Point Mass Distribution (PMD)/Seasonal chemoprevention (SMC) Integration

LESSONS LEARNT FROM GHANA

Otubea Owusu Akrofi

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Outline

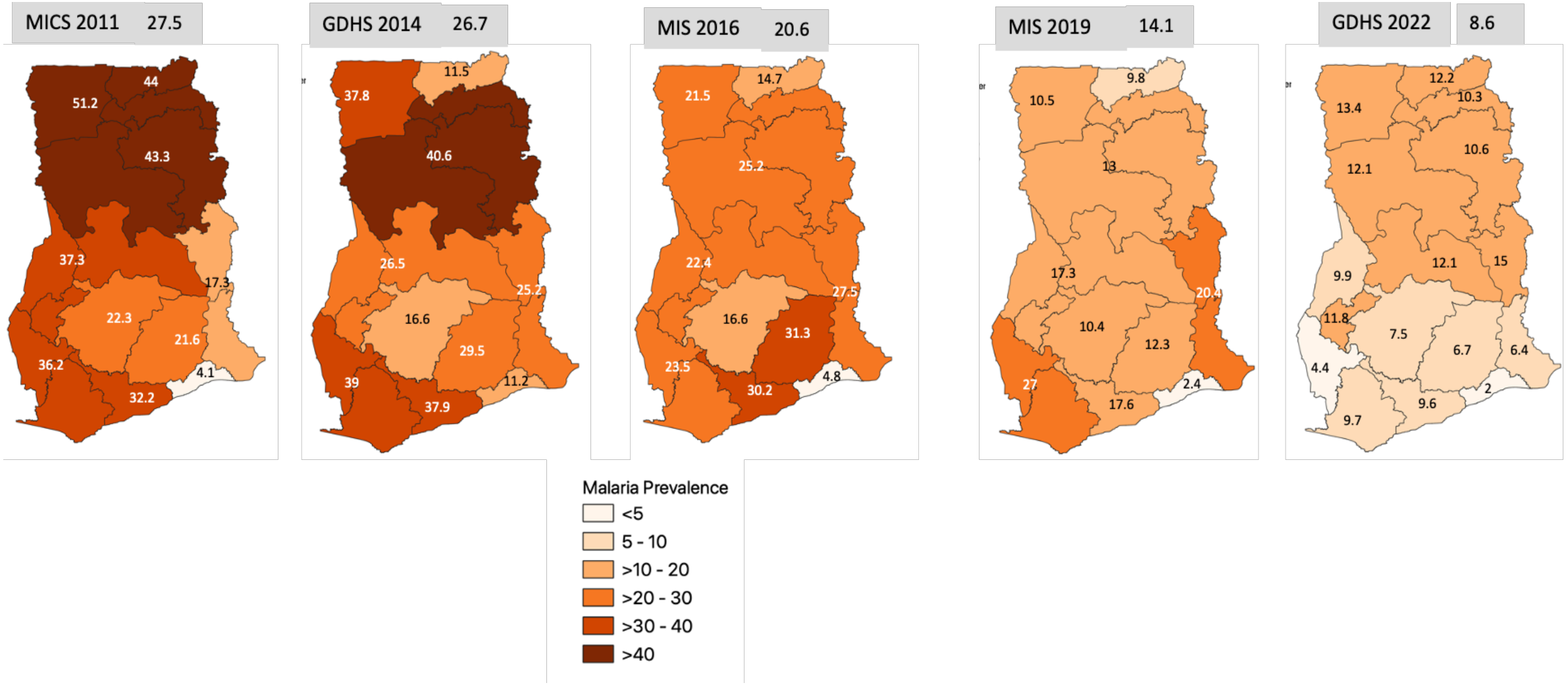
- Malaria Burden
- Introduction
- ITN PMD Campaign
- SMC Campaign
- PMD/SMC Integration
- Challenges
- Lessons Learnt
- Conclusion

Malaria Burden

- In 2022, there were an estimated 249 million cases of malaria worldwide with 608,000 deaths
- The WHO African Region carries a high share of the global malaria burden; 94% of all malaria cases and 95% death (WHO 2022)
- Children aged under 5 years accounted for 76% of malaria deaths in African region (WHO 2023)

