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Campaign Digitalization Meeting

Day 2 – 11 April 2025

Réunion sur la numérisation des campagnes

Jour 2 – 11 avril 2025

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Meeting will begin shortly – la réunion va bientôt commencer

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Campaign Digitalization Meeting

Theme 2: Outcomes and evidence of digitalization

Réunion sur la numérisation des campagnes

Thème 2: Résultats et justicatifs de la digitalisation

Meeting will begin shortly – la réunion va bientôt commencer

Title: Beyond Vouchers: Evaluating Alternative Strategies for ITN Distribution in Ghana

Presented By: **Justice Boakye Yiadom**

National Malaria Elimination Programme-Ghana

Outline of presentation

- Introduction
- Why transition from vouchers?
- ITN Distribution strategies
- The new ITN campaign Distribution Process
- Challenges Encountered
- Key recommendations

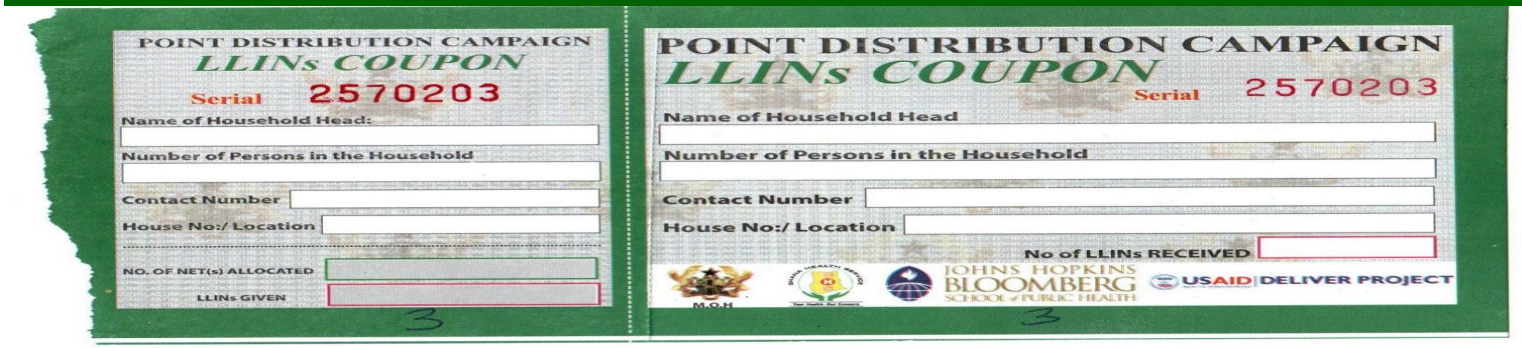
Introduction 1/2

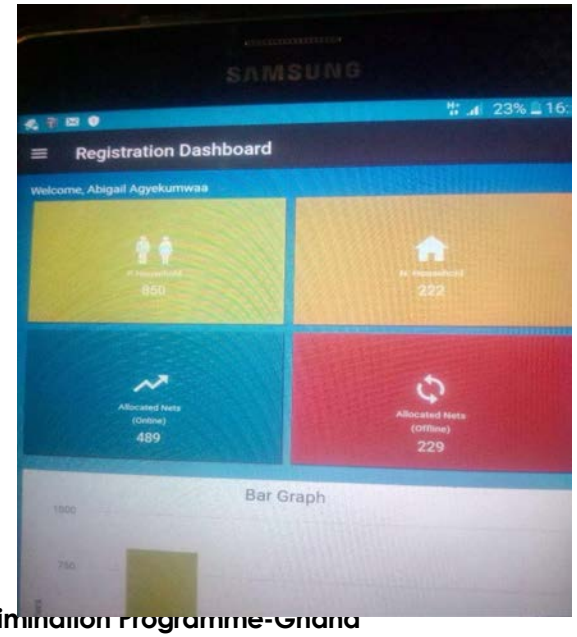
- Since 2008, the Ghana Malaria Elimination Program has relied on ITN campaigns as a core intervention strategy, for malaria control and elimination.
- 2018 the program transitioned from paper-based to a digital system after a successful pilot in four districts in 2017. This was scaled to over 204 districts, reaching more than 15 million people.

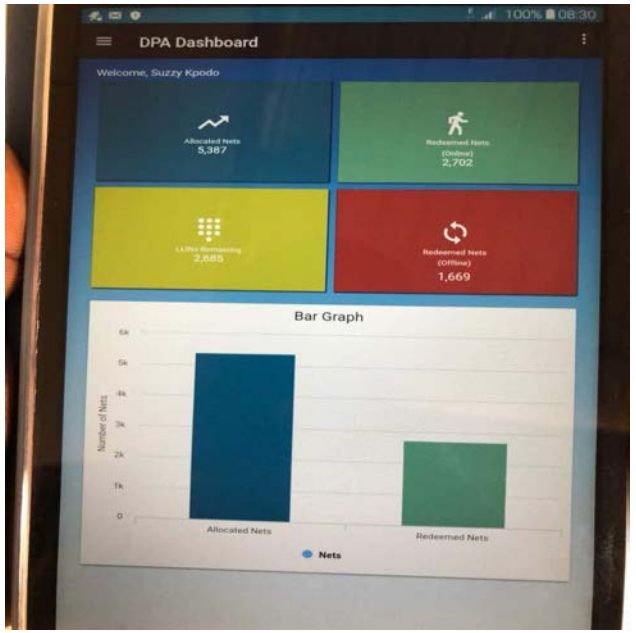
Introduction 2/2

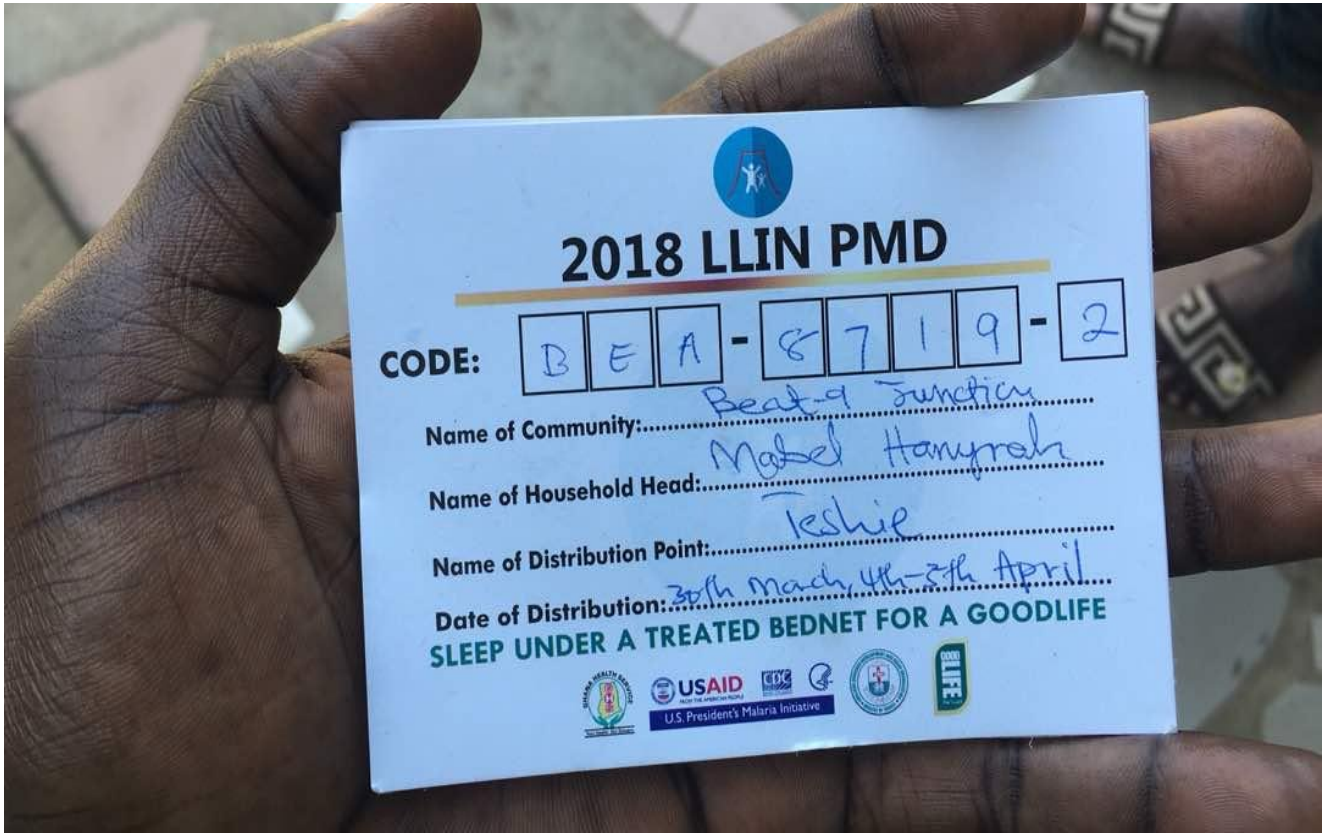
The digitisation initially targeted the registration and distribution processes of the ITN campaigns.

The introduction of vouchers, known as "Code Cards," was a pivotal approach to support the ITN distribution process at the start of digitization.


