MALARIA CONSORTIUM

LEARNING**BRIEF**

Implementing seasonal malaria chemoprevention in conflict-affected areas in Borno state

Lessons learnt from Nigeria

Key learning

- Strong collaborations with partners that have an established presence and expertise on the ground allowed for robust data collection and sharing, as well as for the most accurate assessment of operations in volatile settings.
- Despite security challenges, seasonal malaria chemoprevention (SMC) — which is owned and driven by the state — can safely be delivered to eligible children, internally displaced people and hard-to-reach populations in Borno, achieving high coverage at a cost comparable to that in areas that are less affected by insecurity.
- Using adaptive and flexible approaches mitigated evolving logistical challenges in conflict areas regarding the delivery of medicines and other SMC commodities to hard-to-reach locations and the operation in areas where security risks were of concern.

Background

In Borno state, northeastern Nigeria, malaria is highly endemic.[1-4] During the peak malaria transmission season from July to October, malaria is one of the main drivers of illness and death among children under five,[3] accounting for more than 50 percent of mortality and 50 percent of all recorded morbidity in the state.[3] The lives of communities in Borno state are affected by a ten-year-old religious conflict that has resulted in 1.5 million internally displaced people (IDPs).[3,4] Alongside affected host communities, IDPs are struggling to access healthcare under the volatile security situation.[3,4]

SMC involves the administration of monthly treatment courses of a combination of antimalarial medicines — sulfadoxine-pyrimethamine (SP) and amodiaquine (AQ) — to children 3–59 months during the peak transmission season. The SMC medicines are typically delivered door-to-door by community distributors.[5] The first dose of SP and AQ is given on day 1 under the direct supervision of trained community distributors, while caregivers administer the remaining doses of AQ over the next two days. Community distributors also provide information on AQ administration and how to respond in the event of adverse reactions.[5]

Borno state has been implementing its SMC campaigns since 2017.[6] In 2021, however, the rising conflict in the region — and the resulting displacement of individuals — made it incredibly challenging to reach all eligible children with SMC.[6] Additionally, delayed confirmation of funding disrupted planning activities, leaving just eight weeks for preparation.[6] Despite these obstacles, the rollout of the 2021 SMC campaign in Borno state was successful and we reached around 2.1 million eligible children with only minor delays.[7]

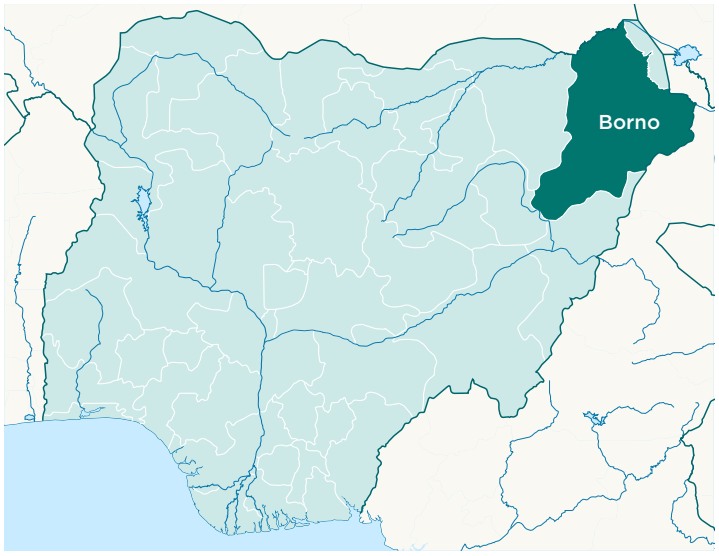
2021 was the first year in which Malaria Consortium supported the Borno State Malaria Programme to implement SMC. Our support addressed funding, operational and technical gaps, ensuring that children in Borno continued to benefit from this proven, lifesaving intervention.[6,7] Our partners included the state Ministry of Health, the State Malaria Elimination Programme (SMEP), the National Malaria Elimination Programme (NMEP), World Health Organization, United Nations Humanitarian Air Services (UNHAS), Médecins Sans Frontières, and InterSoS.

Project activities

Malaria consortium and partners:

- adapted and applied Malaria Consortium's security adaptation principles by rigorously assigning risk levels and regularly reviewing these to mitigate any potential risk to the SMC campaign
- trained local government area (LGA) team members to act as implementers in hard-to-reach areas with risky security situations
- established temporary posts in medium- and high-risk areas, operated by mobile teams
- carried out door-to-door campaigns, where possible, within IDP camps.
- oversaw procurement/adjustment of supply chain management activities that complemented existing structures — including Borno state's Central Medical Store — to ensure quality, safety and security of medicines and other SMC commodities
- partnered with UNHAS and state authorities to use their helicopters to distribute commodities to displaced communities in high-risk, hard-to-reach areas
- collaborated with the Polio Emergency Operations Centre, using their existing hub and daily data briefing meetings to collect, manage and share routine, real-time data from across Borno for data-driven decision-making
- conducted community engagement activities to reach IDPs and host communities, including supporting production of radio spots and organising face-to-face mobilisation meetings at all levels for health service delivery staff and political/religious leaders
- conducted trainings for 9,916 community distributors on: administering SMC medicines; collecting administrative data; and case management and pharmacovigilance activities to help monitor side effects and refer sick children to health facilities for testing and treatment.

