Using Digital Workflows to Enable Integrated Campaign Delivery: A Case of Ghana – National Malaria Elimination Programme (NMEP)

SMC/AMP CONFERENCE -UGANDA

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FEBRUARY, 2026

Outline

- Introduction
- Digitization Journey
- PMD/SMC Integration Strategy
- Digital Workflow Architecture
- Challenges
- Conclusion

Internal

Introduction

Rationale for Integration

- Point Mass Distribution (PMD) and Seasonal Malaria Chemoprevention (SMC) are both Community-based malaria control interventions
- The benefits of both interventions can reinforce each other
- The integration can save both cost and time
- Integration reduces stress on health workers

Guiding Principles for Integration

- Learn Lessons from previous integration efforts
- Integration is not just adding on
- Consultation of strategic leaders on why and how to integrate is important
- Stakeholders at the operational level must buy into importance of integration
- Integration was not going to be an easy task but worthwhile

Internal

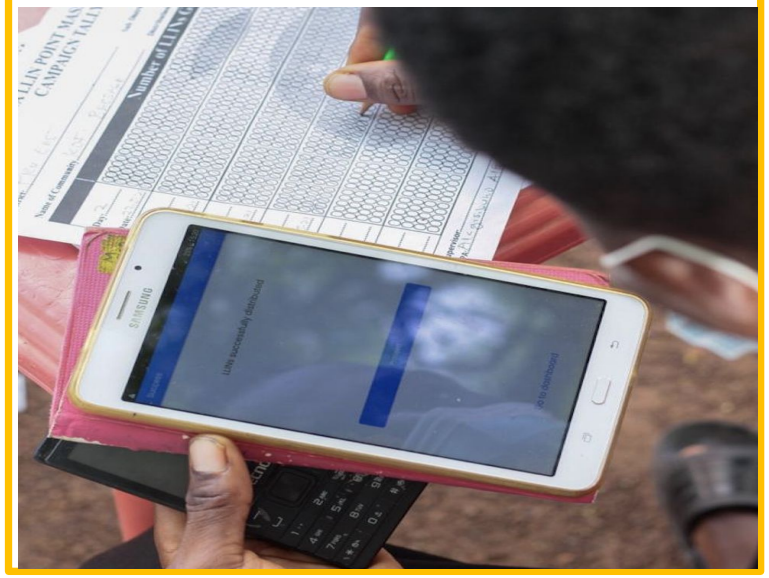
Ghana Campaign Digitization Journey. 1/2

Pre 2018 Campaign

- Paper based HH registration and distribution

2018 & 2021 Campaign

- Transition from paper based registration to digitized registration and distribution
- Program Suplied Mobile device