POINT DISTRIBUTION CAMPAIGN
LLINs COUPON
Serial 2570203
Name of Household Head:
Number of Persons in the Household
Contact Number
House No:/ Location
NO. OF NET(s) ALLOCATED
LLINs GIVEN
3
POINT DISTRIBUTION CAMPAIGN
LLINs COUPON
Serial 2570203
Name of Household Head
Number of Persons in the Household
Contact Number
House No:/ Location
No of LLINs RECEIVED
M.O.H
JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH
USAID | DELIVER PROJECT
3


SAMSUNG
Registration Dashboard
Welcome, Abigail Agyekumwaa
850
222
Allocated Nets (Online)
489
Allocated Nets (Offline)
229
Bar Graph


DPA Dashboard
Welcome, Suzzy Kpodo
Allocated Nets
5,387
Redeemed Nets (Online)
2,702
2,685
Redeemed Nets (Offline)
1,669
Bar Graph
Number of Nets
Allocated Nets
Redeemed Nets
Nets


2018 LLIN PMD
CODE: BEA-6719-2
Name of Community: Beat-9 Junction
Name of Household Head: Mabel Hanyrah
Name of Distribution Point: Ieshie
Date of Distribution: 30th March, 4th-5th April
SLEEP UNDER A TREATED BEDNET FOR A GOODLIFE
USAID
U.S. President's Malaria Initiative

Why transition from vouchers?

01

High printing and logistics costs

02

Lengthy bureaucratic procurement processes

03

Cost-saving measures from printing to support campaign efficiency

04

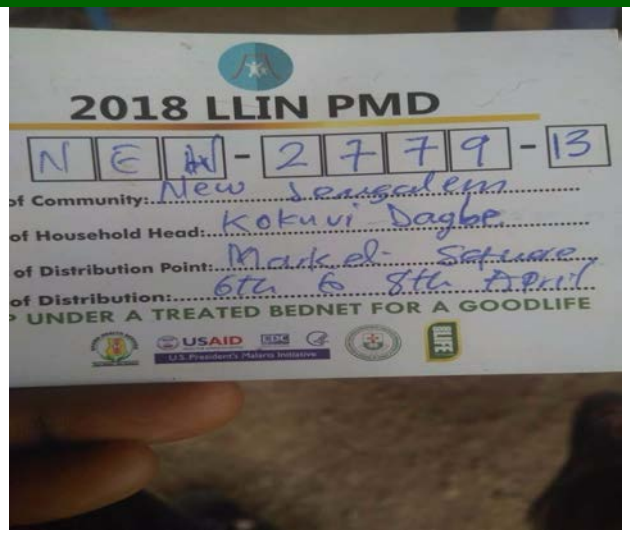
Challenges in waste management

05

Misplacement of vouchers prior to the distribution period

06

Inaccurate and incomplete filling of code cards.


2018 LLIN PMD
NEW-2779-13
of Community: New Jerusalem
of Household Head: Kokuvi Dagbe
of Distribution Point: Market Square
of Distribution: 6th to 8th April
UNDER A TREATED BEDNET FOR A GOODLIFE
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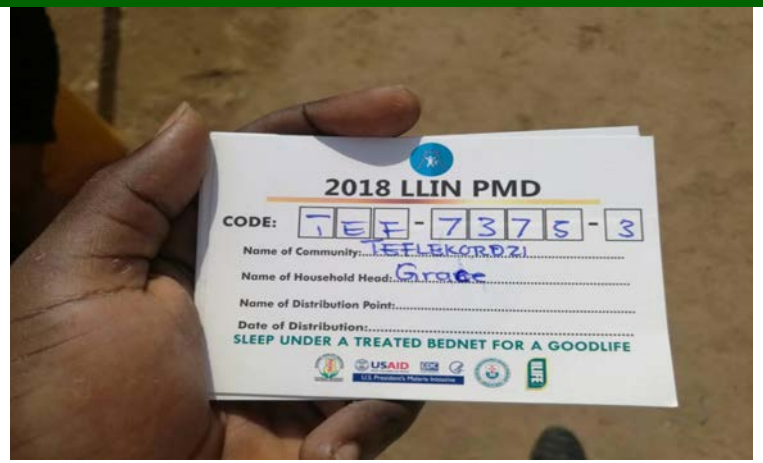
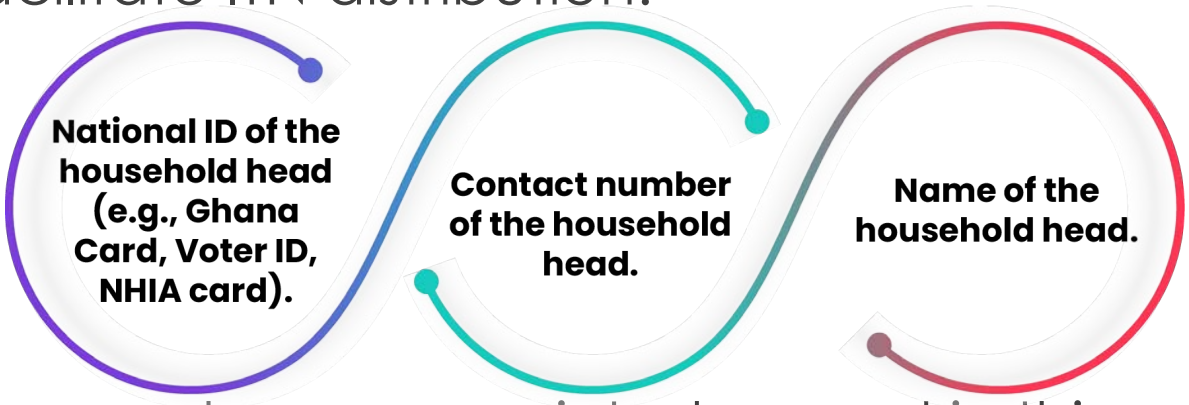

2018 LLIN PMD
CODE: TEF-7375-3
Name of Community: TEFLEKORDZI
Name of Household Head: Grace
Name of Distribution Point:
Date of Distribution:
SLEEP UNDER A TREATED BEDNET FOR A GOODLIFE
USAID

The New PMD Distribution Process

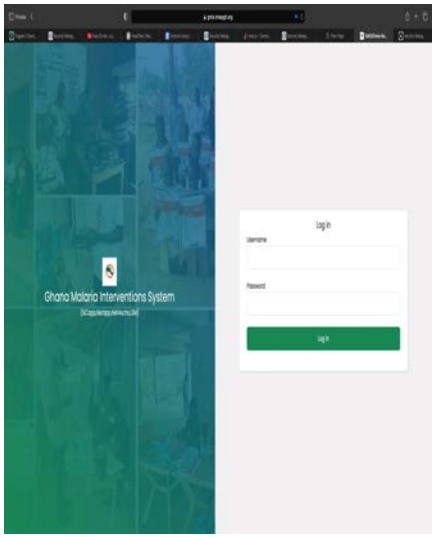
- The Digital tool was redesigned to accommodate alternative methods of distributing ITNs without relying on vouchers.

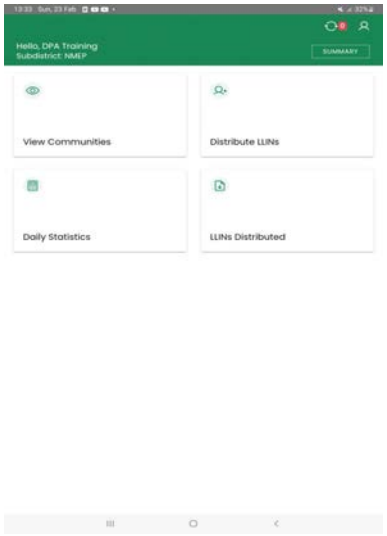
- The new Digital tool offers four options to facilitate ITN distribution:

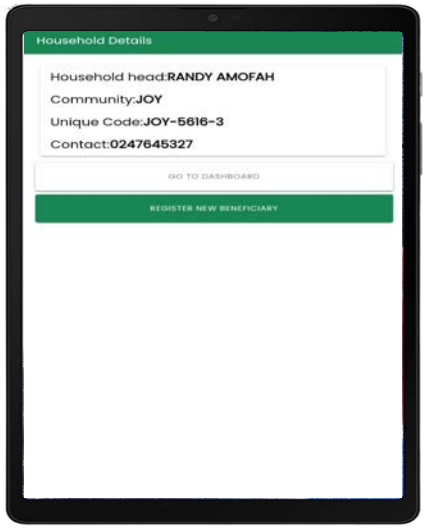


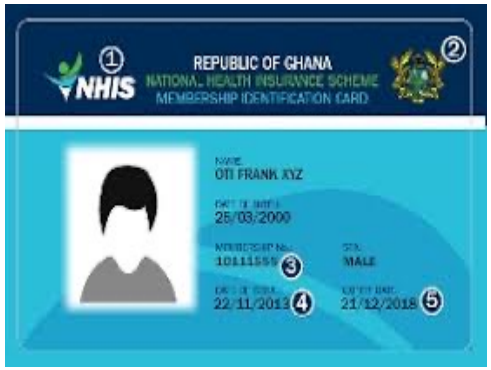
- No vouchers were printed or used in this process.

The New Approach- Alternative to Voucher









Implementation Approach 1/2

- Reviewed Digital Tool to inform redesigning.
- Redesigning of the Digital Tool
- Developed new training slides and materials based on changes
- Implementation of Social and Behaviour Change (SBC) activities to educate beneficiaries on new alternatives
- Trained end users on new functionalities
- Piloted the new alternative before the 2021 ITN campaign

Benefits of the New Approach

- Significant cost savings by eliminating the need for printing and logistics associated with physical code cards.
- A faster registration and redemption process.
- It leveraged existing systems and governance structures.
- Easily scalable.
- Contributes to the management of ITN waste.