SMC implemantation campaign in Borno state, northeastern Nigeria



Results

- **Administrative coverage:** According to administrative data collected by community distributors, our campaign achieved high coverage, including among IDPs and hard-to-reach populations, despite the overall challenging security context. We successfully delivered four monthly SMC cycles in Borno state and reached 2,068,815 children against the estimated target population of 2,051,770 eligible children across the state.[7]
- **Household survey coverage:** SMC coverage measured through routine household surveys following each monthly SMC cycle varied across cycles, ranging from a minimum of 93 percent to a maximum of 96 percent.[7] The population weighted proportion of eligible children who received SPAQ on day 1, directly observed by a community distributor, was 92 percent.[7] The proportion who received day 2 and day 3 medicines was within the range of 98–100 percent.[7]
- **Cost-savings analysis:** Despite the challenging setting, we not only managed to deliver SMC safely at short notice, but for less than is typically the case. The cost of implementing SMC in Borno was comparable with that of implementing SMC elsewhere in Nigeria, and lower than the cost of implementing SMC in Borno in previous years.

Lessons learnt

- Given the short notice and challenging security setting, strong partnerships were crucial for the successful implementation of the SMC Borno state campaign. These included collaboration with the NMEP, Borno state authorities, existing health services at LGA, ward, facility and community level, as well as other partners with an established presence in hard-to-reach locations.
- Adaptations to regular SMC delivery methods were necessary to deliver the campaign in hard-to-reach areas and regions lacking security. We modified our classification of households to include tents in IDP camps. We were therefore able to carry out door-to-door campaigns in almost all low-, medium- and high-risk security areas to reach local communities and IDPs. Overall, less than one percent of the rollout required special approaches, such as temporary fixed points, to reach displaced eligible children. Only one LGA was inaccessible to the SMC campaign due to security concerns.
- In medium and high-risk areas, temporary posts were established and operated by mobile teams to reach people. This underlined the importance of having agreed principles and procedures based on the assessment of different levels of risk to inform when this method should be used.
- Our experience as a leading implementing partner for SMC in Nigeria enabled us quickly to adapt tools, materials and processes used elsewhere in Nigeria for use in Borno.
- The use of military escorts and helicopter services for delivery of commodities further enhanced security for people involved in distributions. We carried out rigorous security assessments in each LGA in accordance with Malaria Consortium's safety and security procedures for all adaptations.
- Involving security agencies facilitated operations and community engagement for political advocacy. Our effective engagement of traditional and religious leaders, as well as town announcers, supported the acceptance and uptake of SMC among communities.
- We also made use of state polio campaign information, which includes lists of communities, IDP camps, a database of children under five disaggregated by community, as well as registered trained personnel (at community, LGA and state level) who can be mobilised at short notice.
- The flexibility of Nigeria's stock allocation mechanism allowed us to use available SMC medicines from residual stocks from other implementing areas. The support from supply chain partners in the state, including the Nigerian Union of Road Transport Workers and UNHAS, meant that we could transport commodities for use at short notice as these supply routes were already established and safe.
- The support of the international SMC community was crucial in reacting to the emerging funding gap and ensuring the continued implementation of SMC in Borno. The gap was flagged by the NMEP at the global level through the SMC Alliance, who subsequently approached potential funders and implementing partners, including GiveWell and Malaria Consortium.
- GiveWell's longstanding support for SMC in Nigeria and close relationship with Malaria Consortium as one of its top charities enabled rapid decision-making regarding the use of philanthropic funding to fill the emerging funding gap for SMC in Borno. The availability and flexibility of Malaria Consortium's philanthropic funding supported the reallocation of its SMC-restricted funding to fill Borno's urgent funding gap in 2021.
- Insecurity impacted on supervision of SMC activities, which led to a high proportion of ineligible children receiving SMC medicines in some medium- and high-risk areas. Due to security risks, trained personnel from the NMEP and SMEP were unable to visit certain areas, resulting in LGA team members delivering SMC interventions instead. Though they are trained, LGA team members are not as highly experienced as NMEP and SMEP personnel.

Recommendations

1. When carrying out an SMC campaign in conflict-affected areas, it is especially important to **use already established systems, community structures and partnerships** as these are difficult to establish in volatile situations. All implementing partners should build on the culture of collaboration, knowledge-sharing and learning cultivated during the SMC campaign. This enables greater use of data for decision-making by ministries of health and other state agencies. For future campaigns, we could consider holding regular refresher trainings, monitoring and mentoring of primary healthcare facility staff on recording and reporting malaria data.[8]

2. The **maintenance of partnerships with supply chain partners should be prioritised** to ensure they are aware of timelines for future procurement and transport needs that may require adaptations at short notice due to security changes.

3. SMC distributors need to be able to reach children displaced by conflict to provide the required information to caregivers regarding timing, dosage and other key information relating to the distribution exercise. The emerging **role of community and religious leaders as advocates for SMC, as well as mobilising caregivers for action, should continue to receive high priority**, especially in situations where people are on the move due to conflict.

4. The issue of distribution of SMC medicines to ineligible children should be addressed through the **strengthening of implementation capacity at ward and community levels, focusing on the improvement of supervision and response to adverse SMC medicines events**. At this level, the use of lead mothers and town announcers would also help to support caregivers in their adherence to SMC guidelines for children. The way they carry out their roles would need to be adapted to accommodate volatile security situations and the needs of populations that are displaced or have become mobile.

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Contact: info@malariaconsortium.org

Cover image: Child receiving SMC medication from a caregiver, under the direct supervision of a community distributor, Nigeria

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