- Ghana is a malaria endemic country
  - Under-five mortality rate: 52/1,000 live births (2017 MHS)
  - Parasite Prevalence – 8.6% (GDHS 2022)
  - 0.4 % of in-patients deaths

Malaria parasite prevalence



Percentage of children age 6-59 months who tested positive for malaria by microscopy by region, 2011-2022; Source: GDHS/MIS

Malaria Interventions Implemented in Ghana

Distribution of Long Lasting Insecticide Nets (LLINs)

Indoor Residual Spraying (IRS)

Larval Source Management

Malaria Vaccine RT'SS (MosquirixTM)

Intermittent Preventive Treatment (IPTp)

Seasonal Malaria Chemoprevention (SMC)

Case Management Diagnosis & Treatment

Cross-cutting interventions

Procurement and Supply Chain

Research, Surveillance, Monitoring & Evaluation

Advocacy, Social & Behavior Communication

Seasonal Malaria Chemoprevention (SMC)

- Ghana incorporated SMC as an additional intervention for malaria control, commencing in the Upper West region in July 2015.

- SMC implementation has contributed significantly to reducing malaria morbidity and mortality among children under five. Parasite prevalence in children under five reduced from 27.5% in 2011 to 8.6% in 2022.

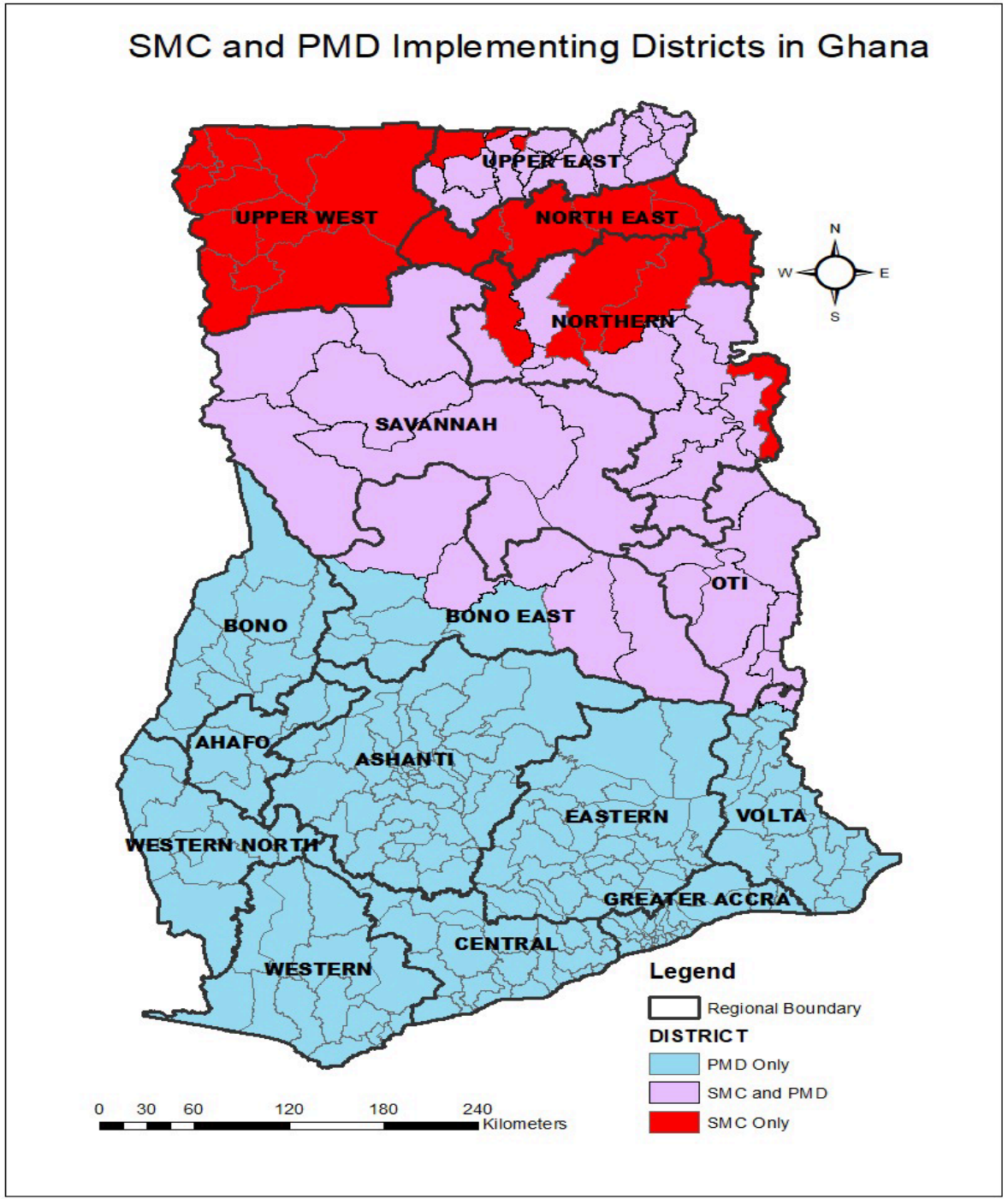
- SMC is the intermittent administration of an antimalarial medicine (Sulfadoxine–Pyrimethamine plus Amodiaquine (SP+AQ) during the high malaria transmission season to asymptomatic children, regardless of whether the child is infected with the malaria parasite