Challenges Encountered and Solutions

- End users resisted the adoption of the new system due to familiarity with the old process

- The new system was somewhat not aligned with the cultural, social, or logistical context of the target beneficiaries, leading to low adoption rates.

Key Recommendations

- Add SMS functionality to GMIS mobile app to send unique codes directly to households.
- Include verification of identity using biometric data from National IDs
- Use mobile apps and digital systems to streamline entire point mass distribution processes/ITN Campaign.

Key Recommendations

- Conduct requirement engineering with key stakeholders including community leaders.

- Organise co-designing workshops with community representatives for SBC campaigns to facilitate adoption.

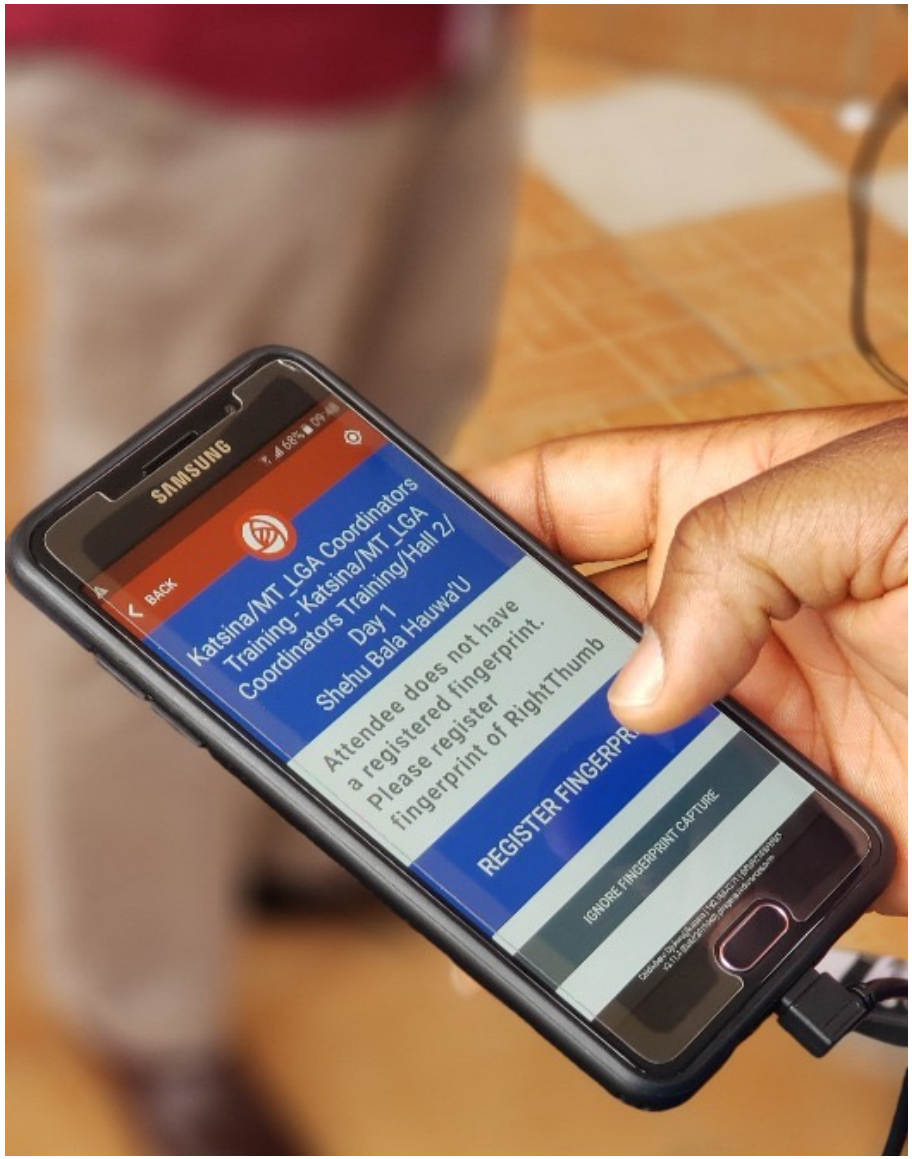
Thank You

Use of e-Token for ITN mass campaign:

A Case Study of the 2024 Pilot in Ogun State, Nigeria

Outline

- Introduction
- Background
- Pilot Implementation
- Challenges Encountered
- Summary of cost savings
- Recommendations and Future Plans
- Conclusion



Introduction

Insecticide Treated Nets (ITNs) are health commodities in malaria prevention, providing a physical barrier against mosquitoes and reducing malaria transmission rates.

ITNs are distributed during mass campaigns to ensure widespread coverage, particularly in malaria-endemic regions like Nigeria which contributes to 28% of the world's global malaria burden according to WHO.

The use of ITNs has been instrumental in reducing malaria morbidity and mortality, especially among vulnerable populations such as children under five and pregnant women.

Objective

The presentation aims to showcase the results and evidence of digitization through the use of e-Tokens in the Ogun State 2024 ITN Mass Campaign.

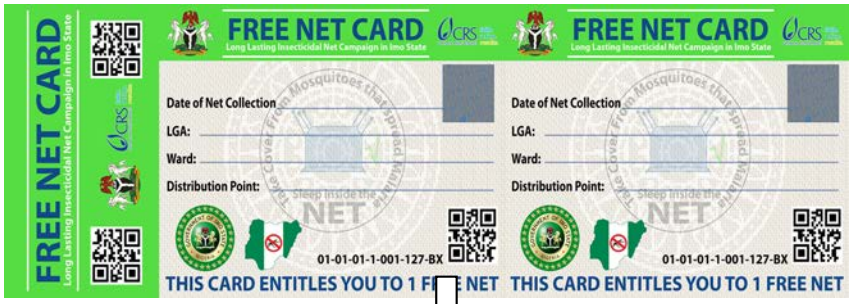
This innovative approach replaces traditional printed net cards with unique digital tokens, streamlining the distribution process and reducing costs.

Background

Historically, ITN distribution in Nigeria relied on printed net cards, which were costly to produce and logistically challenging to manage.

These cards were used to ensure accountability and track the distribution of nets to households

The ITN tokenization strategy was introduced to address these challenges by replacing physical net cards with unique digital tokens.



UWV-4TU- A8M

Pilot Scope

The pilot evaluated the feasibility of tokenization as a cost-effective solution for ITN distribution.

Conducted in three Local Government Areas (LGAs) in Ogun State: Odeda, Ikenne, and Ijebu Ode.

The need to eliminate the need for printed net cards to significantly reduce campaign costs and streamline the distribution process.

These areas were chosen for their diverse urban-rural profiles, providing an opportunity to test the system in varying operational context

Implementation Process for e-Token Pilot

13 Training and Technology Administrators (TTAs) were trained and deployed across the pilot LGAs to support household mobilization teams.

Mobilizers participated in a two-day training program focused on household registration and token generation.

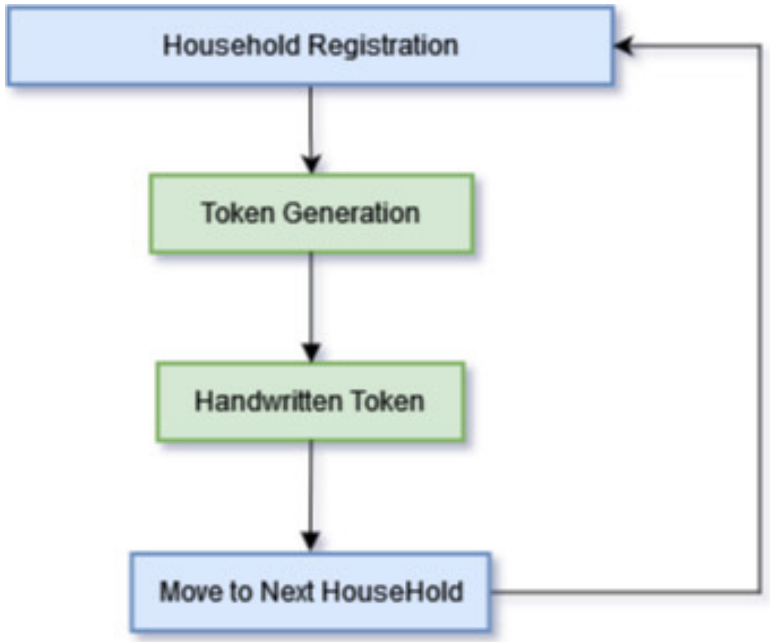
1,300 booklets of e-token record slips were printed with each containing 100 slips.

Distribution Point teams were trained on entering tokens into the mobile app

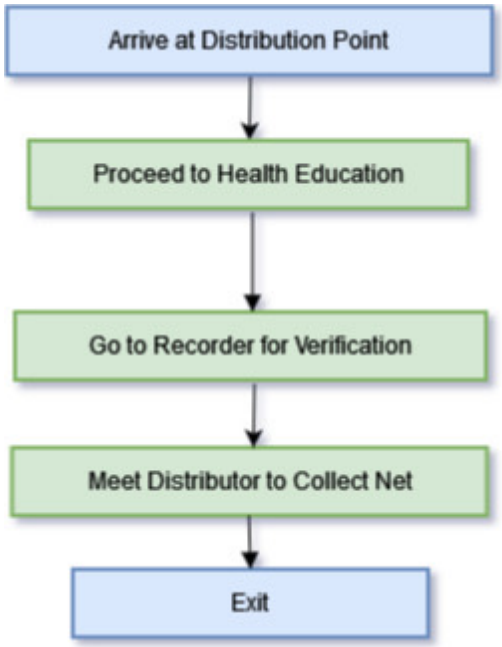
The ICT4D Team ensured the timely resolution of technical challenges and maintained the integrity of the tokenization strategy.