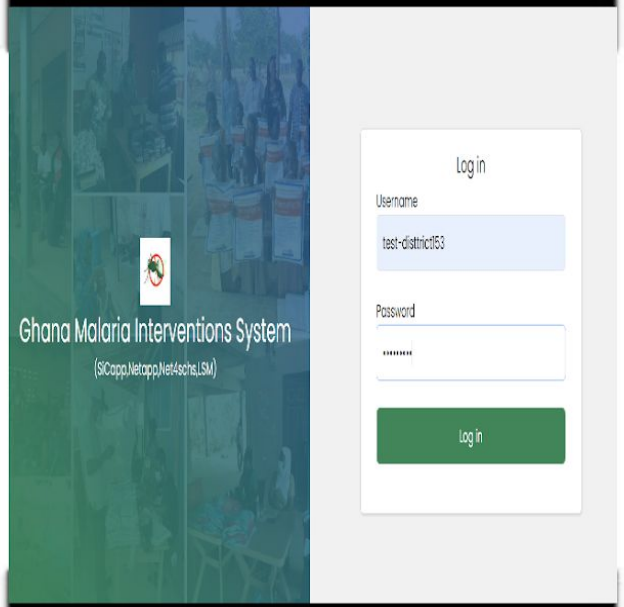
2024 and beyond Campaign

- Campaign Integration
- No code cards

Digitization foundation Pillars. 2/2

TRAINING

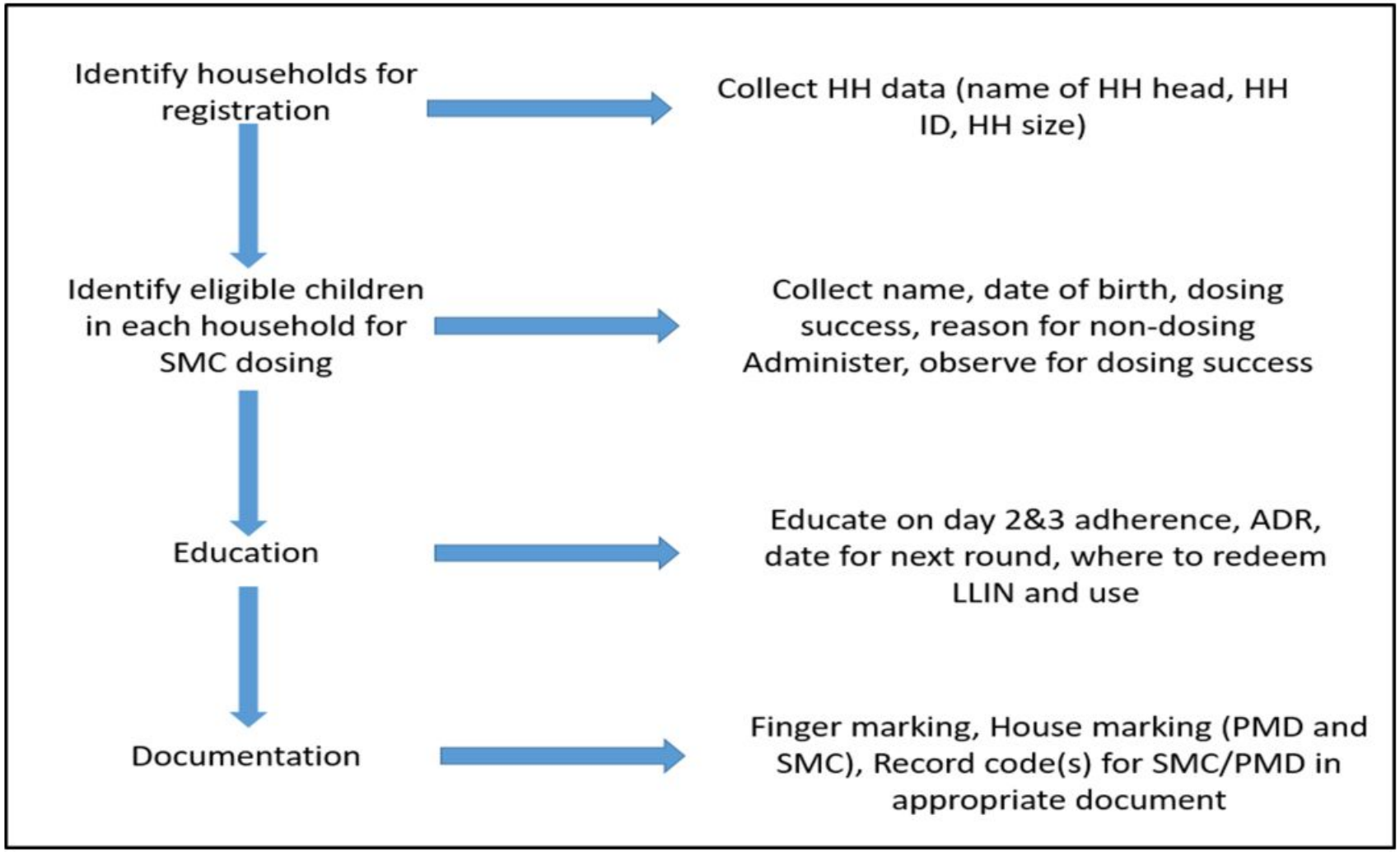
DIGITAL PLATFORM



SUPERVISION

PMD & SMC Integration Strategy 1/3

Flowchart for SMC Dosing and PMD household registration



PMD & SMC Integration Strategy 2/3

PMD & SMC Integration Areas

- Planning meetings at all levels
- Trainings ***(Combined training for national, regional, district supervisors and volunteers)***
- PMD registration and first cycle of SMC dosing
- Documentation and IT ***(an integrated checklist for data collection and supervision developed for integration)***
- Monitoring and Supervision ***(Rapid Assessment)***
- SBC for dosing and registration ***(Combined messaging)***

