Lessons learned and practical experience from pilot introduction of the RTS,S malaria vaccine in Ghana

Workshop on implementation strategies for the introduction of the RTS,S/AS01 (RTS,S) malaria vaccine in countries with areas of seasonal transmission

23 -25 January 2023, Dakar, Senegal

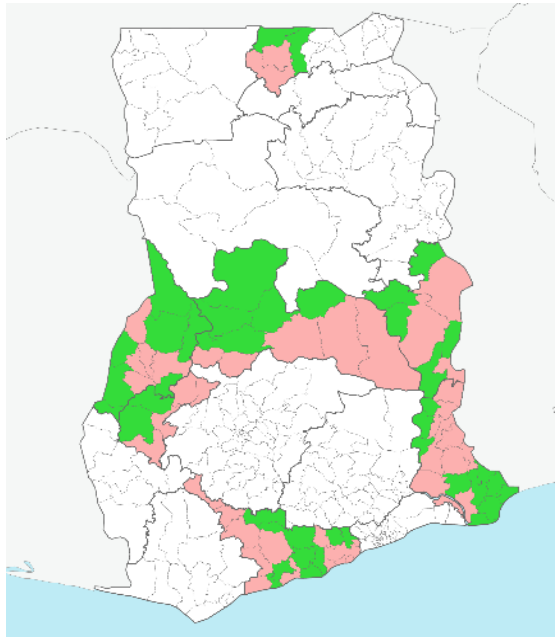
GHANA TEAM
DR. NAZIRU TANKO MOHAMMED, EPI/GHS
MUNIRATU VENU, NMEP/GHS

Outline

- Background and Coverage
- Lessons learnt
- Best Practices
- Challenges
- Conclusion

Background and Coverage

Ghana



82 districts in 7 regions

Pilot vaccinating areas

Pilot non-vaccinating areas

- Start of vaccination in routine: [**30 April 2019**]
- Pilot implementation started in 82 districts in 7 regions (Vaccinating and Comparator districts)
- Annual target population: [**171,396**]
- Total malaria vaccine doses administered (since start – November 2022): [**1,443,656**]
  - Dose 1**: 448,286 (73%)**
  - Dose2: **417,718 (69%)**
  - Dose3**: 402, 546 (68%)**
  - Dose4: **175,646 (45%)**
- Annualized coverage estimates for the malaria vaccine (Jan to Nov 2022)
  - Dose 1: **76%**
  - Dose 2: **71%**
  - Dose 3: **73%**
  - Dose 4 uptake among eligible children who have completed 3 doses: **72 %**
- Phased scale-up /expansion scheduled for Jan 2023 following WHO recommendations on wider use of RTS,S vaccine in areas with mod-high risk of malaria transmission
  - Starting with expansion to the comparator districts in Q12023

EPI / NMCP coordination and country-led mechanisms

- Health Sector Coordination Committee (HSCC), chaired by the Honourable Minister of Health
  - Oversight responsibility for coordinating health sector activities and resource mobilization
- Interagency Coordinating Committee for Immunisation(ICC):
  - highest decision body for immunisation policy and activities
- National Immunisation Technical Advisory Group (NITAG):
  - Provides technical guidance on immunisation
    - Malaria Vaccine Technical Working Group (TWG) is a sub-committee of NITAG with the EPI and NMCP has core members
    - EPI and NMEP has officers in the various TWG- subcommittees; ACSM, Service Delivery, M&E etc.
    - EPI and NMEP collaborated in selecting areas for the vaccine implementation, development of the introduction plan, job aids; training; and monitoring

Preparations leading to launch

- Stakeholder mapping and engagement:
  - National House of Chiefs and Queen mothers, Professional Health Associations, Media, Parliament, Academy of Arts and Sciences
- Development of crisis communication plan (including rumor/media monitoring systems/strategies)
- Identification and training of key spokespersons at all levels
- National and sub-national launch
- Pre-vaccine introduction assessments
- Development of healthcare worker training modules, IEC materials, etc.
- Cascaded training to the sub-district
- Rapid post-introduction assessment