Operationalization

During HHM…



At the Distribution Point…



Challenges Encountered

- Transcription Errors
- Legibility Issues
- Incomplete Mobilization
- Documentation Issues

Summary of Cost Savings

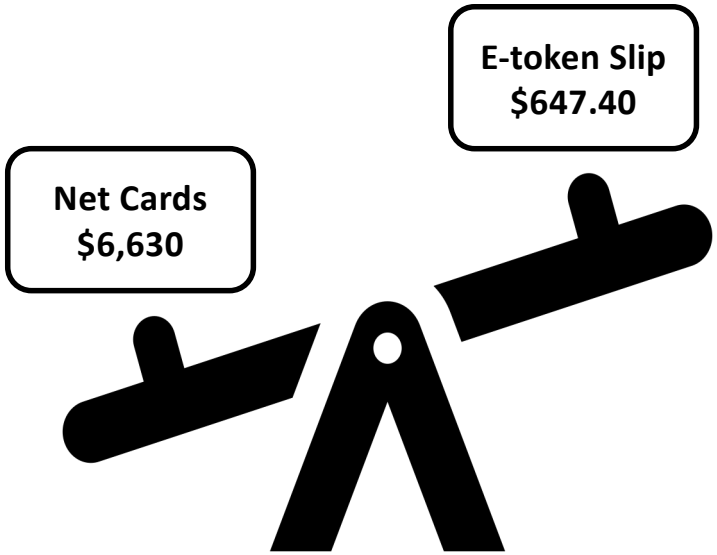
Net Cards vs. e-Token Slips in the 3 Pilot LGAs

Total Cost of **Net Cards: $6,630.00**

Total Cost of **Token Slips: $647.40**

Total Savings: $5,982.60

The pilot achieved an approximate **90% reduction from the use of net cards.**



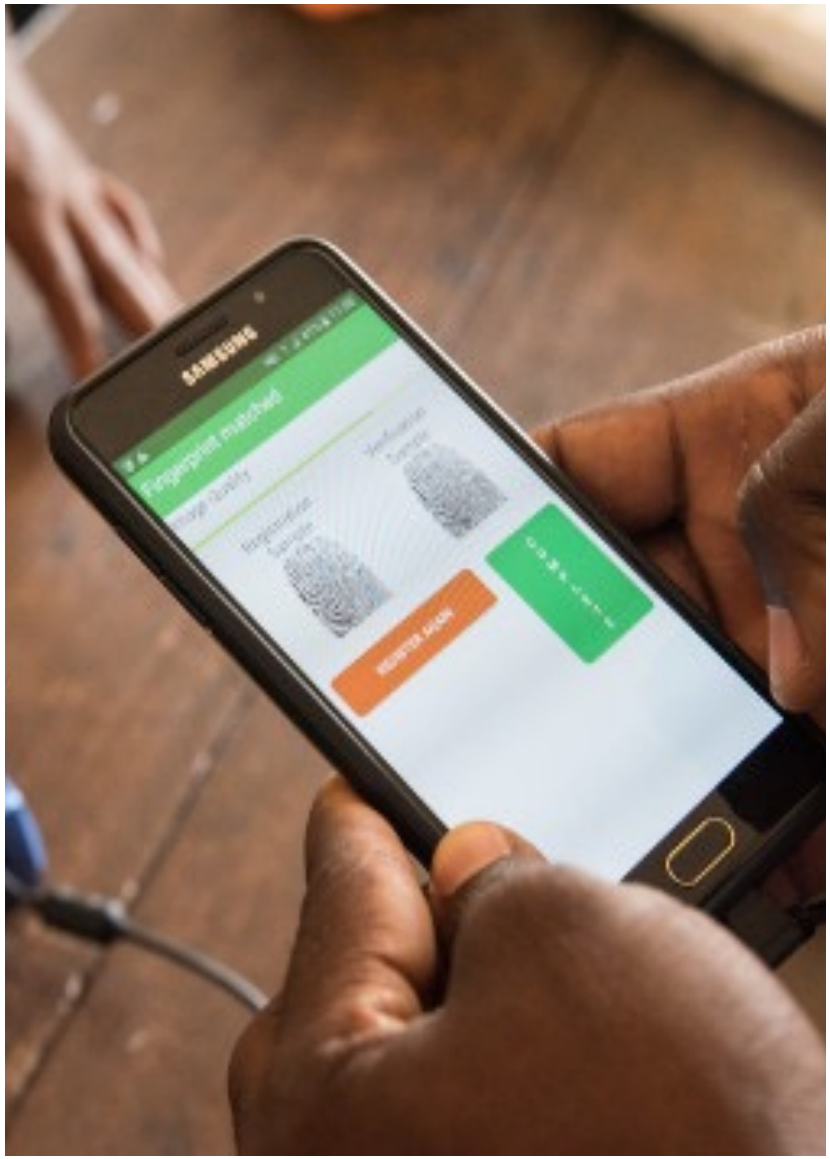
Recommendations and Future Plans

- Only mobilizers handling the device write the e-token
- Redesigning of the app flow
- Emphasize correct documentation during training
- Changing of e-Tokens to Numbers alone to reduce the rate of invalid e-Tokens
- Scale up E-tokenization in all 2025 Campaigns, leveraging the success and insights gained from the Ogun State pilot to enhance the efficiency and effectiveness of ITN distribution.
- Consider merging e-tokens and Beneficiary IDs for integrated campaigns

Conclusion

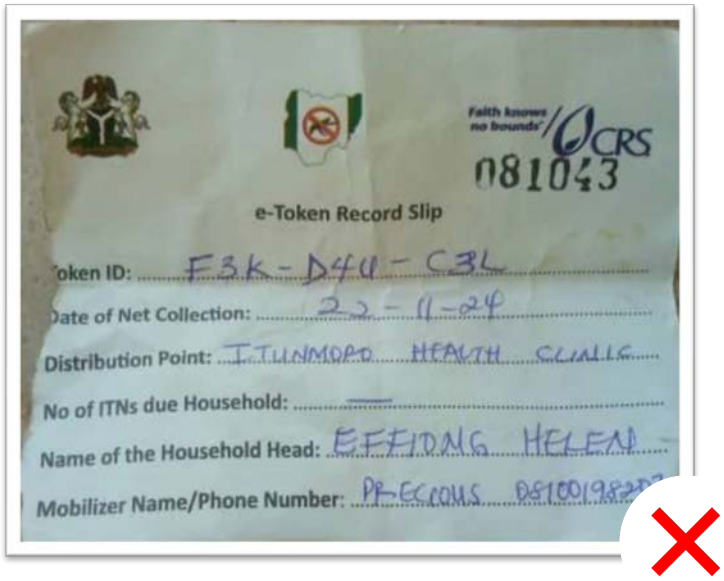
The e-Tokenization pilot in Ogun State serves as a compelling case study showcasing the cost-effectiveness and return on investment (ROI) of digital platforms in improving health outcomes. By embracing digitization, ITN campaigns can achieve greater efficiency, reduce costs, and ultimately save more lives.

The success of the e-Tokenization pilot in Ogun State provides a strong foundation for future initiatives aimed at leveraging technology to improve health outcomes and achieve sustainable development goals.

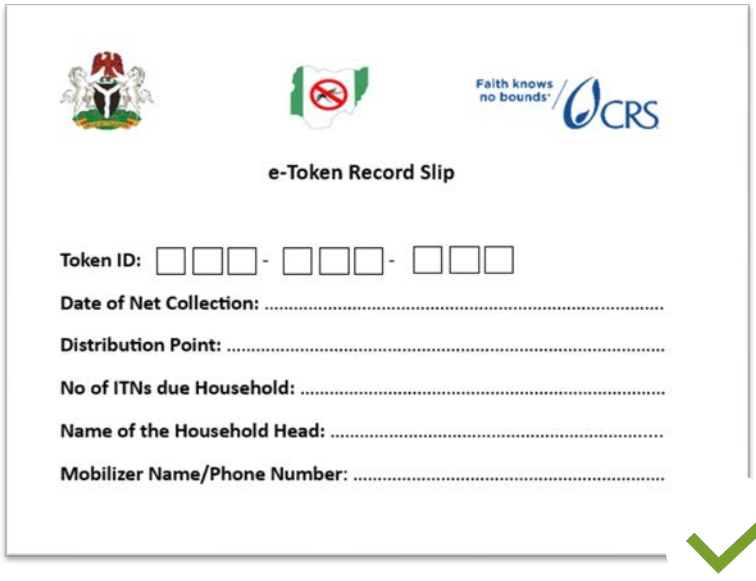


Annexes

1. Wrongly filled Token Slip with Good handwriting wrote V as U



2. Redesigned E-token Slip



Partners

National Malaria Elimination Program (NMEP)

Redrose CPS

Ogun State Government

Society for Family Health

Thank You

Faith knows no bounds®

CRS


Thank
You
Obrigado
Merci
Multumesc
Maake
Asante
Kiitos
Grazie
Mochchakkeram
Spasibo
Welalin
Matondo
Chokrane
Mamana
Dank Je
Nirringrazzjak
Ua Tsaug Rau Koj
Kia Ora
Salamat

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Discussion
Questions & Answers

Discussion
Questions et réponses

Remote participants:
Kindly use the Zoom Q&A feature to submit comments and ask questions, specifying the name of the speaker to whom the question is directed.