Internal

PMD & SMC Integration Strategy 3/3

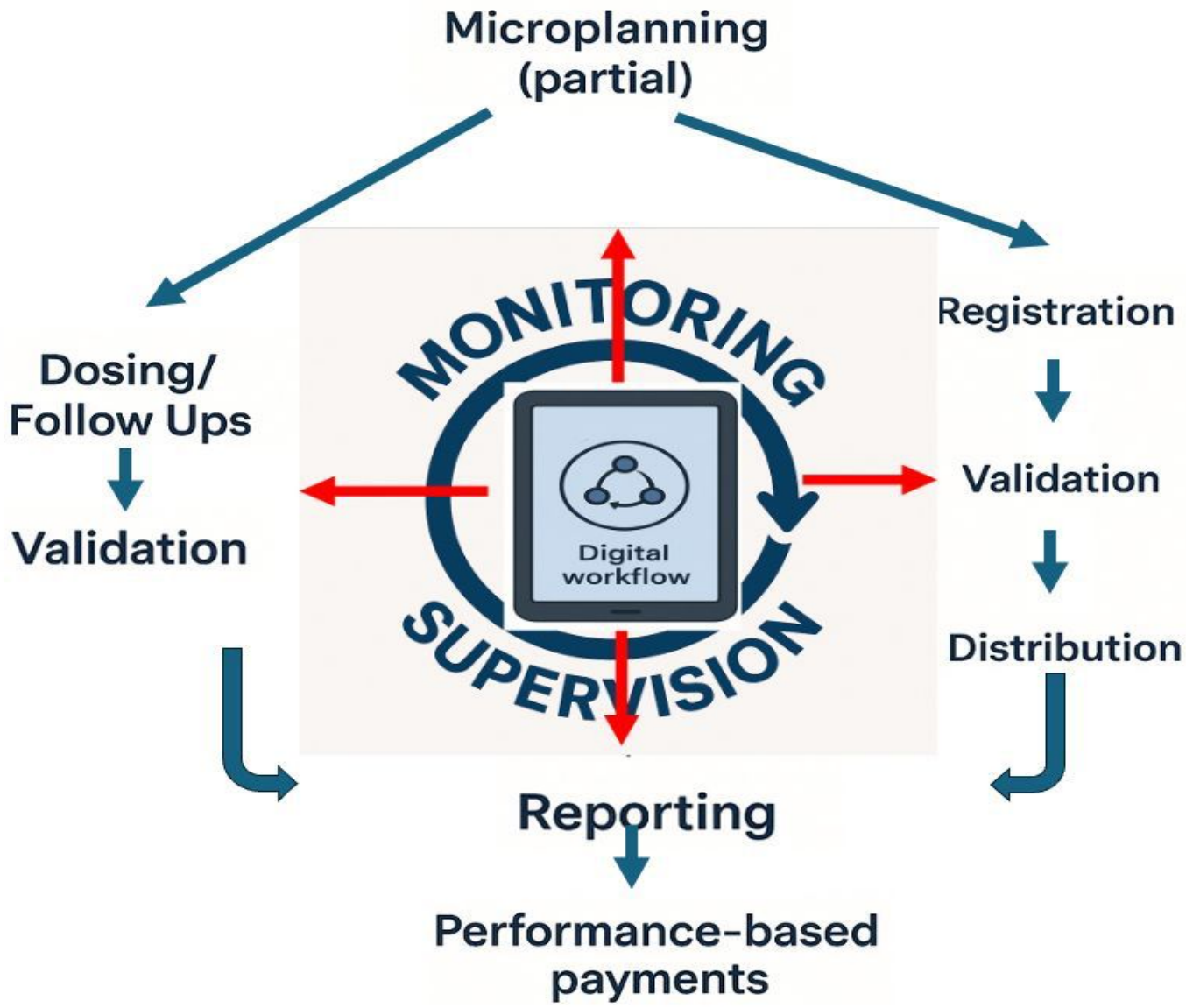
Map of Ghana showing areas of PMD and SMC interventions

Internal

Digital Workflow Architecture. 1/4

Instead of fragmented tools, Ghana implemented:

One connected campaign ecosystem powered by GMIS and supported by secure infrastructure.



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Digital Workflow Architecture. 2/4

Infrastructure Support (Data and Application Hosting)

Behind the application layer:

- Secure centralized data storage
- Backup & disaster recovery
- High-performance dashboards
- National malaria data repository integration
- Data security compliance
- Digital campaigns require resilient infrastructure, not just mobile apps