- The objective of SMC is to establish antimalarial drug concentrations in the blood that clear existing infections and prevent new ones during the period of greatest malaria risk

Insecticide Treated Net (ITN) Distribution

- Point Mass Distribution (PMD) of ITNs: The Mass Distribution of nets strategy comprises a door-to-door registration of all households and point distribution of ITNs to registered households
- This is carried out nationwide (except in districts where indoor residual spraying is implemented)
- PMD is conducted every three years. Five campaigns have been conducted since 2010
- The primary objectives have been to register 40 - 90% (based on set population targets) of all households in targeted regions, and to distribute LLIN to at least 90% of all registered households

Map of Ghana showing areas of PMD and SMC interventions



Rationale for SMC & PMD Integration

- PMD and SMC are both Community-based malaria control interventions

- The benefits of both interventions can reinforce each other and also consolidate malaria control measures into one message during the same period

- The integration can save both cost and time

Rationale for SMC & PMD Integration

	SMC	PMD
Geographic scope	All districts in Northern, North East, Savannah, Upper East, Upper West, Oti and 5 in Bono East	All districts in Ahafo, Bono, Bono East, Oti, Savannah, GAR, Eastern, Central, Volta, Western, Western North Some districts in Ashanti (50), Upper East (13), Northern (15)
Target population	Children aged 3 months to 59 months	Households
Primary Objective	Dose all children aged 3 months to 59 months	to register at least to register 40% to 100% (based on set population targets) of households in targeted districts and to distribute to at least 90% of registered households.
Period	Annually, 4 or 5 doses (June / July to October / November	Every 3 years. Flexible timing
Approach	Door to door	Door to door registration Distribution of LLIN at fixed points in community

Guiding Principles

- Learn Lessons from previous integration efforts
- Integration is not just adding on
- Consultation of strategic leaders on why and how to integrate is important
- The need to let the leaders at the operational level see the benefits of integration was important
- Integration was not going to be an easy task but worthwhile

SMC & PMD Integration (4/12)

PRE-CAMPAIGN

- Develop implementation plan
- Area Identification and Population estimates
- Estimate resource needs and timelines
- Regional Briefing Meetings
- Micro-planning

CAMPAIGN

- Trainings
- Registration & Dosing
  - M&E
  - safety monitoring
- Data review/ Validation
  - PMD
  - SMC
- Transportation of ITNs
- Distribution
- M&E

POST CAMPAIGN

- Evaluation meetings
- Reverse Logistics
- Continued Safety Monitoring (SMC)
- Reporting

Social & Behaviour Change Communication (SBCC)

PMD & SMC Integration Areas (1/8)

- Planning meetings at all levels
- Trainings
- PMD registration and first cycle of SMC dosing
- Documentation and IT
- Monitoring and Supervision
- SBC for dosing and registration

PMD & SMC Integration Areas (2/8)

Planning meetings

- Joint meeting by SMC and Vector Control Units of NMEP
- National planning meeting
  - To draft guidelines and training materials for the approach
- Planning meetings with RHMT (online)