Participants à distance :
Nous vous prions d'utiliser la fonction Q&A sur Zoom pour soumettre vos commentaires et poser vos questions, en précisant le nom de l'orateur à qui la question est adressée.

For technical difficulties / Pour les problèmes techniques: please use the Zoom Chat and/or email info@tiseh.com

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Coffee Break

Pause café

We will return shortly!

A tout de suite!

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For technical difficulties / Pour les problèmes techniques: please use the Zoom Chat and/or email info@tiseh.com

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Campaign Digitalization Meeting

Theme 3: Governance, ownership, and sustainability

Réunion sur la numérisation des campagnes

Thème 3: Gouvernance, appropriation, et durabilité

Meeting will begin shortly – la réunion va bientôt commencer

Ministry of Health

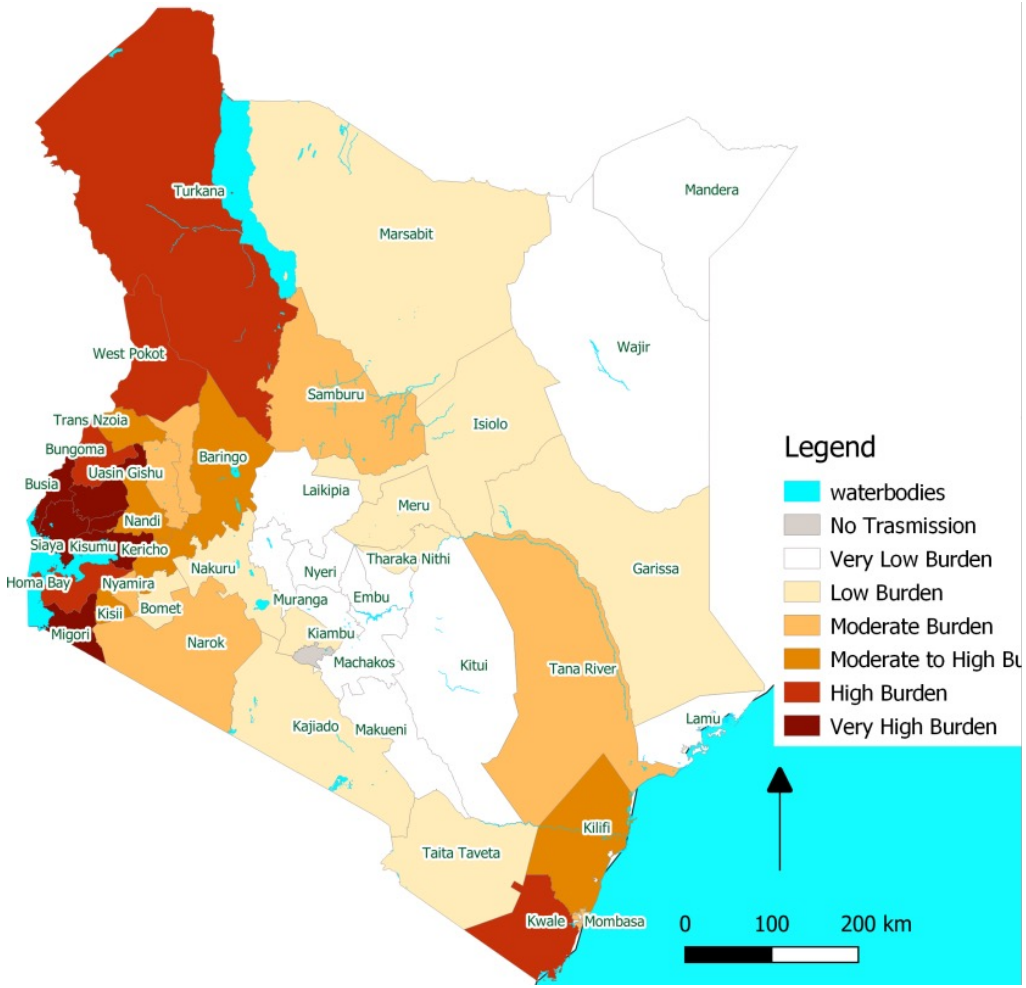
National Malaria Control Programme

Governance, Ownership, and Sustainability of Digital Approaches for Public Health Campaigns: The Case of Digimal-ke

Alliance for Malaria Prevention Meeting

April 2025

Malaria burden



Introduction

Digital Transformation in Health in Kenya

- Legal and policy guidance within the Health Act 2017 and Health Policy 2016 – 2030.

Overview of digital transformation in public health campaigns

- Massnet Distribution Campaign 2023/24 digimal-ke.
- Mass Drug Administration in 2024 for NTDs on eCHIS

Importance of governance, ownership, and sustainability

- Regulations and Coordination
- Accountability, compliance and efficiencies
- Global guidance and all-inclusive country-led processes
- Technology adaptability and resilience

2. Governance & Policy Alignment

Compliance with Kenya's Digital Superhighway principles

leveraging digital technologies

Improve service delivery

Achieve UHC and support attainment of SDGs

Alignment with national data protection regulations

Internal and External Data protection assessment

Role-based access controls

Continuous platform monitoring.

Stewardship by the Malaria Program and Ministry of Health

Plan of Action
Steering committee
Regular reviews and escalation.

01

Personnel Registration and Mgt

All persons involved in Campaign

- Data capture and validation
- Aligning and roles assignment
- SMS/USSD and Web platforms

02

Engagement Mgmt

Activities and Events

- Persons, roles, location and date
- Informs payroll

03

Mapping and Alignment

Administrative, Drop-off and Distribution

- Provides specific visualization
- Links to LMIS
- Informs performance

04

Registration

Beneficiary Registration (on-line and off-line)

- Contact details
- Household population
- Collection point
- Real-time Visibility

05
Commodity Mgmt

06
Distribution

07
Reverse Logistics

08
User and Payroll Mgmt

Needs and Location

- Requirement at local levels
- Order processing and fulfillment

Distribution

- Fixed points
- Beneficiary identification
- Real-time visualization

Mop-up

- Accountability and re-allocation

Campaign personnel

- User Profile and Account
- Multiple-level approvals
- Linkage to mobile money platform

Overall, View

Digimal Stats	
Registered Users	164,894
Active Activities	4,826
Active Events	4,714

Households	
Total Registered	4,881,896
Total Served	4,568,576
Total Remaining	313,320
% of Households Served	93.58%

Nets	
Total Required	15,495,596
Total Delivered	15,363,362
Total Distributed	14,627,269
Total Remaining	736,093
% of Nets Distributed	95.21%

Household Population	
Total Registered	29,764,513
Total Served	28,099,563
Total Remaining	1,664,950
% of Population Served	94.41%

Country Ownership & Sustainability

Locally developed with university-based developers

Built on open-source technology for reusability and integration

Low device requirements (BYOD model) for wider accessibility

Developed training Materials on virtual academy.

Integration & Scalability

Campaign Execution	Coordination and Management	Technology
• Beneficiary registration • Service delivery tracking and reporting • Inventory management and distribution oversight • Notifications	• Real-time dashboards for monitoring and evaluation • Data warehousing for comprehensive reporting • Human Resource data capture including referencing other system for HR information • Payroll for payment of campaign staff using integration with mobile payment platform (various wallets)	• Open-source and API ready • Link to the ERPs used for logistics (Kemsa and Meds) • Expenditure reporting (Microsoft Dynamics 365)

5. Impact on Governance & Decision-Making

Real-time dashboards at all campaign levels

Transparent tracking of personnel, performance and commodities

Time-stamped records ensuring accountability

Prompt Payment system with multi-level approvals and built-in validation.

Lessons Learned & Future Recommendations

- **Scalability:** Larger pilots needed to reduce deployment issues
- **Data Readiness:** Pre-collection, validation, and cleaning before upload
- **Interoperability:** Leveraging existing datasets for validation (e.g eCHIS)
- **Scope Management:** Sticking to defined features while staging enhancements
- **Adaption:** Other delivery programs and pathways (SMC, ITN-CCND, IRS)