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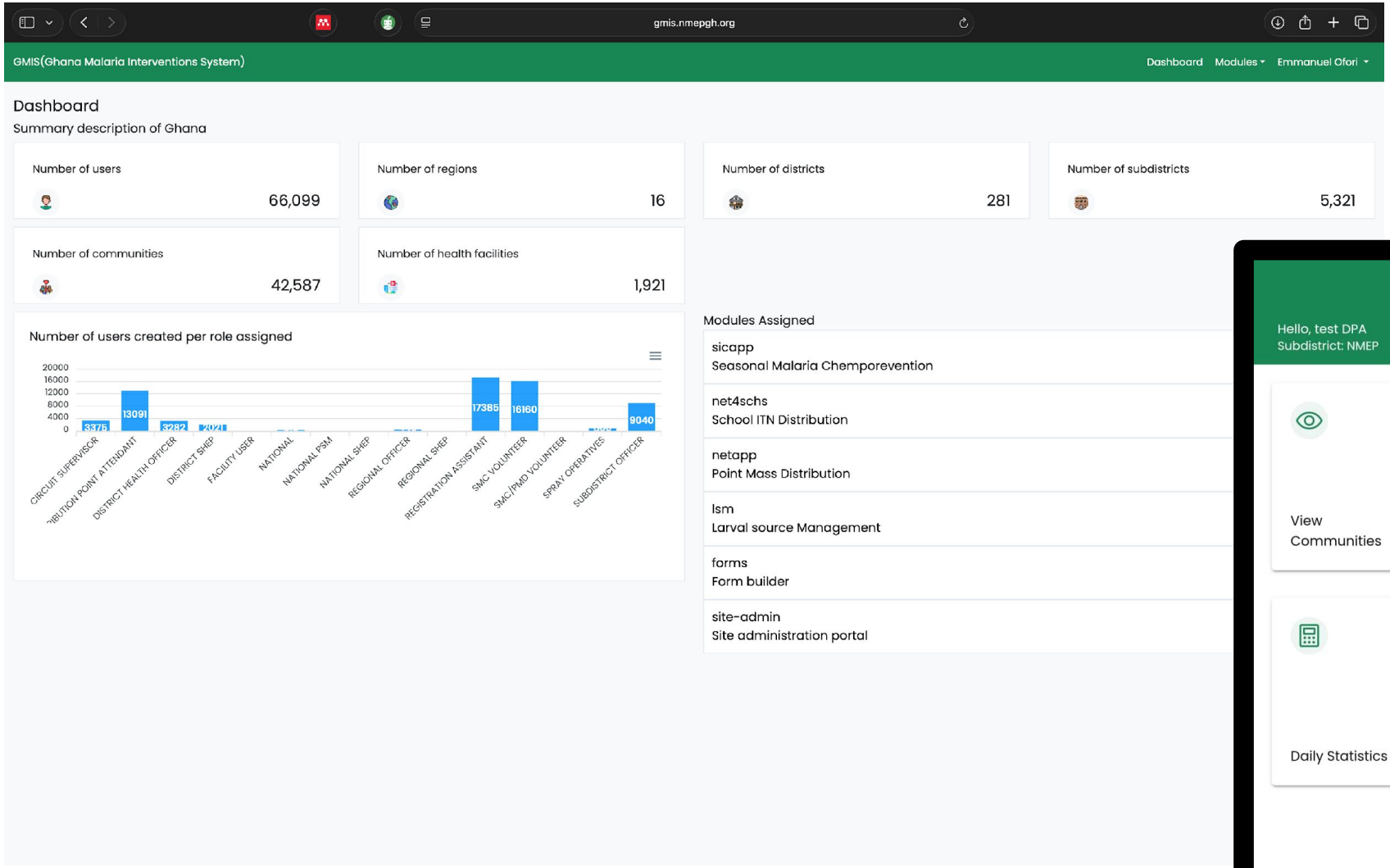
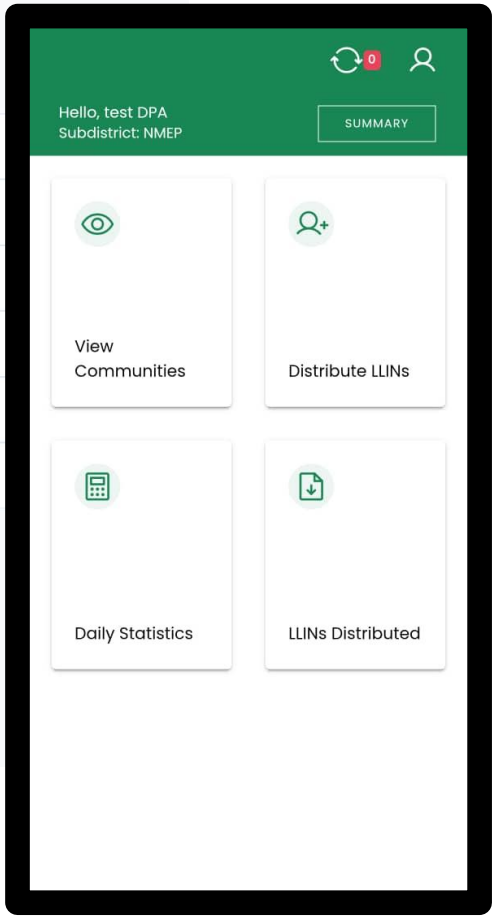
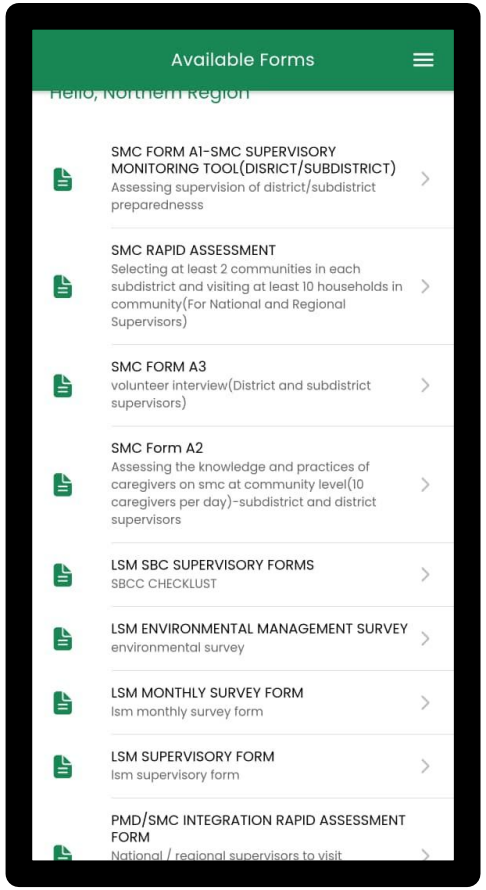
Digital Workflow Architecture. 3/4







