Implementation of the Seasonal Malaria Chemoprevention (SMC) digital campaign in Benin

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Protect children between 3 to 59 months of age by preventing malaria-related cases and deaths during the period of high malaria transmission
Operational Objectives

- Ensure the four (04) cycles of SMC every year in the targeted health zones during the period of high transmission.
- Ensure an administrative coverage of at least 95% of children between 3-59 months of age in each SMC cycle.
- Ensure an effective coverage of at least 90% of children between 3-59 months of age in each SMC cycle.
Health Zones eligible for SMC in Benin
1. Malanville Karimama (MK)
2. Tanguïéta Matéri Cobly (TMC)
3. Kandi Gogounou Sègbana (KGS)
4. Banikoara
Four health zones in northern Benin have been selected for the implementation of SMC in accordance with the eligibility criteria defined by WHO: Malanville Karimama (MK), Tanguiéta Matéri Cobly (TMC), Banikoara (BNK) and Kandi Gogounou Ségbana (KGS).
Implementation Strategy

ZONES WITH THREE SUPERVISED DOSES

• Enumeration of children between 0 to 59 months of age by ATs using smartphones
• Supervision by other field actors
• Door-to-door administration / supervised intake during the 03 days by community relay teams under the watchful eye of mothers or caregivers

ZONES WITH ONE SUPERVISED DOSE

• Enumeration of children between 0 to 59 months of age by ATs using smartphones
• Supervision by other field actors
• Door-to-door administration with a single dose supervised by community relay teams. The 2nd and 3rd doses will be given by mothers or caregivers
Comparative results of the 1st and 2nd cycle

- **ZS MK - 1PS**
  - Juillet: 0.865
  - Août: 0.871

- **ZS TMC - 1PS**
  - Juillet: 0.890
  - Août: 0.926

- **ZS BANIKOARA - 3PS**
  - Juillet: 0.985
  - Août: 0.86
  - Août: 1.018
  - Août: 1.01
  - Août: 0.96

- **ZS KGS - 3PS**
  - Juillet: 0.953
  - Août: 0.90
  - Août: 0.82
  - Août: 0.976
  - Août: 0.95
  - Août: 0.89
Challenges and perspectives

- Continuation of SMC for the third and fourth cycles
- Improvement of dose coverage rate to more than 95% at least in GF zones
- Improvement of first dose coverage to 100% in IHSA zones
- Continuation of the campaign with respect to safety rules in the context of COVID 19
- Timely organization of payment of all actors (RC, AT, SP, TTA....) involved in SMC.
Using digital tools to optimize SMC delivery in Benin

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Background

• SMC campaigns in Benin have traditionally been paper-based

• Benin conducted a nationwide digital ITN campaign and obtained a rich population dataset

• The population dataset of children under 5 from the ITN campaign was used to implement the SMC campaign
Digitization Component

Cash and Asset Transfer Platform to transfer SMC paper tools into mobile application and dashboards

The Application was programmed to collect bio data and register the children between 0-59 months, determine their eligibility, and enable drug administration to the child

Each child received a unique identification in form of a QR code badge that is scanned on the application to register, identify and administer the dose to a child through out the course of each cycle of the campaign

Unique identification in the form of a QR code badge was provided to each field agent and supervisors to enable the tracking of training attendance and field activity tracking to develop electronic payment sheet for the field agents and supervisors

Data was collected and reported in real time to a dynamic dashboard

Daily coverage rates were generated from the dashboards

Training

Dose administration

Monitoring and supervision activities
Adapting to COVID-19

• Training class size were reduced from 40 persons to a max of 25 to enable social distancing within the classes
• Hand washing stations were provided at the training locations
• Field agents were provided with COVID 19 safety preventive materials to enable safe administration of the drugs
• Monitoring and supervision teams leveraged the real time dashboards to track the coverage rates of the drug administered and the total number of children registered
• Simple excel reports shared daily and via Whatsapp to reduce the limitation of physical meeting
Benefits of using a digital system

- Geo spatial tracking of doses administered per child within the household using Maxar digital footprint data

  Image is a coverage Map of doses as at day 3 in one commune
  - *Green* represents Children who have received all 3 doses
  - *Yellow* represent Children who have received only the 1 & 2 dose
  - *Red* represent Children who received only the 1st dose

- Improved accountability of drugs utilized by each team

- Improved performance of the field agents and supervisors due daily tracking of field activities
Benefits of using a digital system

• The application ensures a control to check eligibility of the child and certifies he receives the correct drugs for the 1st dose before the 2nd and 3rd doses can be administered respectively.

• In the 1 supervised dose heath zone the digital system makes it possible to collect the feedback information for each specific child if the parent/caregiver administered the 2\textsuperscript{nd} and 3\textsuperscript{rd} doses to measure the dose coverage rates

• Real-time data collection tracking of adverse reaction from the drug administration, referrals, health conditions of the children during the course of the administration. No paper data collation etc.

• SMS to households and dose administration teams to improve effectiveness of the campaign and share vital health messages
Challenges and Lessons Learned

• Heavy rainfalls interrupted work schedule for some drug administration teams
• Adverse reaction of some children leading to some household refusal for the 2\textsuperscript{nd} and 3\textsuperscript{rd} dose administration to their children
• Enforcement of COVID-19 precautionary measures by some households and campaign staff and refusal of some households due to fear of been infected by COVID-19
• Absence of children and care givers in some households
• Data entry errors due to poor learning of some drug administration teams
Thank you for listening
Questions?