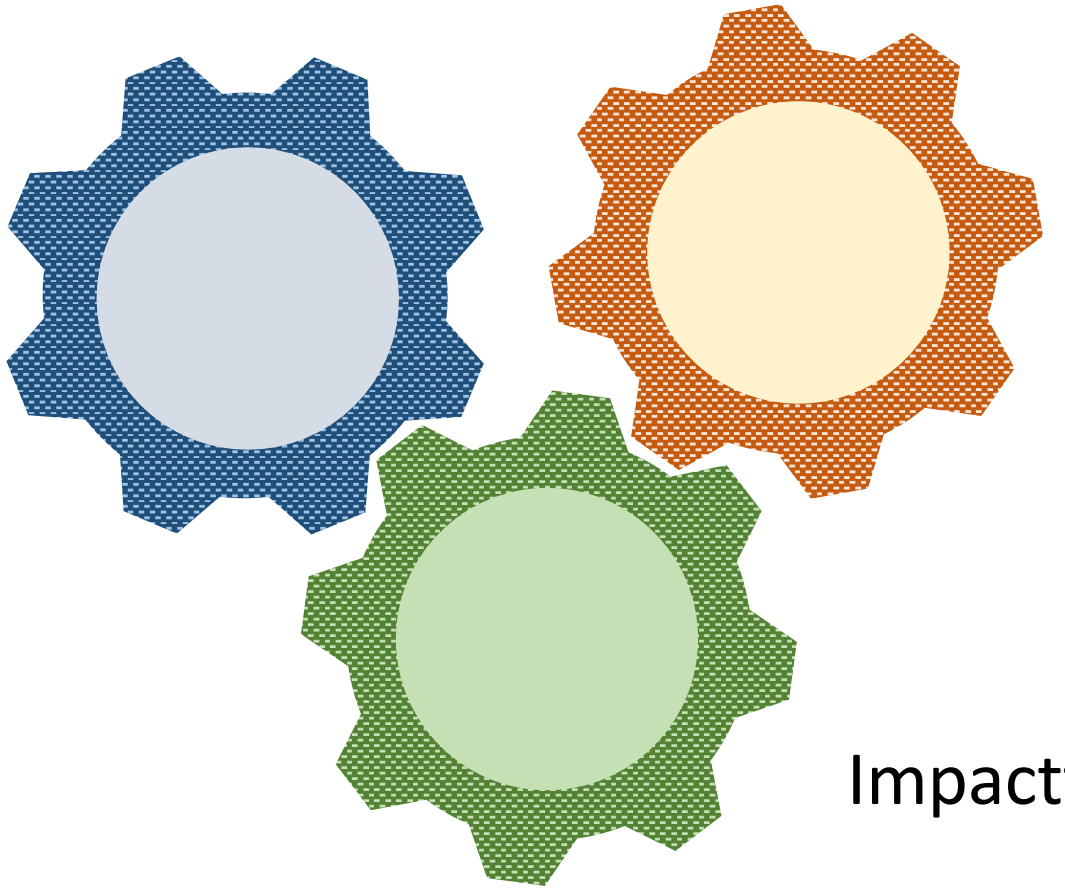
Conclusion

Committed Leadership
Ensures that digital initiatives align with national health priorities, secure policy backing, and receive continuous investment for sustainability.

Resilient and adaptive Technology Platforms
The backbone for real-time data collection, secure and transparent decision-making, and seamless integration platforms like Digimal-ke can evolve to meet emerging public health needs.

Community Acceptance
Engaging local stakeholders, ensuring ease of use, and addressing digital literacy barriers enhance trust, adoption, and reliability.

Sustainable



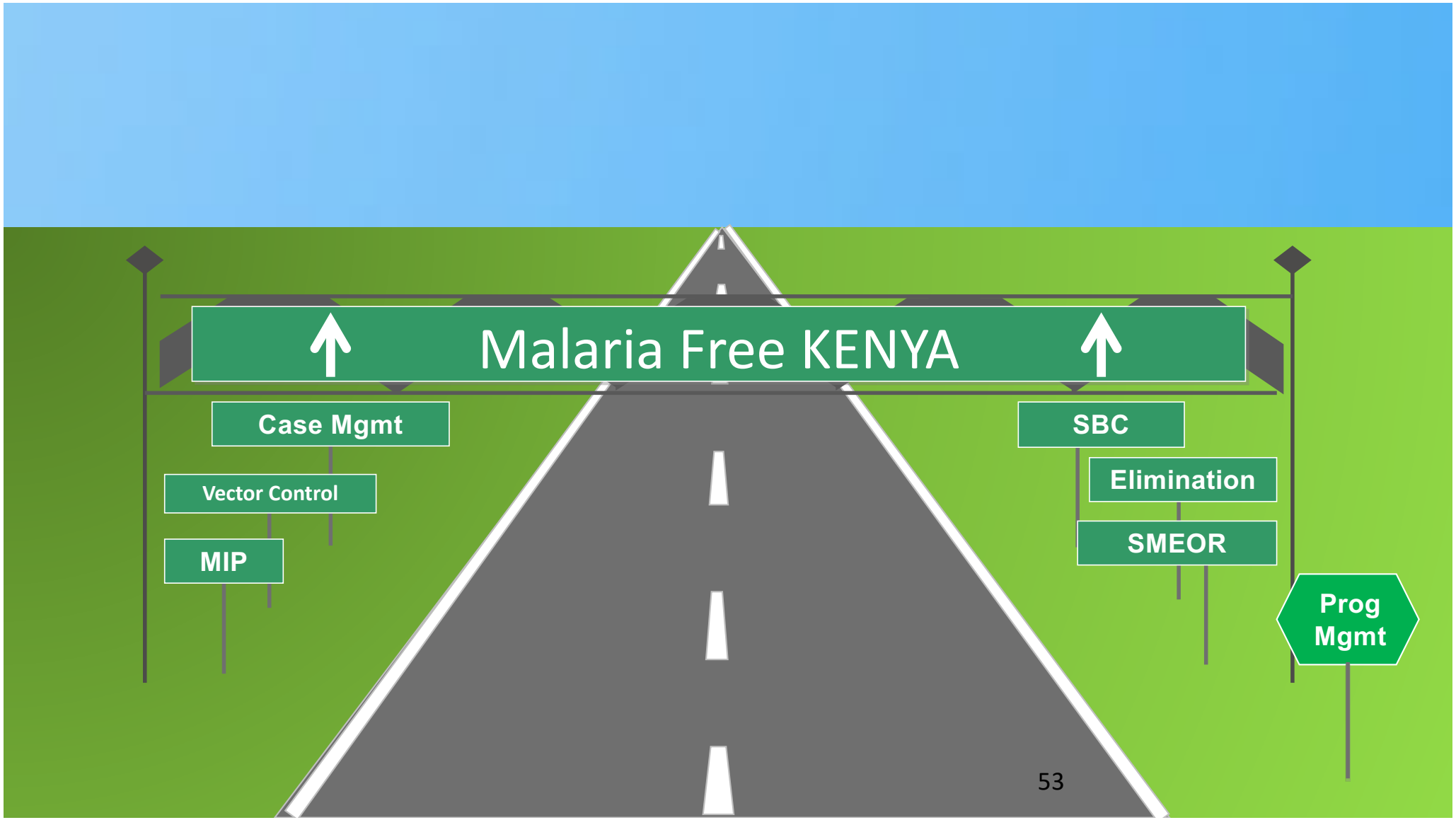
Scalable

Impactful

Every once in a while, a new technology, an old problem, and a big idea turn into an innovation.

- Dean Kamen

The National Malaria Control Programme (NMCP)
P.O. Box 19982 – 00202
Nairobi, KENYA
Website: www.nmcp.or.ke
Facebook: www.facebook.com/nmcpkenya
Twitter: @nmcpkenya


Malaria Free KENYA
Case Mgmt
Vector Control
MIP
SBC
Elimination
SMEOR
Prog Mgmt

La solution intégrée pour les soins communautaires et les campagnes nationales avec Alafiacomm au Bénin

AMP 2025
Campaign Digitalization Meeting

CommCare by dimagi

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Plan

1. Introduction
2. Expérience du Bénin dans la mise en oeuvre des campagnes digitalisées
3. Présentation de la plateforme Alafiacomm
4. La santé communautaire au profit des campagnes de santé publique
5. Défis & perspectives

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Introduction

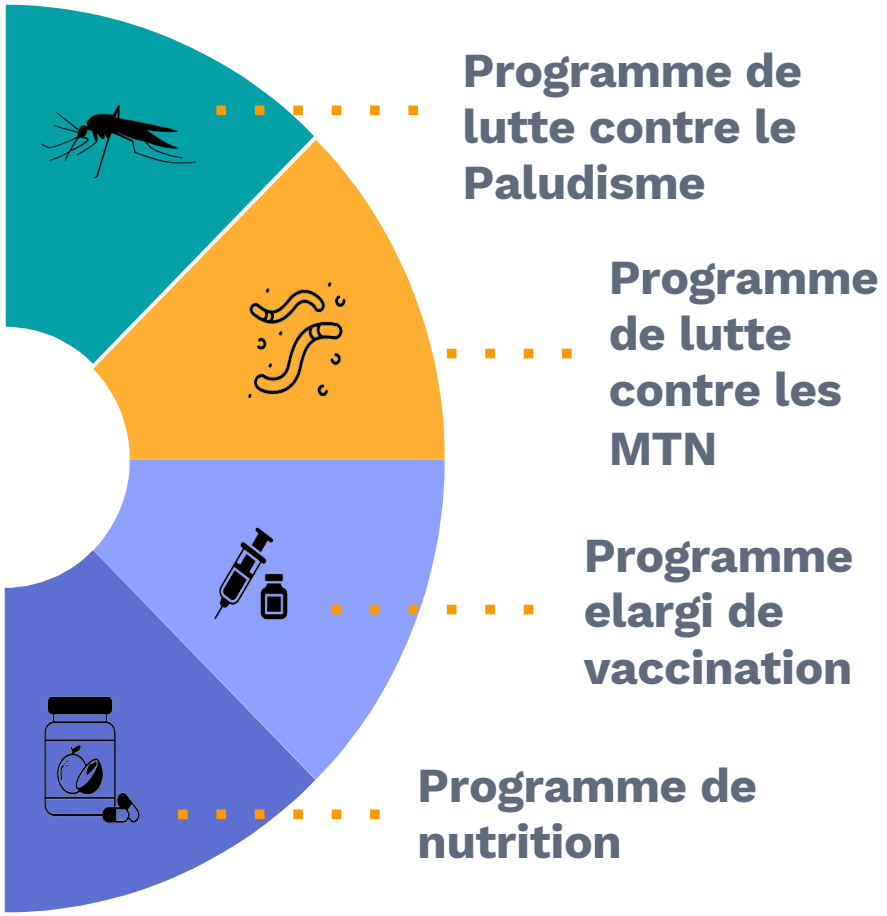
Au Bénin, plusieurs **programmes de lutte** contre les maladies endémiques ou prioritaires s'appuient sur des **campagnes de masse** pour atteindre leurs objectifs.

