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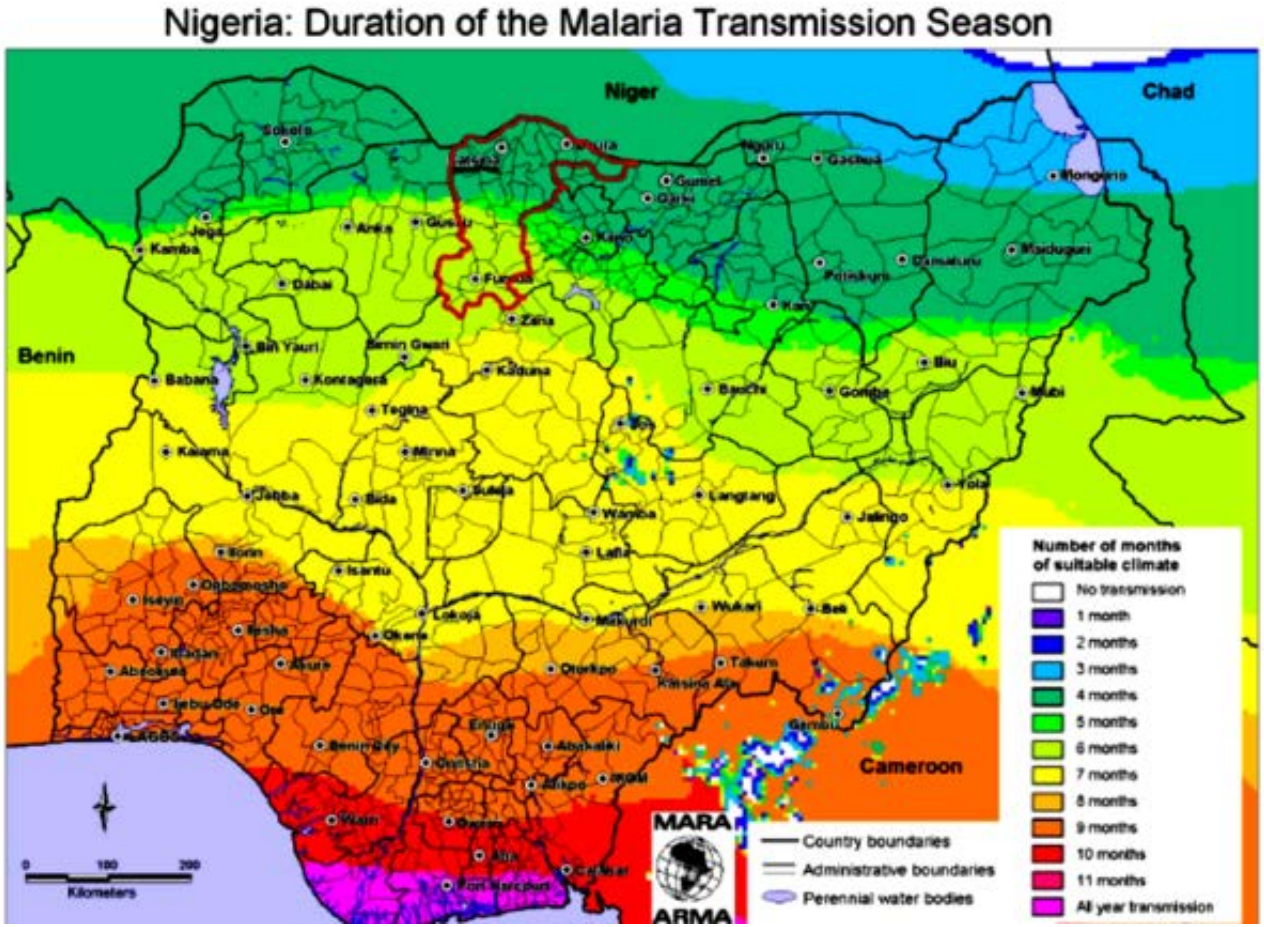
Introducing Seasonal Malaria Chemoprevention into Northern Nigeria

Dr. Ebenezer Baba, Technical Coordinator
Malaria Consortium Nigeria

PREVENTION | DIAGNOSIS | TREATMENT | RESEARCH

Background



- SMC feasible in nine of Nigeria's 36 states
- Currently implemented in two
- Children 3-59 months:
  - Nine states (9.6 million)
  - Katsina (1,424,828)

Project Objectives

Objective 1: To design in consultation with key local stakeholders, community-based delivery systems for SMC which will review aspects relating to feasibility, community acceptability, effectiveness and cost