Lessons learned

- Good collaboration between the NMEP, EPI and NRA essential for the operationalization of plans
- The vaccine introduction plan should address health systems strengthening and integration with other child health interventions across the life course
- Healthcare workers must be adequately educated to ensure effective communication with caregivers
- Existing defaulter tracing systems must be reviewed and strengthened to reduce drop-out rates
- Catch-up campaigns may be necessary to optimize the uptake of the 4th dose, including leveraging the second year of life (2YL) strategies
- Appropriate strategies should be developed to reach eligible children in difficult to reach populations (island/riverine communities, urban and peri-urban areas, mobile populations etc.)
- Where available, the use of electronic vaccination registries can support improving data quality and defaulter tracking
- Strengthen vaccine quantification and forecasting at all levels to prevent avoidable vaccine stock-outs
- The concept of AESI surveillance was poorly understood and led to low reporting
- Scheduled Reorientation of health staff on the administration of the vaccines

Best practices

- Good political will and strong support from the government
- Development of job aids on vaccine eligibility and MOV supported in improving healthcare worker knowledge
- Early and broad stakeholder mapping and engagement; tailored message appropriate for the audience
- Development of crisis communication plan, identification/training of critical spokespersons and active listening
- Periodic intensification of routine immunisation (PIRI) was a good strategy to address vaccination coverage gaps. Strategy should be data driven and community/district specific
- To standardize and expand the scope of support supervision, the country employed electronic supervisory tools (ODK). This allowed for prompt analyses of key indicators to guide support to MVIP districts
- Formation of the Joint Malaria Vaccine Committee that supported conducting causality assessment

Stakeholder engagement on sub-national introduction

- Early stakeholder mapping and engagement: National House of Chiefs and Queen mothers, Professional Health Associations, Media, Parliament, National Academy of Arts and Sciences
- Media engagement: (meeting with senior editors)
- Training of key spokespersons
- Community engagement strategies developed at all levels
- Communication messages emphasized the phased introduction and continuous use of existing malaria control interventions
- Successes:
  - Engagements enhanced high level and community support for the vaccine despite the initial anti vaccination campaign and rumors
  - Trained spokespersons adequately addressed public concerns following the social media campaign against the vaccine
- Challenge:
  - Funding to sustain community engagements and education
  - Initial communication gaps by healthcare workers with regards to the concept of phased introduction and asking for “consent”

Special considerations

- The timing of healthcare worker training should be appropriately aligned to vaccine introduction. Training should be completed not more than a month before the commencement of vaccination
- Healthcare workers must be adequately educated on the phased introduction approach to ensure effective communication with caregivers; Poor communication around the vaccine introduction led to some refusals
- Clear and simple communication messages for “non-participating” areas using locally acceptable channels

Achievements and successes related to malaria vaccine implementation

- High level of political commitment and support
- Good intersectoral collaboration
- Good vaccine acceptance: despite the initial challenges (evidence from the PIE)
- Sustained performance: during COVID-19 pandemic and after a related stock out
- Functioning vaccine safety committee: Joint Malaria Vaccine Committee
- Good uptake for a new vaccine: ≈80% of implementing districts are achieving at least 60% coverage (dose 1)
- Drop-out rates < 10 %: maintained between dose 1 and dose 3

Challenges related to malaria vaccine implementation

- Post-vaccine introduction (Q2 2019): initial wave of anti-vaccination campaign (affected uptake in some districts) and reduction in social mobilization drive
- Health worker education: misapplication of eligibility criteria leading to missed opportunities for vaccination
- Attrition of trained staff
- Supervision: irregular at lower levels of health system
- Data quality: gaps and irregular feedback across health administrative levels
- 4th dose: high drop-out rate
- AEFI reporting rate: comparatively lower from routine surveillance

Implementation through SMC/ Other MDA Programmes

Seasonal Malaria Chemoprevention (SMC) is carried by trained community health volunteers

Usually delivered through house-to-house Strategy during the peak season of rainfall

Option of conducting RTS,S mop-up vaccination alongside SMC still under discussion for MVIP/SMC implementing regions

Issues about ADR/ AEFI reporting and management will require careful consideration and

Thank you for listening