- Recours à des acteurs communautaires
- Résultats divers: discordance couverture administrative et couverture issu du monitorage

MIILD

CPS

Onchocercosis (MDA)



MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Expérience du Bénin dans la mise en oeuvre des campagnes digitalisées (1/6)

Avant 2020 :

- Collecte manuelle (outils papiers) des données des interventions communautaires en santé .
- Cette approche avait plusieurs limites :

Travail plus pénible et moins sûr

Augmentation de la pénibilité du travail du relais communautaire. Manque de systématisation. Exigence de plus de compétence.

Faible visibilité des activités terrain

Les autorités sanitaires ne disposaient d'aucune vue en temps réel sur les activités des relais, limitant la supervision et la réactivité et la prise de décision en temps utile.

Retards dans la transmission des rapports

Les rapports passaient par plusieurs niveaux manuels avant d'être transmis, entraînant des délais de plusieurs semaines.

Manque de données consolidées

Les informations collectées sur papier étaient incomplètes, restaient dispersées, difficiles à agréger, rendant l'analyse globale quasi impossible.

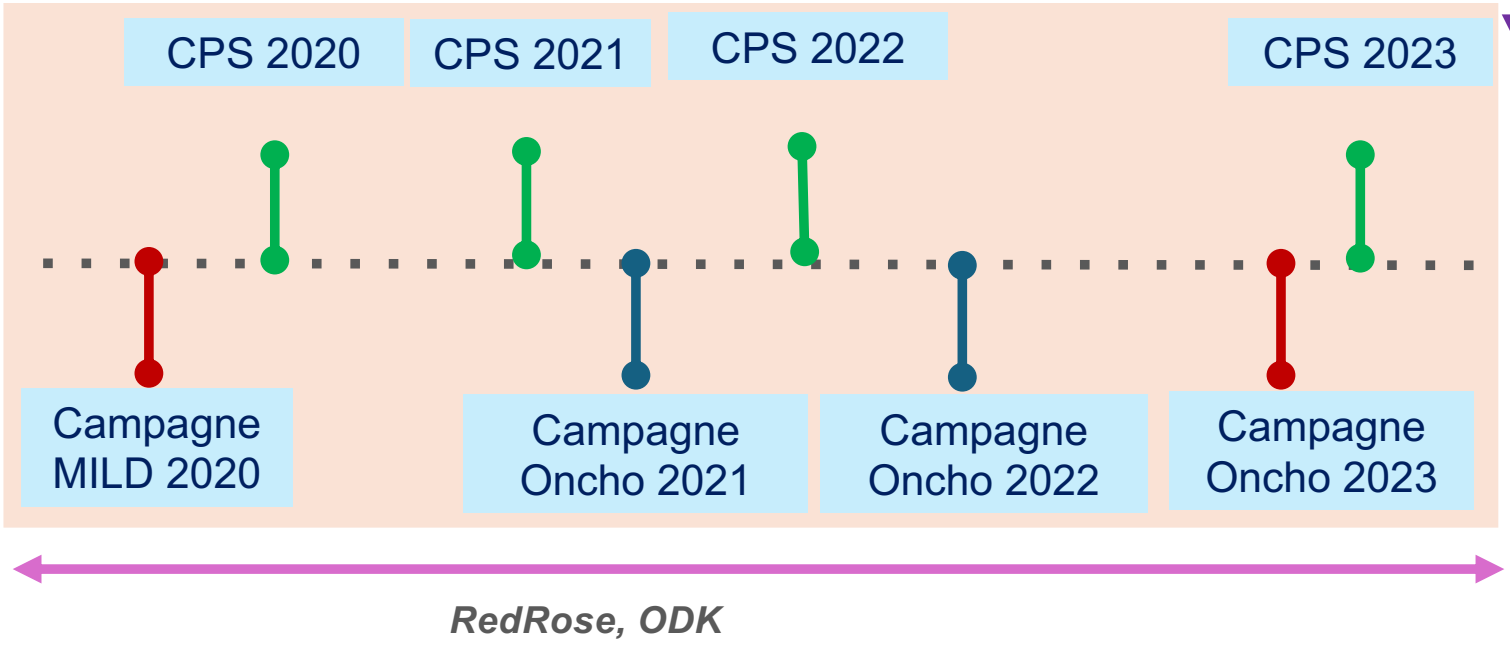
MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Expérience du Bénin dans la mise en oeuvre des campagnes digitalisées (2/6)

Avant 2020 …….

- Couverture administrative élevée versus monitorage faible
- Cibles/ménages, îlots/quartiers ou villages sous couverts
- Paiement acteurs complexes, délai long

Santé Communautaire



MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

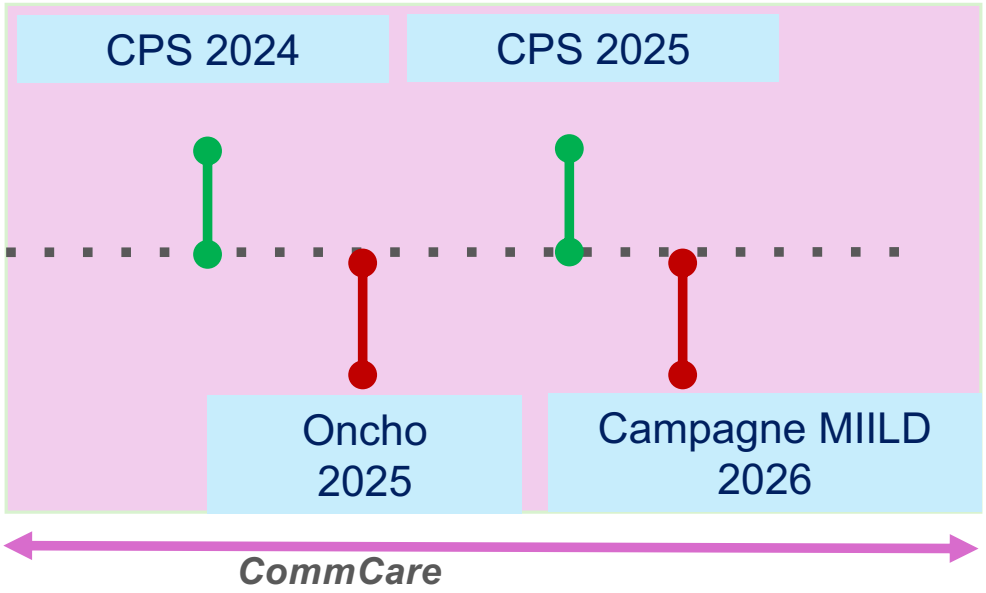
Expérience du Bénin dans la mise en oeuvre des campagnes digitalisées (3/6)

A partir de 2023.....

Santé Communautaire

Une avancée notable:

- Couverture administrative proche de la réalité
- Amélioration qualité des interventions
- Réduction des délais
- Suivi/géolocalisation acteurs
- Paiement dématérialisé, plus sûrs et plus rapides



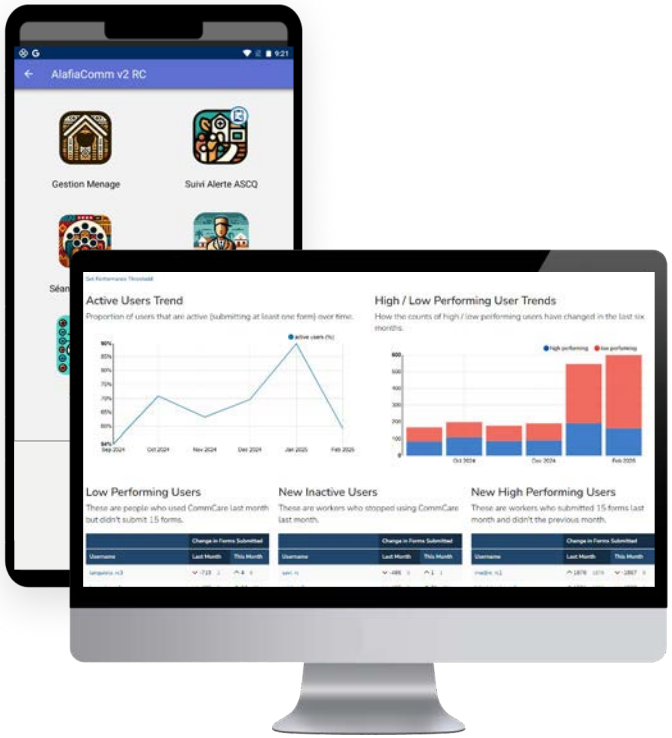
MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Présentation de la plateforme Alafiacomm (4/6)

Alafiacomm, développée sur la plateforme **CommCare**, conçue par Dimagi, change la donne.