Figures showing Web and mobile interfaces

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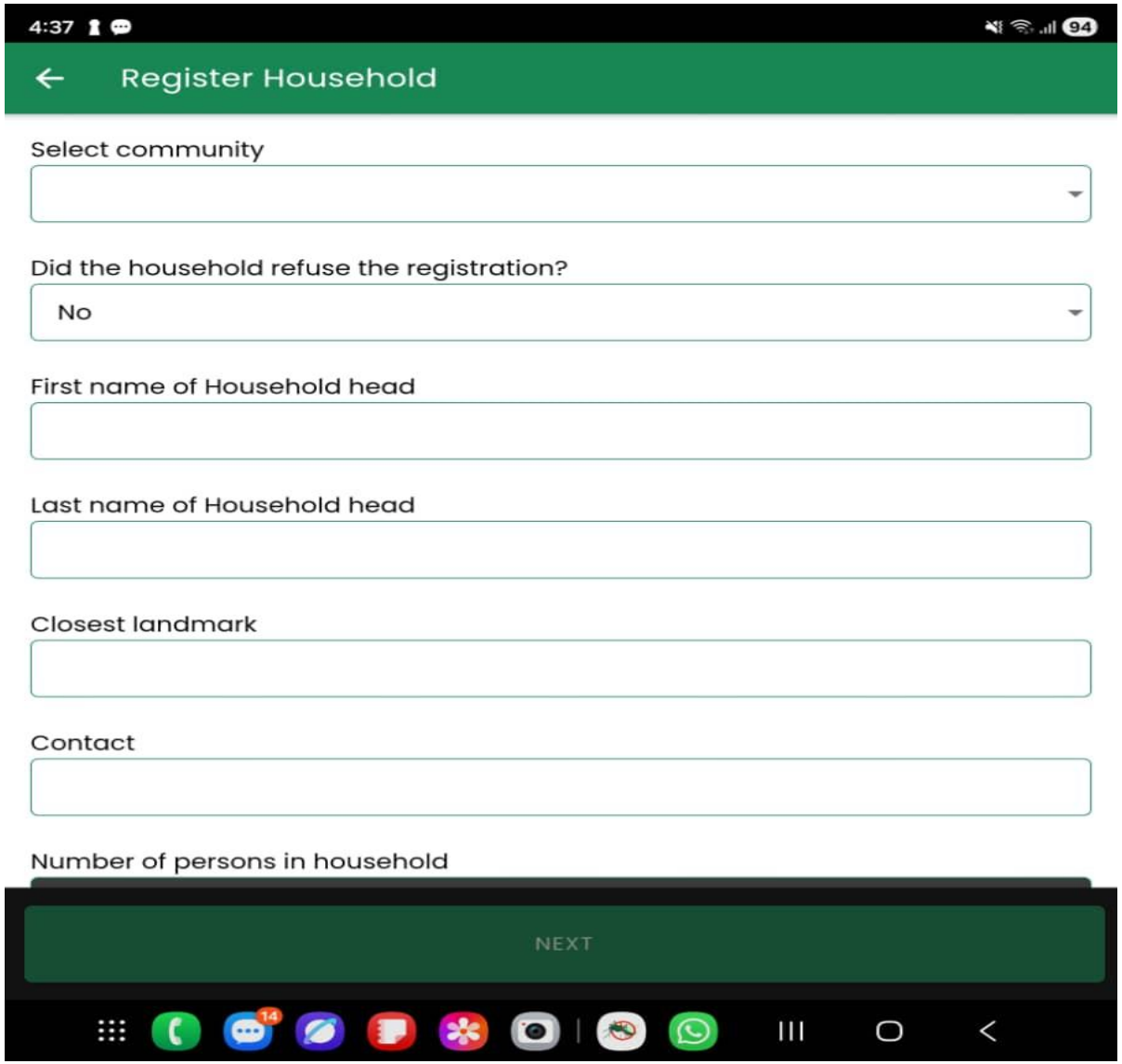