PMD & SMC Integration Areas (3/8)

Trainings

- Regional Training of Trainers (ToT)
- District/subdistrict cluster training:
  - PMD &SMC
  - PMD Only
  - SMC Only
- RA training

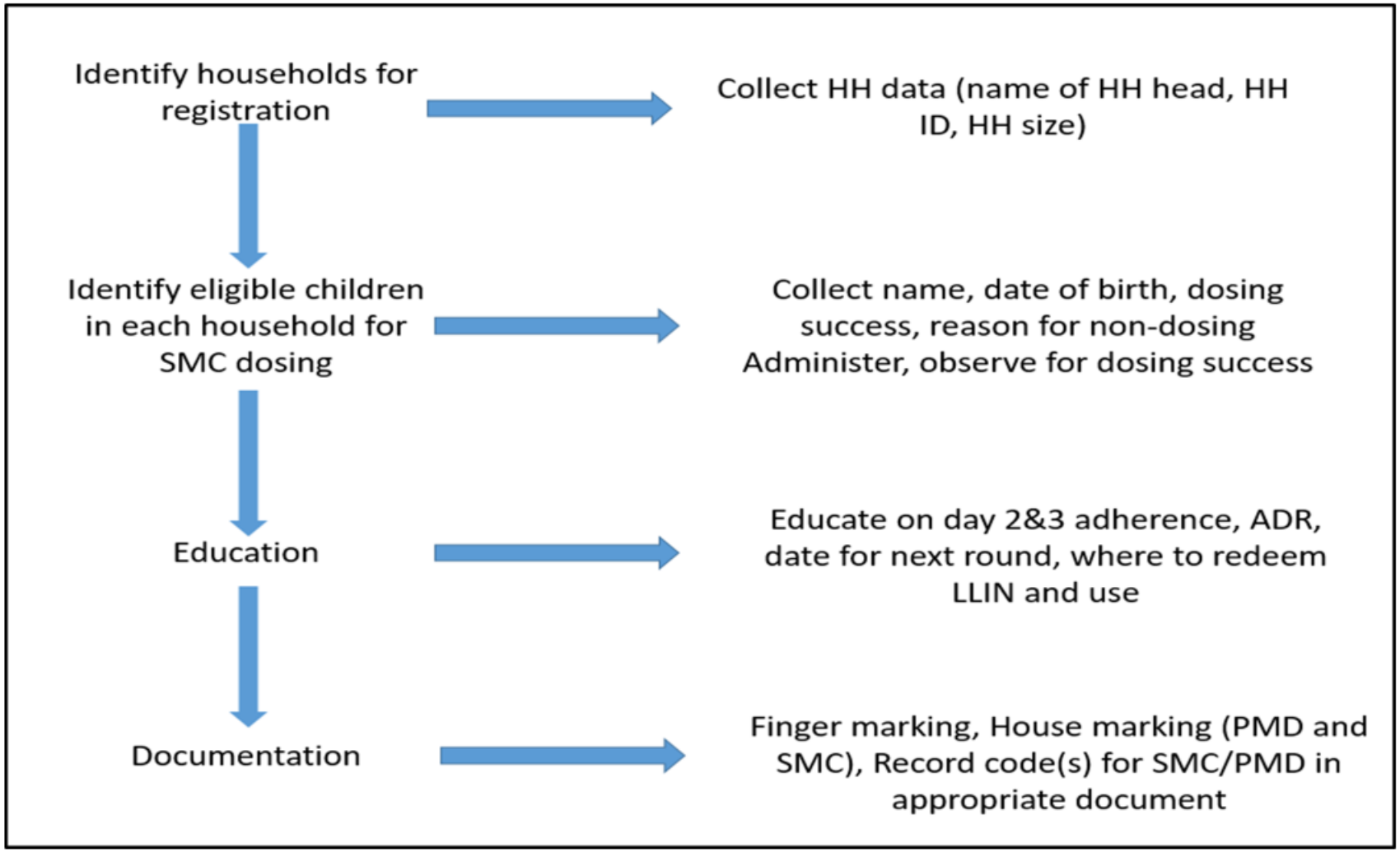
PMD & SMC Integration Areas (4/8)

