9	10
	4 Likely	5	6	7	8	9
	3 Moderate	4	5	6	7	8
	2 Not Likely	3	4	5	6	7
	1 Rare	2	3	4	5	6

Annex 12: SMC Budget Planner

STEP 1 - TOP level estimation

Number of children	250,000
Number of rounds (months)	3

	$	
Cost per 1 child per 1 course	0.65	
Total Costs ($)	**487,500**	
Planning meetings	9,750	2%
SMC drugs	219,375	45%
SP-AQ	197,438	90%
Drugs for side effects	21,938	10%
Training	39,000	8%
Field work implementation	121,875	25%
Supervision	48,750	10%
Sensitization & advocacy	48,750	10%
		100%

Annex 13: Sample Calendar for Service Delivery

Sample calendar for Community Health Workers

	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Month 0	Sensitization campaign in village																															
	Drugs (SP and AQ) distributed to CHWs																															
Month 1 (round 1 of SMC)	Distribution of SMC																															
	Catch-ups at health post																															
	Return unused drugs to health centre																															
	Sensitization for round 2																															
	Drugs (AP and AQ) distributed to CHWs																															
Month 2 (round 2 of SMC)	Distribution of SMC																															
	Catch-ups at health post																															
	Return unused drugs to health centre																															
	Sensitization for round 3																															
	Drugs (AP and AQ) distributed to CHWs																															
Month 3 (round 3 of SMC)	Distribution of SMC																															
	Catch-ups at health post																															
	Return unused drugs to health centre																															
	Inform population of end of campaign																															

AQ, amodiaquine; CHW, Community Health Worker; SMC, Seasonal Malaria Chemoprevention; SP, sulfadoxine-pyrimethamine

Months of distribution to be determined by the Ministry of Health. The first day of distribution can be changed: it need not be the first day of the month

Annex 14: Suggested List of SMC Materials and Tools

These suggested materials, tools and supplies should be developed, procured, and/or produced prior to SMC Implementation. Some will need to be translated and pre-tested in the community to ensure understanding and contextual appropriateness.

Training and Supervision:

- Trainer Guide
- Trainer Manual
- CCG Training Manual
- Supervisor Manual
- HFW Training Manual
- Pharmacovigilance Job Aid
- SMC Pre-Test and Post-Test
- Answer key for SMC Pre-Test and Post-Test
- Test Score Tracking Sheet
- CCG Competency Checklist for SMC
- Training Attendance Register
- Training Evaluation Form
- Training Certificate
- Pens
- Spiral notebooks to take notes
- Flipchart paper
- Flipchart markers
- Folder to keep hand-outs and job aids
- Post-it notes
- Masking Tape
- Stapler with staples and scissors
- Name tags

Data Collection and Service Delivery:

- SMC Register
- SMC Tally Sheet
- HF Drug Requisition Form
- Health Facility End-of-Cycle Report
- Supervisor End-of Cycle Report
- Survey instruments for sentinel site data collection
- Surveys and forms for case control evaluation of drug efficacy and resistance
- Training Report for National Trainers
- SMC Referral Form
- National PV Forms (yellow form)
- SP+AQ for each age dose
- Spoons, cups and water to administering drugs

SBCC Tools:

- SMC Job Aid
- Child Record Card
- Banners and Posters
- Advocacy Kit with fact sheets and community messages

Annex 15: Criteria for Selection of Community-based SMC Delivery Methods

ESTIMATED	Fixed-Point	Door-to-Door
Size of community	Larger	Smaller
Time taken per child	7 minutes	30 to 90 minutes per household depending on the number of eligible children in the household
Number of households per day	-	4 to 10
Number of CCGs needed	3	2
Number of children seen per day	48 per day (8 per hour)	30 to 35
Distance for child's caregiver to travel	1-2 kilometres	None
Distance for the CHW team to travel	From CHW home to HF to collect drugs From HF to Fixed Point location From Fixed Point to HF to return drugs From HF to CHW home	From CHW home to HF to collect drugs From HF to community households From community household to HF to return drugs From HF to CHW home
Approximate cost	*Evidence to be determined*	*Evidence to be determined*

Annex 16: Sample Training Enumeration

The following example illustrates how to calculate the number of training events and trainers needed to train enough CCG to delivery SMC to 800,000 children using three delivery methods (house-to-house, fixed point, and a combination of both).