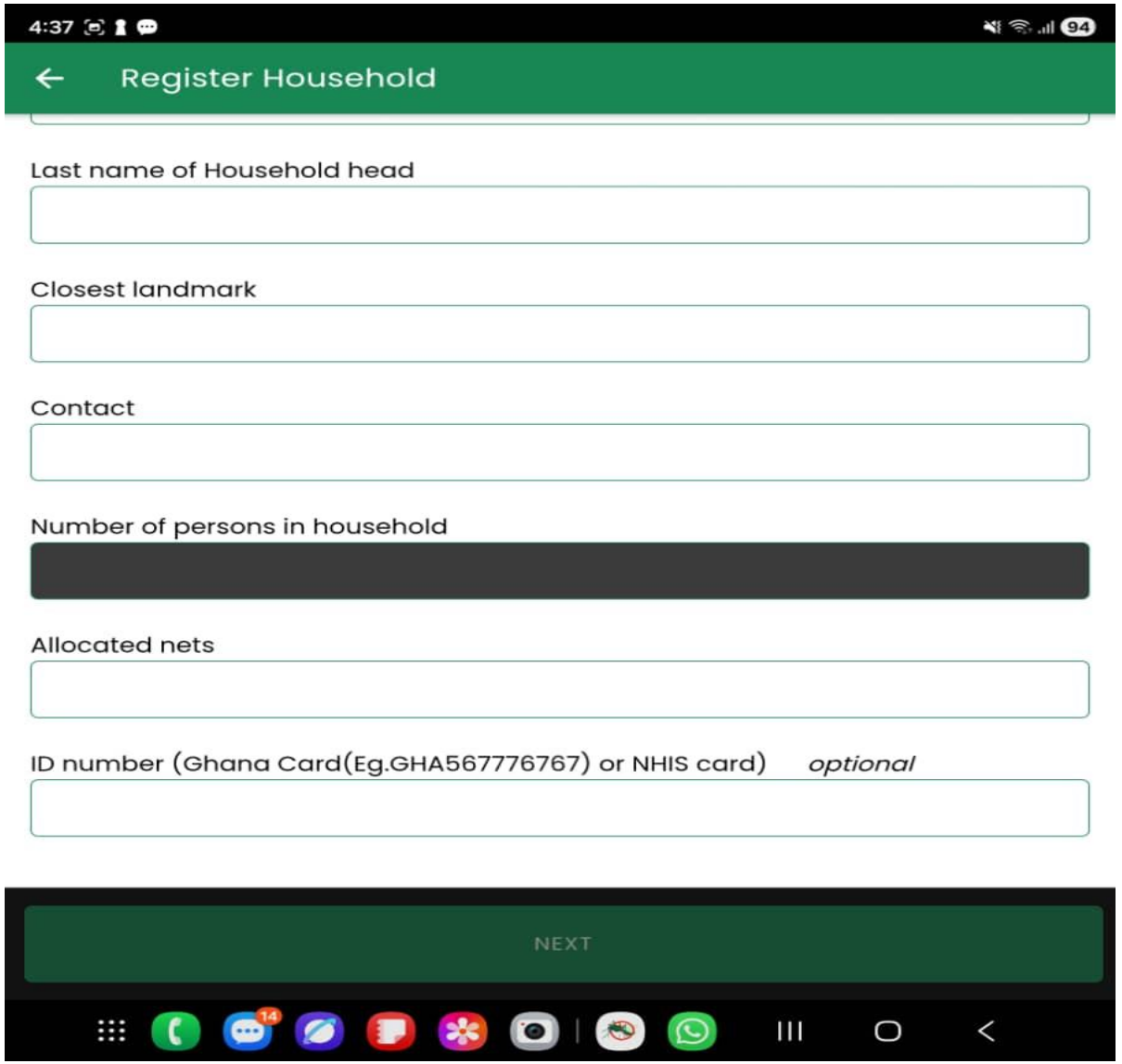
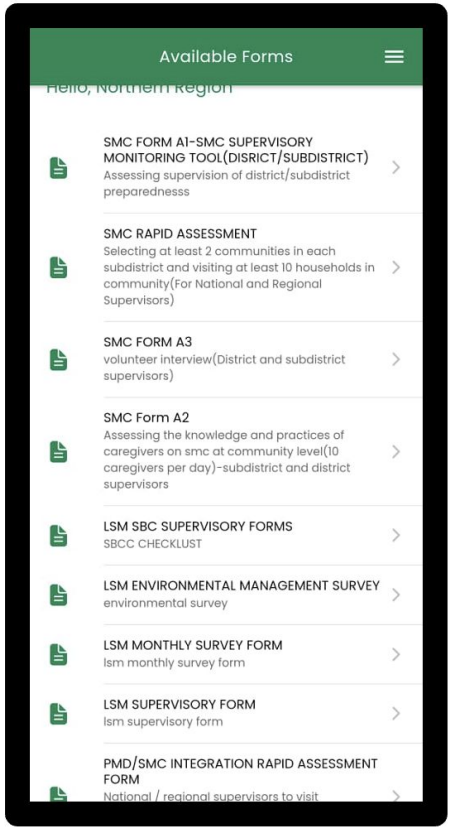
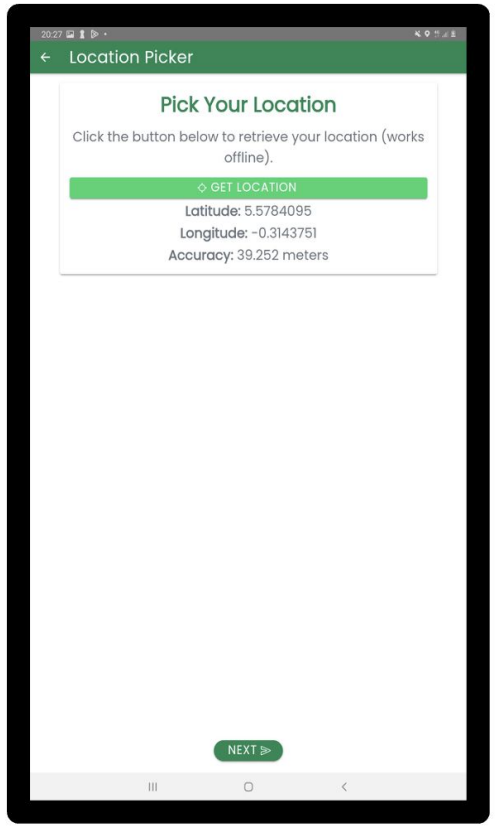
Digital Workflow Architecture. 4/4