PMD registration and first cycle of SMC dosing

- Combined the two activities
- 7 days for the activities at the same time, instead of 5 days
- 15 to 20 minutes to register a household and dose an eligible children if present
- Same volunteers recruited
- Targets for volunteers:
  - PMD: 350 households for 7 days, 50 households per day
  - SMC: 150 eligible children for 7 days, 22 eligible children per day (Assuming an average HH size of 4 and19.2% population aged 3 to 59 months, a volunteers visited an average of 29 households)

PMD & SMC Integration Areas (5/8)

Flowchart for SMC Dosing and PMD household registration



PMD & SMC Integration Areas (6/8)

Documentation and IT

- The SMC and PMD integration used the GMIS (Ghana Malaria Interventions System) app to streamline data collection
  - for households already registered under the SMC program
  - new households who weren't captured in previous SMC campaigns
- Instead of re-registering households, volunteers used the GMIS mobile platform to update existing household records with the number of ITNs provided during the PMD campaign
- This approach simplified the data capture process
  - ensuring more accurate and
  - timely reporting of household registration while reducing redundancy in household registration.
- Households that hadn't been captured during the SMC campaigns the previous year were registered on the GMIS platform for the first time

PMD & SMC Integration Areas (7/8)

Monitoring and Supervision

- Supervision for both activities at all levels; national, regional, district and sub-district levels
- Supervision: Same electronic app to capture data from supervision on the same platform
- Real-time monitoring on some indicators
- Both PMD and SMC t-shirts and an identification tag (ID tag) were used throughout the days of registration and first cycle dosing
- Supervisory forms
  - Form A (to be completed once during district assessment)
  - PMD-SMC Rapid Assessment form (20 per day, 10 per community)

PMD & SMC Integration Areas (8/8)

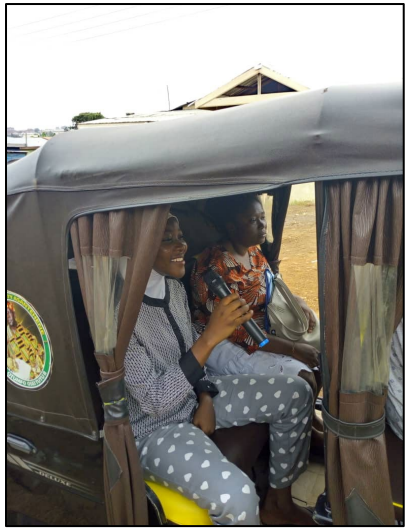
Social and Behaviour Change (SBC)

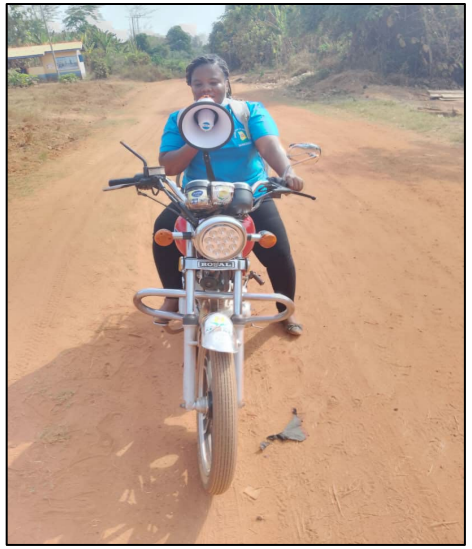
- Messages sent prior to, during and after registration and dosing were for both PMD and SMC, one message was not used for both
- However, same channels and personnel were used to transmit the messages
- Funds were added on for both activities