Objective 2: To launch and execute SMC delivery in selected areas using predetermined delivery systems and collect data on process indicators including cost

Objective 3: To disseminate findings and share experiences with stakeholders to inform scale up and national plans for SMC

Objective 4: To evaluate community acceptability, costs and effectiveness of the delivery system for SMC

Formative Research - Design

Aim: to explore the potential feasibility and acceptability of different delivery options for SMC in northern Nigeria, and to inform the development of a supportive BCC programme

- Deductive/ inductive approach
- Qualitative design based on key informant enquiry (KIIs, FGDs):
  - 14 key target groups identified at state, LGA and ward level
  - 4 LGAs in Katsina state (Baure, Dutsi, Mai Adu'a, Mashi)
  - Specific informants selected using a combination of purposive and random sampling
- Thematic analysis of the qualitative data followed the 'Framework Approach' (Pope, Ziebland and Mays, 2000)

Formative Research – Key Findings

Existing services (scope and quality) for management of malaria at health facility and community level

- General satisfaction with quality of care at HFs - more drugs and staff key suggestions for improvement
- The scope of health services led by CCGs mostly unclear
- Low RDT use at HF levels
- HF support supervision to CCGs appeared to be established
- Referral linkage between community and HF level however appeared to be weak

Formative Research – Key Findings

Community level health seeking behaviour patterns and related attitudes and beliefs

- Decisions on source of care primarily led by proximity of drug availability and associated costs
- CCGs mostly used if mobilised, due to good household access and trust from communities
- But still much fever self-medication/management with paracetamol and "sponging" before formal advice/care sought
- Appeared to be little community level demand for malaria diagnosis
- High acceptability of ACTs and injections for treatment of severe illness
- Opinions of male household heads ultimately influenced treatment decisions
- Referrals are constrained by finances, lack of available (free) transport and bad roads, low promotion by CCGs

Formative Research – Key Findings

Feasibility of potential SMC delivery systems

- Most informants agreed that the distribution of drugs should be at the community level to ensure wide reach and encourage community support, with differing views of direct management of the process
- HH to HH suggested as the easiest approach
- Some concern over storage and security of drugs at the community level
- Ability for mothers to keep simple diaries on fever cases and adverse events questionable given low literacy levels
- Difference of opinion regarding CCG incentives