Number of Children: 800,000

Number of CHWs:	H to H	Fixed	Comb
Average number of children which can be treated per day	30	48	39
Average number of children which can be treated per cycle and per CHW team for each 5-day cycle	150	240	195
Approximate number of CHW which will need to be recruited and trained in order to treat all 800,000 children in one cycle	10,667 (800,00/150)*2	10,000 (800,00/240)*3	10,333

Number of Children: 800,000

Number of CHW Trainings to be Delivered:	H to H	Fixed	Comb
Number of CHWs	10,667	10,000	10,333
Number of CHW trainings needed based on 20 CHWs per training	533	500	517
Number of CHW trainings needed based on 25 CHWs per training	427	400	413

Number of Children: 800,000

- Each CHW training is 2 to 3 days
- Number of CHW trainings ONE trainer needs to deliver assuming 2 trainings per week: 8

Number of CHW Trainers needed to deliver all CHW Trainings 4 weeks prior to SMC Kick-off:	H to H	Fixed	Comb
Number of trainers needed to implement all trainings with 20 CHWs per training	67	63	52
Number of trainers needed to implement all trainings with 25 CHWs per training	53	50	52
Number of TOTs needed	4	3	3

Number of Children: 800,000

Number of Supervisors:	H to H	Fixed	Comb
Number of CHWs per Supervisor based on number of supervision visits that can be conducted each cycle	10	15	12
Number of Supervisors needed to be recruited and trained	1,067	667	861

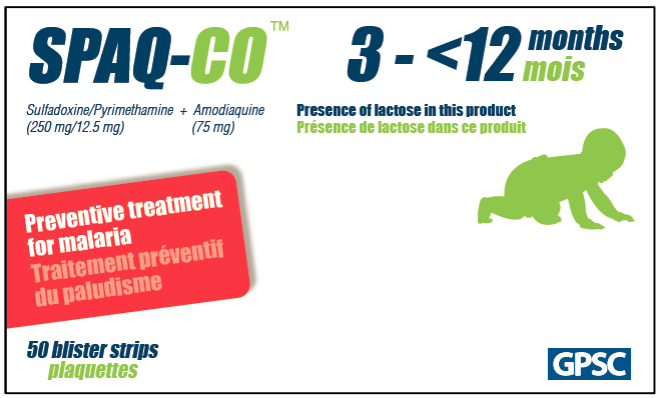
Annex 17: CCG Core Competencies for SMC

1. **CCG is prepared and has all the required materials to deliver SMC:**
   - Sufficient drug packets of SP and AQ for both age groups
   - SMC Register and SMC Tally Sheet
   - SMC Referral Forms
   - SMC Record Cards
   - SMC Job Aid
   - Cups, spoons, sugar, and pen
2. **CCG gives the caregiver information about SMC.**
3. **CCG uses the *SMC Job Aid* to explain to the caregiver that SMC is administered on 4 monthly occasions during the rainy season.**
4. **CCG obtains the child's name and age.**
5. **CCG asks the caregiver if the child has ever taken SMC medicines before.**
6. **CCG asks the caregiver if the child has ever had a drug reaction to amodiaquine (AQ) or SP, such as a severe rash, swelling or difficulty breathing.**
7. **CCG asks the caregiver if the child has any allergies to drugs such as sulfa or cotrimoxazole, (Bactrim or Septrin).**
8. **On the 2nd 3rd and 4th cycles, the CCG asks the caregiver if the child became sick after the last course of SP and AQ.**
9. **CCG does NOT give SP and AQ to children:**
   - Who are younger than 3 months
   - Who are older than 5 years
   - Who have had a side effect reaction to sulfa medicines, or SP, or AQ?
   - Who became sick after the last course of SP and AQ
   - Who have fever
   - Who are sick
   - Who have taken a dose of SP or AQ in the past 28 days
   - Who are currently taking cotrimoxazole or Septrin or Bactrim
10. **CCG refers all sick children and children with fever to the nearest health facility and completes the *SMC Referral Form* correctly.**
11. **CCG records information correctly in the *SMC Register* and *SMC Tally Sheet*.**
12. **CCG gives the *SMC Record Card* to caregivers of children who are not eligible for SP and AQ this cycle and explains when to return the next cycle.**
13. **CCG gives the right dose of SP and AQ to the child based on the child's age.**
14. **CCG keeps the child under observation for 30 minutes after SMC medicine administration.**
15. **CCG gives the child another dose of SP and AQ if the child vomits within 30 minutes.**