PMD Posters

SMC Poster

Traditional Channels





LLIN Registration Coverage, 2021 vs 2024

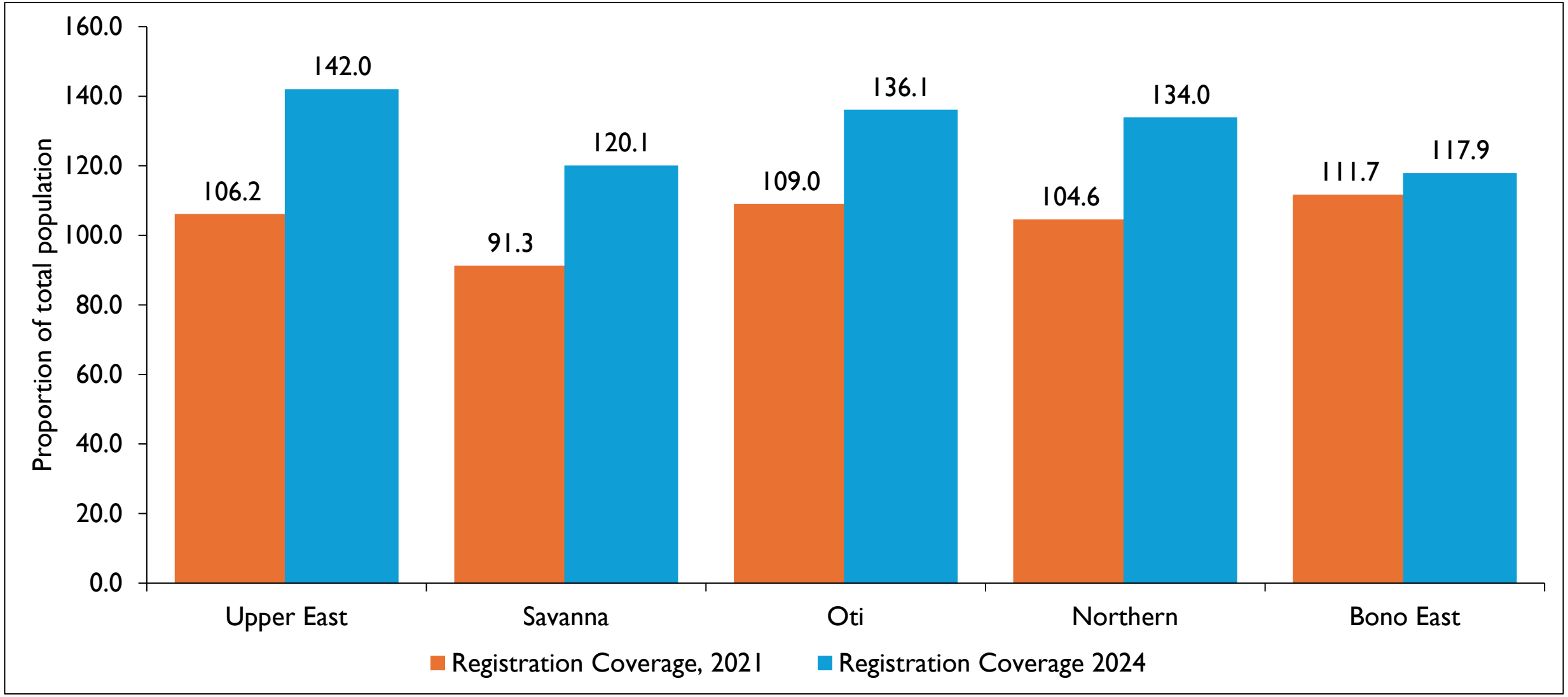


Figure 1: LLIN registration Coverages in SMC& PMD integration areas

SMC Registration Coverage, 2023 vs 2024

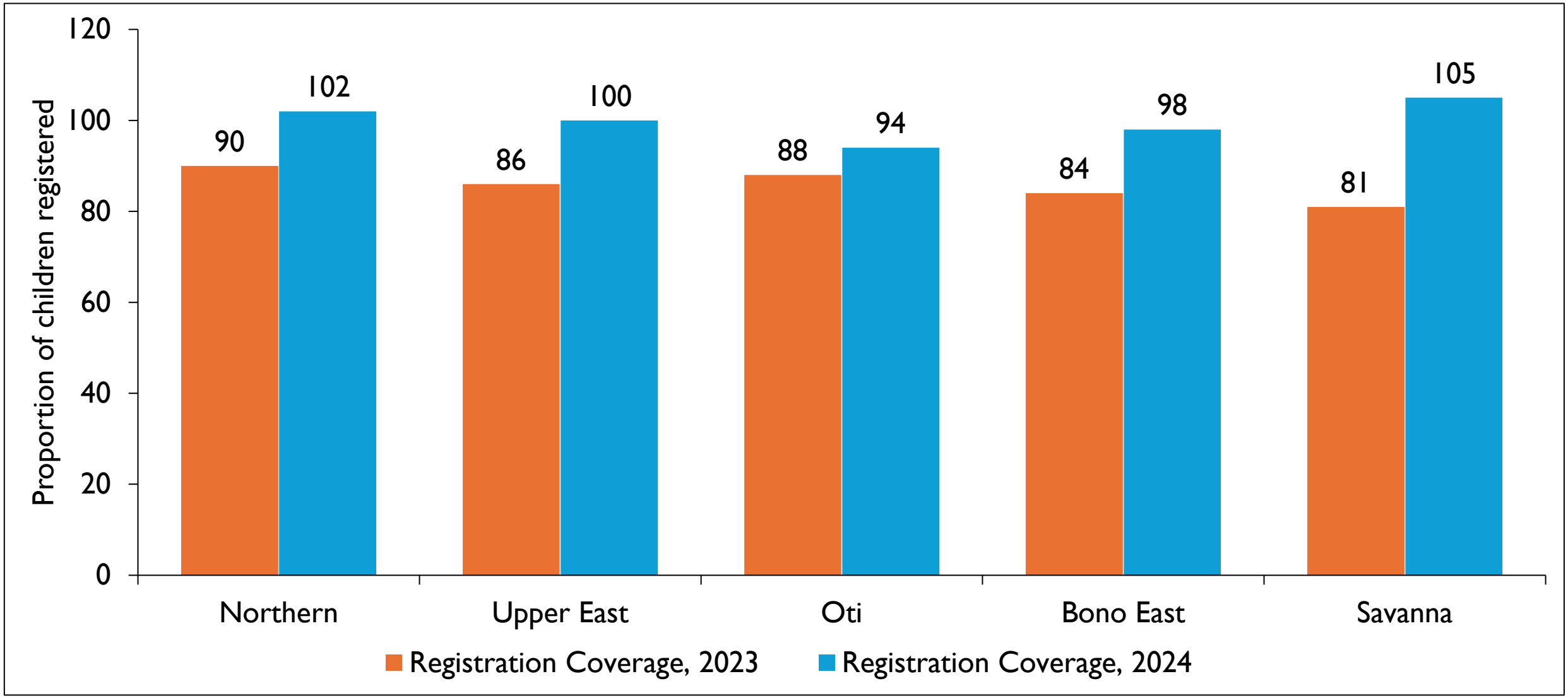


Figure 1: SMC registration Coverages in SMC& PMD integration areas

Challenges

- Relatively longer hours for training sessions
  - A day's training session for each cluster; districts from far had to commute back at late hours

- Volunteers complaining of volume of work though number of days was extended

- Some volunteers confused about the modality and key messages to give to beneficiaries/caregivers. This was however, solved through on the job coaching and supportive supervision and monitoring

- About 1out of 10 volunteers did not have the android operating system that is the basis of the GMIS App

Lessons Learnt (1/2)

- Extensive stakeholder engagement prior to implementation was carried out. These engagements included sessions where decision making on the approach to use was discussed

- One of the challenges that arose from previous integration attempts were unclear communication to region; districts adopted different inconsistent approaches (use of of two volunteers in some districts, and other districts used one volunteer but increased number of days)
    - Early and clear consensus on the details of approach should be finalized with relevant stakeholders and documented as standard operation guidelines for the integration.

Lessons Learnt (2/2)

- SMC uses more than twice the number of volunteers used for PMD, therefore, more volunteers were available for both exercises

- At the beginning of the exercise, tablets were limited but the use of the Bring Your Own Device (BYOD) approach lessoned the burden of having to provide electronics tablets for the campaigns

Conclusion

- Integrating major portions of the SMC and PMD campaigns had to be done with careful planning and stakeholder consultations
- All major aspects of the campaign were taken into consideration to achieve maximum results
- In spite of challenges faces, coverages of both PMD and SMC has improved with the integration compared to years without
- Lessons learnt from this integration will be used to improve on furhter integration efforts rather than go back to individually held campaigns with same people and resources

Acknowledgement

- Regional and District Health Directorates
  - Oti
  - Upper West
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THANK YOU