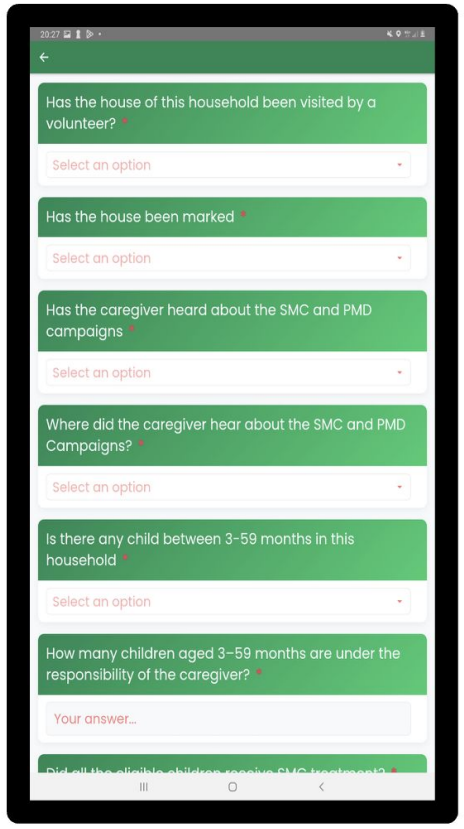




Digital Workflow support for integration supervision







Images of unified checklist and rapid assessment form

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Digital Workflow Architecture achievements

GMIS enabled:

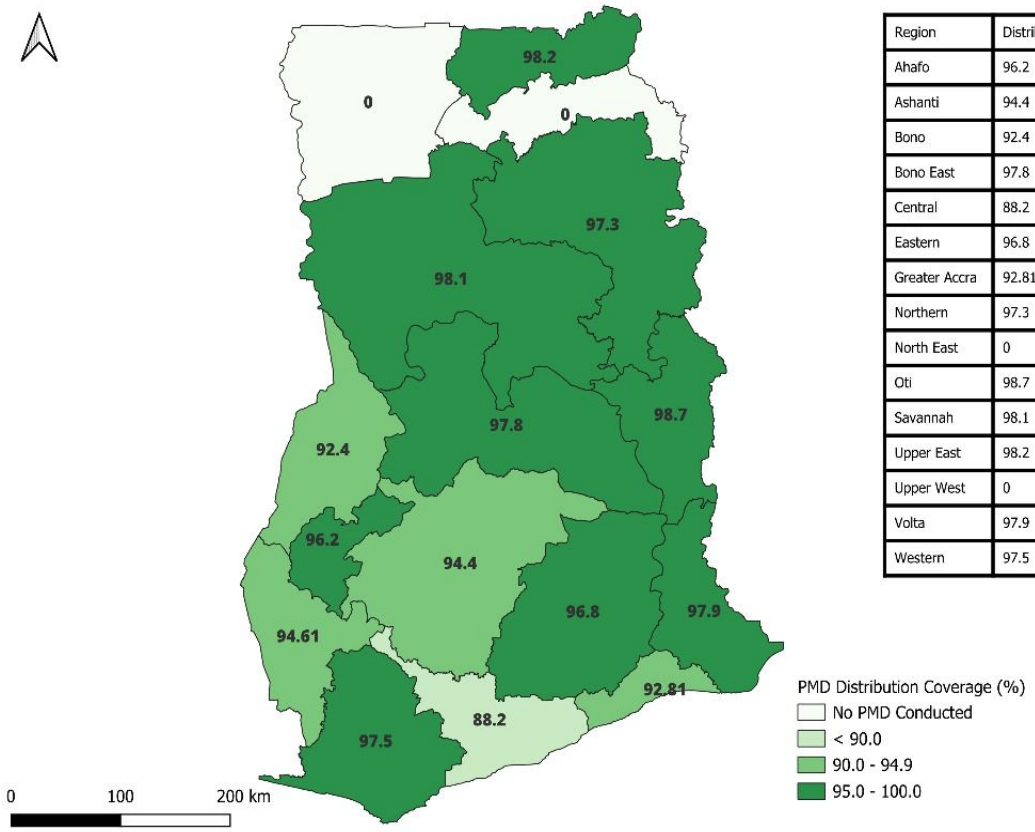
- Data reuse for next campaign
- Household-level registration/Distribution/Child dosing
- Real-time data sync
- Built-in validation logic
- GPS tagging
- Supervisor dashboards
- Automated aggregated reports
- Interoperable with DHIS2

Digital workflows reduced duplication and improved real-time decision-making.