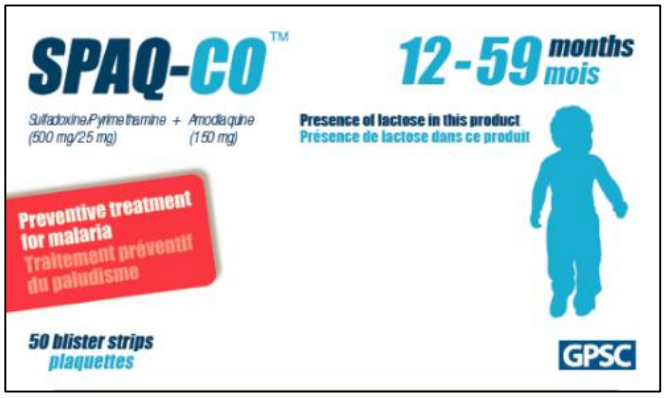
16. **CCG shows the caregiver how to crush AQ tablets and mix with water and sugar, and how to observe the child for 30 minutes.**
17. **CCG uses the *SMC Job Aid* to explain to caregiver about potential side effects and to go to the health facility if the child becomes sick after taking SP and AQ.**
18. **CCG gives the second and third dose of AQ to the caregiver to take home and explains how to administer the second and third doses of AQ at home and to be adherent.**
19. **CCG fills in the SMC Record Card correctly and gives it to the caregiver with instructions for how to tick for doses of AQ given at home and to return next month with the SMC Record Card.**
20. **CCG tells the caregiver to seek treatment at the health facility if the child is sick or has a fever.**
21. **CCG rinses spoons and cups used for SMC medicine administration.**

Annex 18: Sample Drug Packaging

3 to <12 months (3 months to less than 12 months):



12 to 59 months (12 months up to 59 months):



Annex 19: SMC Service Delivery Checklist

- Collect drug packets of SP+AQ from the health facility at the beginning of each day.
- Ensure that drug packets are counted correctly with the health facility worker and expiry dates are checked.
- Record the number of drug packets *received* for each age group on the Tally Sheet.
- Ensure CCG teams have all the necessary materials for SMC delivery and are prepared to administer SP+AQ.
- Help CCGs assigned to door-to-door delivery to find the assigned households.
- Determine children are eligible for SMC before they are given SMC drugs.
- Record all children in the register and Tally Sheet.
- Refer children who are sick or have fever to the health facility for further assessment.
- Refer all children with possible SAEs immediately to the health facility.
- Educate the mothers and children about strict adherence to the 2 daily doses of AQ.
- Tally the Tally Sheet at the end of each day and submit to the health facility.
- Meet at the end of each day of the cycle to review daily drug accountability and discuss any challenges with SMC administration.
- Return all remaining drug packets to the health facility at the end of each day record them on the Tally Sheet.
- Safely store any extra lose tablets of AQ in a locked box in a cool pace for the duration of the cycle.
- Discuss any suspected cases of SAEs referred to the health facility that occurred after the previous cycle.
- Return any remaining AQ tablets to the health facility 3 days after the last day of the cycle.
- Give CCG teams feedback about the behaviours you observed based on the CCG Competency Checklist for SMC.
- Complete and submit the End-of-Cycle Reports.