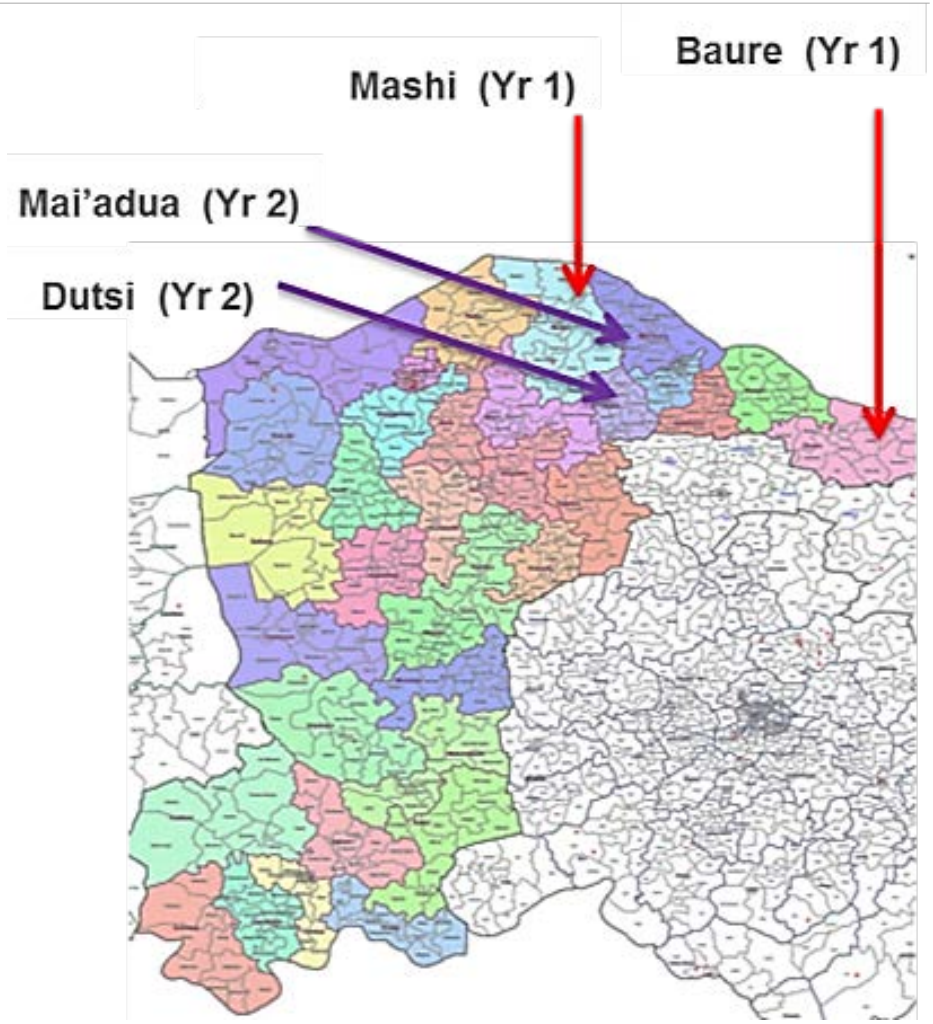
Formative Research – Key Findings

Factors which could either support/ hinder delivery of SMC

- Involvement of key, trusted community stakeholders in the mobilisation/sensitisation and delivery of drugs important to encourage community support
- Suspicion may be raised if an awareness campaign did not precede drug delivery, and if distribution not at most opportune time
- Communities likely to be supportive of SMC given malaria a community priority, the drugs will be free, and people have confidence in ACT effectiveness
- Materials in Arabic script could raise acceptability
- A need to emphasise SMC as a compliment to other malaria control efforts i.e. environmental management and LLIN use
- Requests for clear messaging on dosages, timing of doses and possible danger signs

Implementation Design

- Phased implementation to allow for application of learning in Phase 2
- Estimation of target population (children 3-59 months) based on polio immunisation records
- Key stakeholders (NMCP, state, LGA) actively involved in design
- Each seasonal round, four monthly cycles of three-day course of SMC medicines administered over five days (SP once, AQ once per day x 3 days)



Implementation Design

- A combination of two SMC delivery systems – fixed delivery combined with HH to HH
- Extensive community mobilisation centred around community leaders
- Drug reconciliation and accountability system designed
- New training package designed:
  - SMC delivery and effective management of referred patients at HF level
  - Selection of CCGs, scope of CCG led services, SMC competencies developed
  - Support supervision, referral and feedback loop
- IEC/BCC materials

Community mobilisation tools

Early Findings

First cycle (Aug 2013):

	Mashi	Baure	Total
Target population	78,237	63,605	**141,842**
Received SMC	81,682	51,545	**131,227**
Coverage	104%	81%	**94%**
Referred, n(%)	4,872 (6)	4,000 (8)	**8,872 (7)**
SP/AQ/Septrin in 28 days	536	1,047	**1,583**
Vomited, n(%)	358 (0.4)	555 (1.1)	**913 (0.7)**

Wards located near international borders had higher than expected numbers, indicating possible cross border migration

Second cycle (Sept 2013):

- >10% increase in coverage
- 21% decline in children presenting with fever
- HF records indicate a 30% drop in malaria cases between 1st and 2nd cycles

Early Implementation Experience

- Procurement and logistics challenges delayed the first cycle in 2013
  - May have contributed to inordinately high rates of fever cases at the time of the intervention
- Back up delivery of SMC at health facilities for referred cases tests negative
- One week extension of delivery period at HF after each cycle to allow SMC delivery to missed children
- Initial challenges crushing tablets
- Need to improve cross border collaboration

Early Implementation Experience

- Support is essential toward improving appropriate case management in facilities within the catchment area of the intervention
- Traditional and religious institutions play a key role in mobilisation
- Stipend provided to cover transport and communication cost US$4.50 / person per day
- 2,634 CCGs recruited and trained from the two LGAs

Progress on Scale-Up Plan

- NMCP inclusion of SMC strategy in policy revision and on-going review of national strategic plan
- NMCP to inform drug regulatory agency (NAFDAC) on safety profile of SP-AQ, inclusive of procedures for pharmacovigilance
- Findings from on-going implementation in Katsina and Kano planned to feed into adaptation of WHO implementation guide
- Technical expert group set up by the NMCP within the case management sub-committee
- Resource mobilisation drive – resources from DFID through the SuNMaP project to extend implementation to Jigawa State on the based on lessons identified

M&E Framework

Primary outcomes:

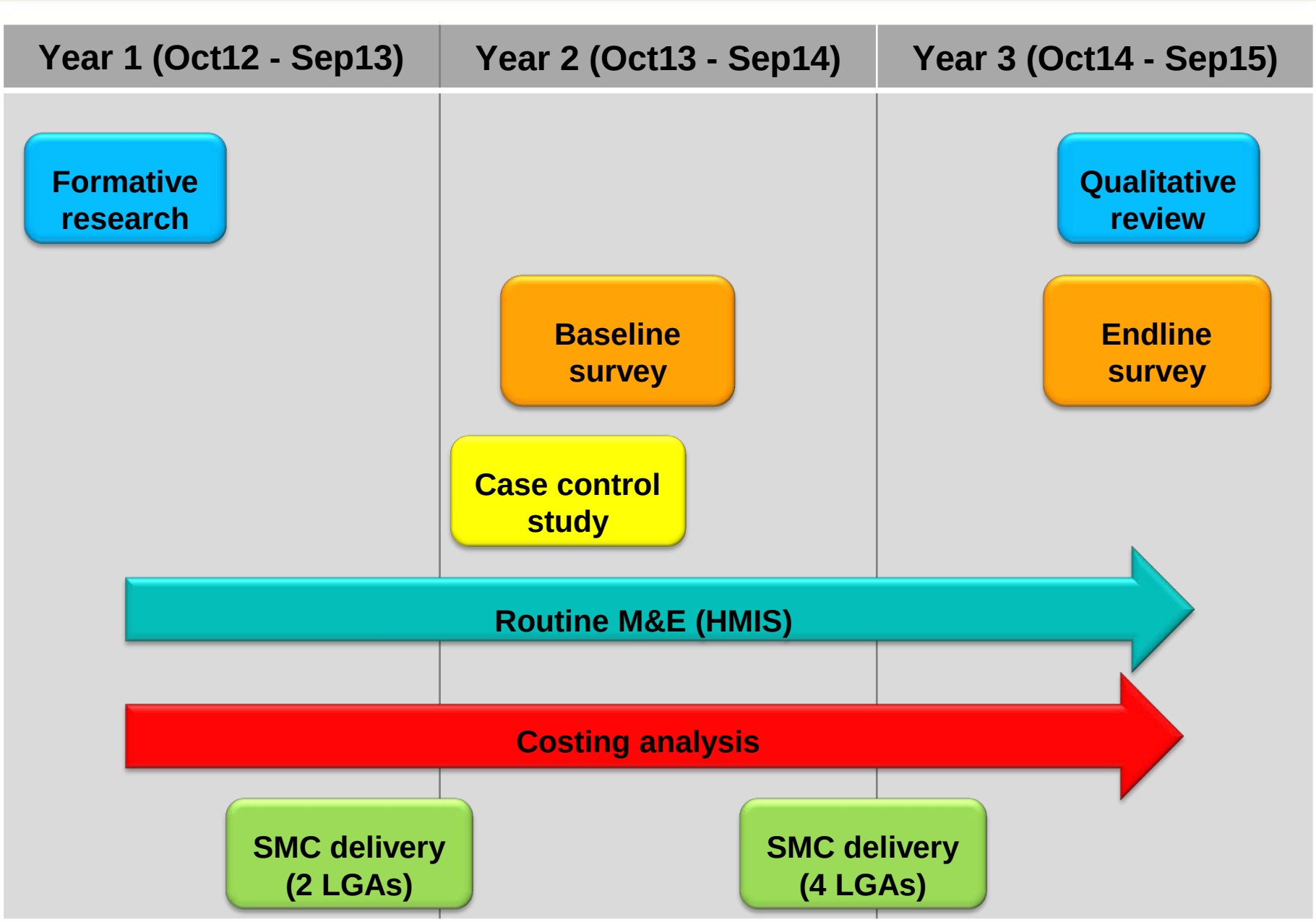
- Malaria incidence (of fever and confirmed malaria cases) among <5s - passive surveillance at HF levels across four LGAs throughout implementation period
- Coverage

Secondary outcomes:

- Parasite prevalence and two week fever prevalence (baseline and endline surveys, one month following end of rainy seasons)

Other:

- Adherence (project data on drug intake)
- Adverse events (regular pharmacovigilance at HF level)
- Protective efficacy (case control study at HF level)
- CCG performance (structured observations based on competency checklist)
- Acceptability and feasibility (formative research and post implementation qualitative review)
- Costing analysis (standard ingredients approach from provider perspective)


Year 1 (Oct12 - Sep13)
Year 2 (Oct13 - Sep14)
Year 3 (Oct14 - Sep15)
Formative research
Qualitative review
Baseline survey
Endline survey
Case control study
Routine M&E (HMIS)
Costing analysis
SMC delivery (2 LGAs)
SMC delivery (4 LGAs)

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