Internal

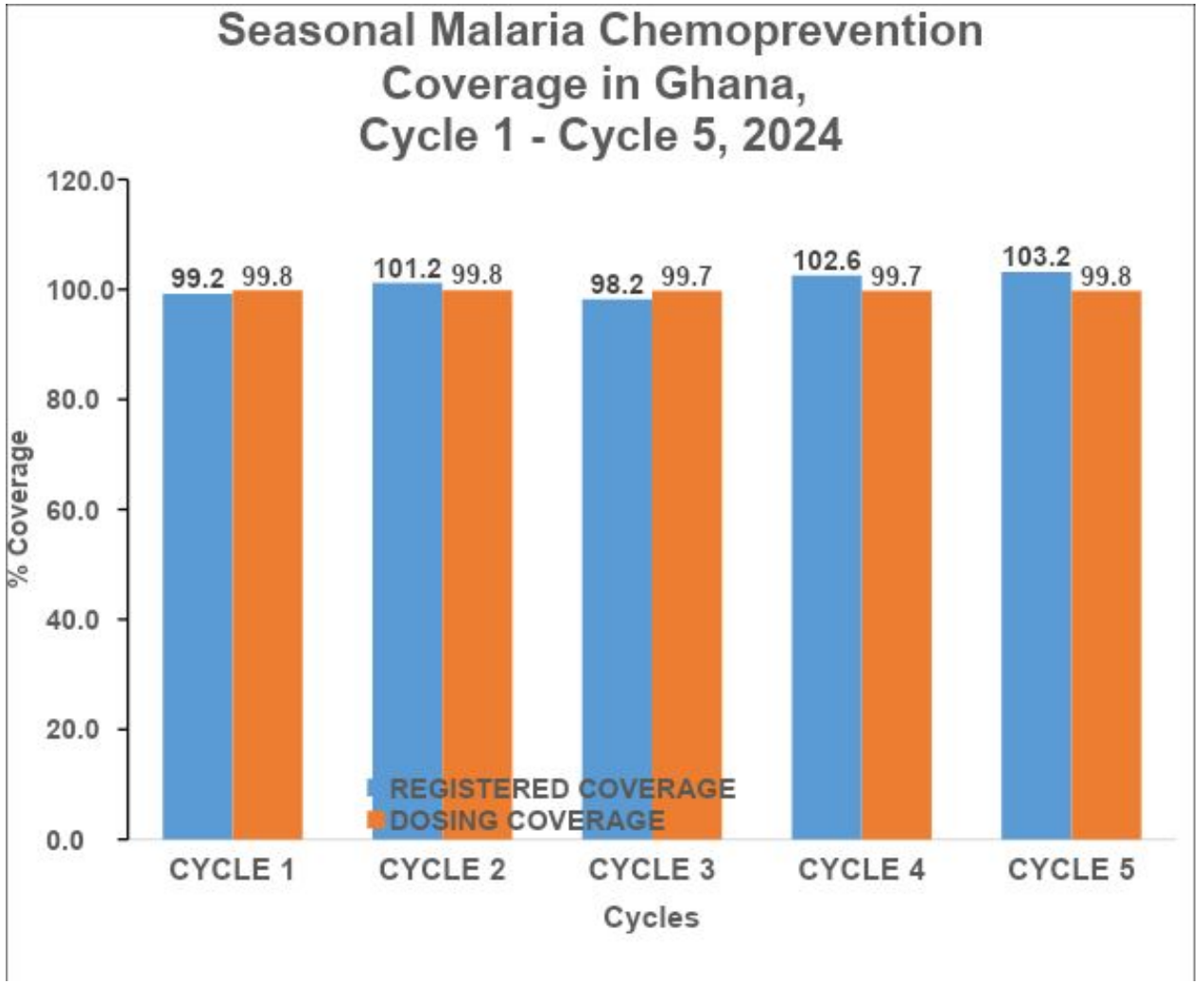
Campaign Achievement

PMD 2024 Coverage



Region	Distribution Coverage
Ahafo	96.2
Ashanti	94.4
Bono	92.4
Bono East	97.8
Central	88.2
Eastern	96.8
Greater Accra	92.81
Northern	97.3
North East	0
Oti	98.7
Savannah	98.1
Upper East	98.2
Upper West	0
Volta	97.9
Western	97.5

SMC 2024 Coverage



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General Integration 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

- A few volunteers did not have the android operating system which works for the GMIS App

Internal

Conclusion

- Now more than ever, we need to optimize health campaign eg. SMC and PMD to achieve impact with limited resource
- Extensive stakeholder engagement prior to implementation is crucial
- Digitization provides that platform for optimization
- The success of a digitized ca,paign is a robust digital infrustracture, training and supervision

Internal

Acknowledgement

- Regional and District Health Directorates
- Global Fund
- USAID/PMI
- AMP
- SMC Alliance

THANK YOU

Internal

Follow us

NATIONAL MALARIA ELIMINATION PROGRAMME (NMEP)

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