Annex 20: Sample Tally Sheet

SEASONAL MALARIA CHEMOPREVENTION TALLY SHEET

Tally Sheet N°:		**State:**		**LGA:**	
Health Facility:		**Village:**			
CHW name:	1		2		

SMC CYCLE: ☐ Cycle 1 ☐ Cycle 2 ☐ Cycle 3 ☐ Cycle 4 ☐ D1 ☐ D2 ☐ D3 ☐ D4 ☐ D5

	Number of children who received SP and AQ: *Fill 1 circle per child*			Number of children NOT eligible for SMC: *Fill 1 circle for each child present at distribution point but did not receive SP and AQ*		Number of children given a second dose of SP and AQ: *Fill 1 circle for each child given an additional dose of SP and AQ*	
	3 to <12 mos	12 to 59 mos		3 to <12 mos	12 to 59 mos	3 to <12 mos	12 to 59 mos
5	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
10	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
15	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
20	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
25	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
30	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
35	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
40	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
45	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
50	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
55	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
60	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
65	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
70	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
75	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
80	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
85	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
90	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
95	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
100	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○
	Total =	Total =		Total =	Total =	Total =	Total =

DRUG PACKETS ADMINISTERED

Number of children who received SP+AQ:	3 to <12 mos:		12 to 59 mos:	
Number of children NOT eligible:	3 to <12 mos:		12 to 59 mos:	
Number of children requiring 2nd dose of SP+AQ:	3 to <12 mos:		12 to 59 mos:	
Total number of children seen:				

DRUG ACCOUNTABILITY and RECONCILIATION

		Opening balance	Total received	Quantity used	Total lost	Total remaining	Observations
		A	B	C	D	(A+B) – (C+D)	
3 to <12 mos	Complete packets						
	SP tablets						
	AQ tablets						
12 to 59 mos	Complete packets						
	SP tablets						
	AQ tablets						

Annex 21: Content to Include in an SMC Job Aid

The SMC Job Aid is a tool to help CCGs to:

1. Determine a child's eligibility for SMC
2. Complete the child's Record Card and Register
3. Administer SP+AQ by DOT
4. Give information to the caregiver about giving AQ at home
5. Give health messages on prevention of malaria

STEP 1: ASK the child's name, sex and age:

ASK	Record in the *Register*	Mark in *Tally Sheet*
1. What is the child's name?	Name of the child	---
2. Is the child a boy or a girl?	Tick M or F	---
3. How old is the child?	Write the child's age in years and months If the child is younger than 3 months or older than 59 months: Tick column **"E" for "Excluded"** in the corresponding cycle	---
STOP if child is older than 59 months. Child is not eligible for SMC. **Children who are 59 months at Cycle 1 may continue SMC for all 4 cycles, but will not be eligible for SMC the following year.** **STOP if child is younger than 3 months. Child may return when 3 months old.**		

STEP 2: ASK about allergies?

ASK all questions	Record in the *Register*	Mark in *Tally Sheet*
4. Does the child have any allergies? **5. Has the child ever had a drug reaction to amodiaquine (AQ) or SP, such as a severe rash, swelling or difficulty breathing?** **6. Does the child have any allergies to drugs such as sulfa or cotrimoxazole, (Bactrim or Septrin)?** **7. Did the child become sick after the last course of SP and AQ?**	If the child is allergic to SP or AQ, or if the child has a confirmed adverse drug reaction to SP or AQ: Tick column **"E" for "Excluded"** under the corresponding cycle Write in red letters next to name **"NEVER give SMC drugs"**	if caregiver answered YES to any question: Fill in the **"not eligible"** for the correct age range: • 3 to <12 months • 12 to 59 months
STOP if the child has an allergy to SP or AQ. Child is NOT eligible for SMC. **REFER all children with possible side-effects from previous cycle.**		

STEP 3: ASK about fever or sickness:		
ASK all questions	**Record in the *SMC Register***	**Mark in *SMC Tally Sheet***
8. Is the child sick? **9. Does the child have a fever?**	If caregiver answered YES to any question: Tick column **"S" for "Sick and Referred"** under the corresponding cycle.	If caregiver answered YES to any question: Fill in the **"not eligible"** for the correct age range: • 3 to <12 months • 12 to 59 months
STOP if the child is sick or has a fever. NO SMC today. **Refer to the nearest health facility to be evaluated and tested for malaria.** **Give caregiver the *SMC Record Card* and *SMC Referral Form*.**		
STEP 4: ASK about other medicines the child is taking:		
ASK all questions	**Record in the *SMC Register***	**Mark in *SMC Tally Sheet***
10. Has the child taken any medicines in the last 28 days? **11. What medicines has the child taken in the past month?**	If caregiver answered YES and is taking an antiretroviral: Tick column **"E" for "Excluded"** under the corresponding cycle.	If caregiver answered YES and is taking an antiretroviral: Fill in the **"not eligible"** for the correct age range: • 3 to <12 months • 12 to 59 months
STOP if the child has had SP or AQ in past 28 days. NO SMC today. **Give caregiver the *SMC Record Card*. Child may return next cycle.**		

Annex 22: List of Suggested Indicators for SMC

SMC
▪ Percentage coverage of eligible children who received full course of SMC in project sites according to national policies
▪ Percentage coverage of eligible children who received full course of SMC for at least 3 cycles
▪ Malaria incidence amongst all age groups
▪ Malaria prevalence amongst children
▪ All-cause mortality rate amongst the population (all age categories)
▪ Percentage of eligible children who reported a recent episode of fever (within the past 2 weeks)
▪ Prevalence of molecular markers associated with resistance to SMC drugs
▪ Percentage of suspected malaria cases tested with an RDT or microscopy
▪ Production volumes by manufacturers of pre-qualified SP+AQ products
SMC Drug Production
▪ Updated listing of manufacturers of quality assured SP+AQ
▪ Updated listing of sources of prequalified API
▪ Number of supported LGAs with drug efficacy studies completed
▪ List of new and alternative products developed
Procurement
▪ Volume of quality assured SP+AQ accurately quantified by country
▪ Number of LGAs where the agreed quantity was supplied within schedule
▪ Number of LGAs with documented procurement plan with a timeline and budget in place before the start of procurement
▪ Number of LGAs with an SMC demand forecast in place
▪ Proportion of budget utilized for the procurement of SMC drugs
▪ Volume of quality assured SP+AQ delivered to LGAs
▪ Value of SMC treatments delivered by country
▪ Median lead time in days from date of order to date of delivery in country
▪ Median duration in days of stock out at national stores at central level during SMC implementation months
▪ Number of treatments administered to eligible children per cycle
Supply chain
▪ Proportion of Health Facilities that have adequate SMC drug supplies at designated time as per their planning document
▪ Volume of quality assured SP+AQ supplied to districts per cycle
▪ Median duration in days of stock out at medical stores at district level during SMC implementation months

- Volume of quality assured SP+AQ used/leftover/lost per cycle
- Proportion of districts submitting the LMIS data
- Proportion of budget utilized for supply chain strengthening

SMC Delivery

- Percentage of eligible children who received the first dose of SMC treatment course on the distribution site (for fixed site and door to door distribution), per cycle
- Percentage of eligible children that received SMC treatment, per cycle
- Percentage of eligible children that received SMC treatment, for 1 /2 /3 & 4 cycles
- Percentage of children not given SMC drug because of non-eligibility
- Number of distribution team by delivery method, per target pop
- Average number of children seen per day by delivery method
- Number of LGAs with a micro-plan validated with a timeline and budget in place before SMC implementation
- Proportion of budget utilized for service delivery
- Proportion of distribution teams reporting on activity, per cycle

Pharmacovigilance

- Percentage of eligible children who suffered from any adverse event reaction (self-reporting) per cycle
- Number of serious adverse events (AE) or lack of AE reported
- Percentage of LGAs with PV focal point at national level
- Percentage of HF with up-to-date PV guidelines available
- Proportion of HFWs trained in safety monitoring, reporting and management of AEs and SAEs.
- Percentage of cohort event monitoring effectively conducted
- Percentage of health facilities reporting on AE
- Proportion of AE potentially related to SMC administration that were effectively managed by country by site
- Number of PV reporting forms produced
- Number of LGAs with documented PV plan with a timeline and budget in place before training implementation
- Number of LGAs where PV forms were supplied and health facility staff trained before the start of SMC delivery
- Proportion of budget utilized for PV

Training and Supervision

- Percentage of National Trainers, CCG, HF workers, and supervisors who received a certificate of training completion
- Average increase in knowledge from training for National Trainers, HF workers, supervisors as measured in a written pre- and post-test
- Number of supervisory activities conducted during SMC delivery
- Percentage of distribution teams that were supervised at least once per cycle

- Number of LGAs with documented training plan with a timeline and budget in place before implementation of training
- Proportion of training materials produced in local language
- Number trainings was completed before the start of SMC delivery
- Proportion of SMC Training Reports received from Master Trainers and National Trainers after each training
- Proportion of budget utilized for training implementation
- Proportion of supervisory activities that included a competency assessment
- Proportion of supervisors submitting the End-of-Cycle Report.
- Proportion of health facilities submitting the End-of-Cycle Report

Social Mobilization/Behaviour Change Communication

- Number of materials produced by type of material and target audience
- Number of people trained or oriented in communication for SMC, by people type
- Number of LGAs with documented communication plan with a timeline and budget in place before implementation
- Number of LGAs where social mobilization activities were initiated before the start of SMC delivery, per cycle
- Proportion of budget utilized for social mobilization and BCC
- Percentage of households that heard about date and place of SMC distribution
- Percentage of eligible children who were present at the distribution (for fixed site and door to door distribution) per cycle
- Percentage of eligible children who did complete the treatment course at home, per cycle
- Percentage of caretakers of eligible children who remembered the key BCC messages about SMC
- Number of materials distributed by type of material and target audience
- Number of advocacy activities carried out (advocacy visits, meetings and public presentations), by timing and target audience
- Number of social mobilization activities carried out before, during and after the distribution (e.g. home visits, community meetings)
- Number of radio / TV spots aired, by country

SMC Costing

- Median price of quality assured SMC products by source
- Cost per child reached with SMC per annum in supported LGAs
- Cost per dose delivered by country by type of delivery (fixed point, house to house)

Resource mobilization

- Financial gaps in each supported country identified and reported
- Percentage funding for procurement for SMC products and delivery in supported LGAs by each funder/donor

Resources

WHO SMC Policy Recommendation
http://www.who.int/malaria/publications/atoz/who_smc_policy_recommendation/en/

WHO SMC Field Guide
http://apps.who.int/iris/bitstream/10665/85726/1/9789241504737_eng.pdf

SMC Grade Tables-MPAC
http://www.who.int/malaria/mpac/feb2012/smc_grade_tables.pdf

Estimating the potential public health impact of seasonal malaria chemoprevention in African children. Cairns, M., Roca-Feltrer, A., Garske, T., Wilson, A.L., Diallo, D., Milligan, P.J., Ghani, A.J., Greenwood, B.M. 2012. Nature Communications. Dol: 10.1038/ncomms187
http://www.nature.com/ncomms/journal/v3/n6/pdf/ncomms1879.pdf

Sub-National Targeting of Seasonal Malaria Chemoprevention in the Sahelian Countries of the Nouakchott Initiative. 2015
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4554730/

Non-profit Fiscal Policies & Procedures: A Template and Guide Developed by Compass Point. June 2012.
https://www.compasspoint.org/sites/default/files/documents/Guide%20to%20Fiscal%20Policies%20and%20%20Procedures.pdf

Quantification of Health Commodities A Guide to Forecasting and Supply Planning for Procurement. USAID Deliver. 2014
http://deliver.jsi.com/dlvr_content/resources/allpubs/guidelines/QuantHealthComm.pdf

Supply Chain Management Guide. CRS. 2011.
http://static1.1.sqspcdn.com/static/f/752898/17983763/1335967653367/Chapter+7+Supply+Chain+Management.pdf?token=IQSjXIA4P0o498ueplkXvhkfFXI%3D

A practical handbook on the pharmacovigilance of antimalarial medicines. Who 2010.
http://www.who.int/malaria/publications/atoz/malaria-pharmavigil.pdf

NFDAC Good Pharmacovigilance Practice Regulations 2009
http://apps.who.int/medicinedocs/documents/s17105e/s17105e.pdf

Strengthening safety surveillance in seasonal malaria chemoprevention campaigns in Africa TDR news item. 10 June 2015
http://www.who.int/tdr/news/2015/safety_surv_mal_chemoprev_camp/en/

Video about SMC
https://www.youtube.com/watch?v=ZHjTsAWSb8w