Utilisée par les relais communautaires (RC) et les Agents de Santé Communautaire Qualifiés (ASCQ), elle permet entre autre:

- Une approche plus systématisée et une augmentation de la confiance des utilisateurs
- Une gestion rapide et efficace des cas communautaires
- Une synchronisation des données en temps réel
- Un renforcement du pilotage national par les autorités sanitaires



🛠 **CommCare**, développé par Dimagi, est une technologie éprouvée utilisée dans plus de 80 pays pour la digitalisation de plusieurs interventions, utilisable hors ligne et intégrable avec différents systèmes de BI et DHIS2.

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Présentation de la plateforme Alafiacomm (5/6)

Les utilisateurs du système

IT

IT / Administrateur Système

Supporter les utilisateurs finaux
Gestion des utilisateurs
Export des rapports

ASCQ

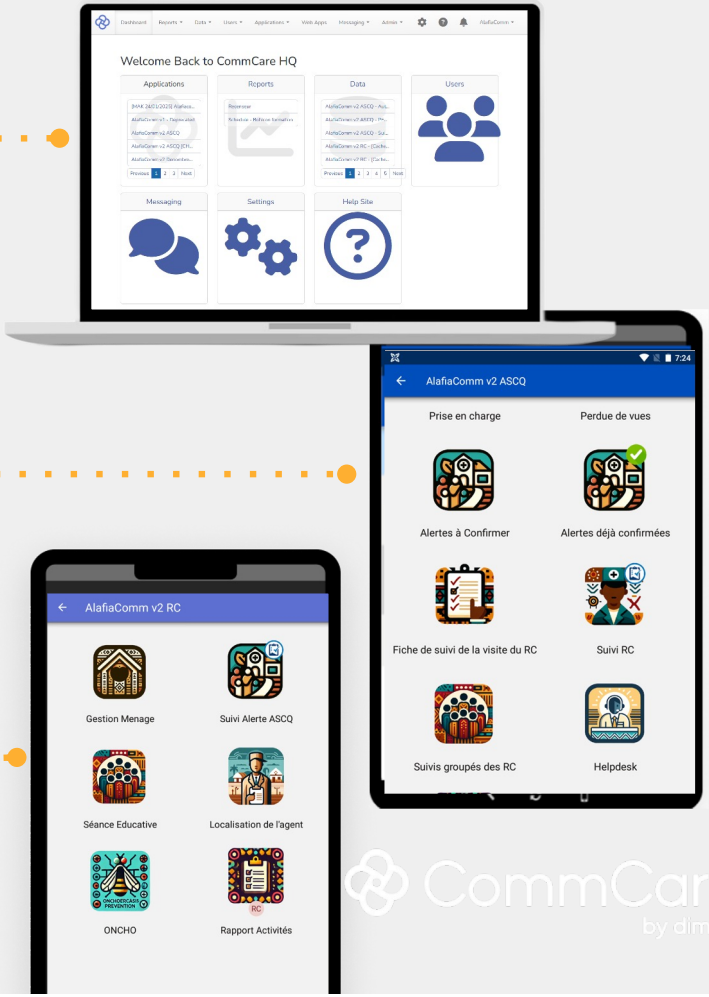
Alafiacomm ASCQ

Prise en charge et Suivi des demandes référencement
Supervision et suivi groupé des relais communautaires
Gestion des alertes et des références
Suivi performance des relais

Relais Communautaire

Alafiacomm RC

Enregistrement des ménages et des membres,
Suivi des visites à domicile et des demandes de référencement
Enregistrement des séances éducatives
Alertes communautaires
Référence rapide des cas



MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Présentation de la plateforme Alafiacomm (6/6)

Impact et portée d'Alafiacomm

Un outil au service de la transformation

Alafiacomm a eu un impact considérable sur la gestion des données en santé communautaire au Bénin.
La plateforme a permis d'améliorer l'efficacité et la précision des interventions sur le terrain, tout en facilitant la coordination et le suivi des campagnes de distribution, notamment pour la CPS et l'onchocercose.

Prochaine avancée majeure

Alafiacomm intègre désormais les bases ***d'un système de paiement digital*** pour les agents de santé communautaires.

Une innovation en cours qui permettra d'assurer transparence, traçabilité et reconnaissance du travail effectué sur le terrain par les RCs et ASCQs.

1.9M ménages enregistrés
6.9M membres

14 000 utilisateurs d'application

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

La santé communautaire au profit des campagnes de santé publique (1/3)

1. **Connus par les communautés:** Les RC vivent dans les zones qu'ils desservent, ce qui facilite l'acceptation sociale et l'accès aux ménages.

2. **Formés à l'utilisation d'Alafiacomm**: Ils ont été formés à la collecte numérique via Alaficaomm, garantissant une bonne maîtrise des outils digitaux sur le terrain.

3. **Disponibles dans toutes les zones sanitaires**: Grâce aux efforts de déploiement national, des RC sont présents dans chaque zone sanitaire, assurant une couverture territoriale complète.

« En s'appuyant sur les relais communautaires déjà formés et connectés, chaque campagne devient plus rapide, plus fiable, et mieux tracée. »

Une stratégie gagnante qui capitalise sur les forces existantes pour maximiser l'impact terrain.

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

La santé communautaire au profit des campagnes de santé publique (2/3)

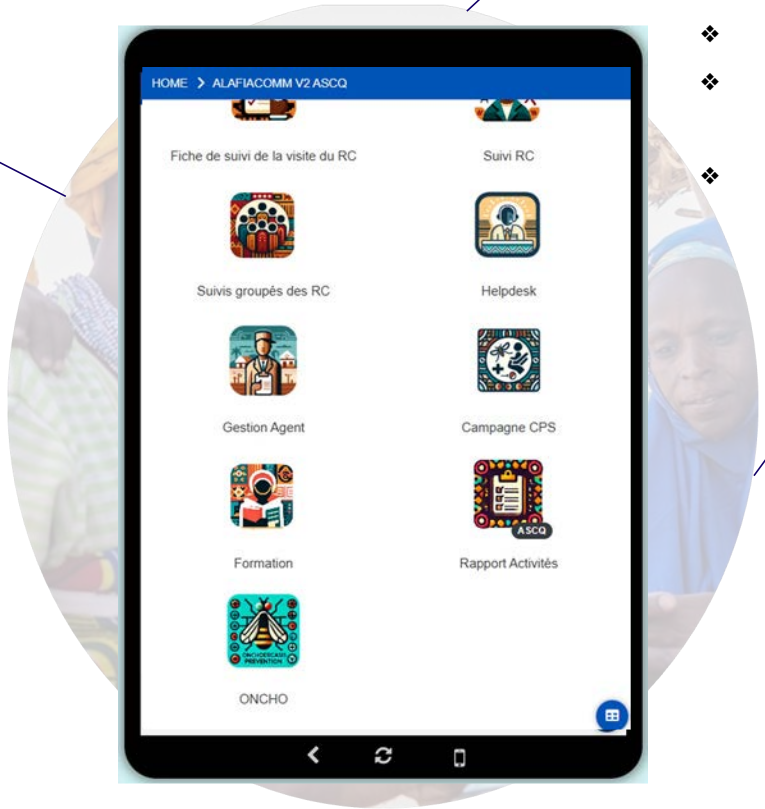
Vue globale du système

Alafiacomm

CPS (Prévention du Paludisme Saisonnier)

Gestion des campagnes

- Administration du SP et du AQ
- Gestion du stock
- Suivi des effets indésirables et de référencements
- Supervision
- Formation
- Rapport de progression



Activités de routine

- Suivi des ménages en temps réel
- Signalement des cas
- Supervision mobile
- Génération automatique de rapports mensuels
- Travail hors-ligne et synchronisation

ONCHO (Campagne contre l'Onchocercose)

Gestion des campagnes

- Administration de l'ivermectine
- Gestion des mouvements de stock
- Supervision
- Formation
- Gestion des effets indésirables
- Rapport de progression

La santé communautaire au profit des campagnes de santé publique (3/3)

Les avantages d'un système intégré

Intégrer la santé communautaire et les campagnes dans un seul système présente de nombreux avantages, tant sur le plan opérationnel que stratégique.

1 **Harmonisation des outils et des pratiques**

Un seul système pour les RC, ASCQ, superviseurs et responsables facilite la standardisation des flux de travail, des formulaires et des indicateurs.

2 **Optimisation des ressources humaines**

Les relais communautaires formés pour le suivi des ménages sont aussi mobilisables pour les campagnes, ce qui évite de recruter/former à nouveau pour chaque campagne.

3 **Renforcement qualité activités**

Il y a une meilleure couverture réelle des cibles. Les consignes et directives sont plus assurées.

4 **Réduction des coûts et meilleure durabilité**

Un seul système = moins de maintenance, moins de serveurs, moins de formations multiples. La digitalisation devient plus durable financièrement.

5 **Données consolidées et cohérentes**

Toutes les données (routinières ou issues des campagnes) sont centralisées, ce qui permet une meilleure visibilité sur la santé des populations, sans silos entre les programmes.

MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

Défis & Perspectives

Défis

- Transfert de compétence au Ministère de la santé
- Hébergement et contrôle des données
- Sécurisation et protection des données
- Interopérabilité avec DHIS2
- Pérennisation

Perspectives

- Intégration d'autres interventions
- Plateforme de paiement et de gestion financière
- Utilisation de l'IA: interaction avec bénéficiaires, diffusion de messages, ciblages spécifiques
- Système de géolocalisation
- Tableau de bord intelligent

Merci de votre aimable attention

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Discussion
Questions & Answers

Discussion
Questions et réponses

Remote participants:
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For technical difficulties / Pour les problèmes techniques: please use the Zoom Chat and/or email info@tiseh.com

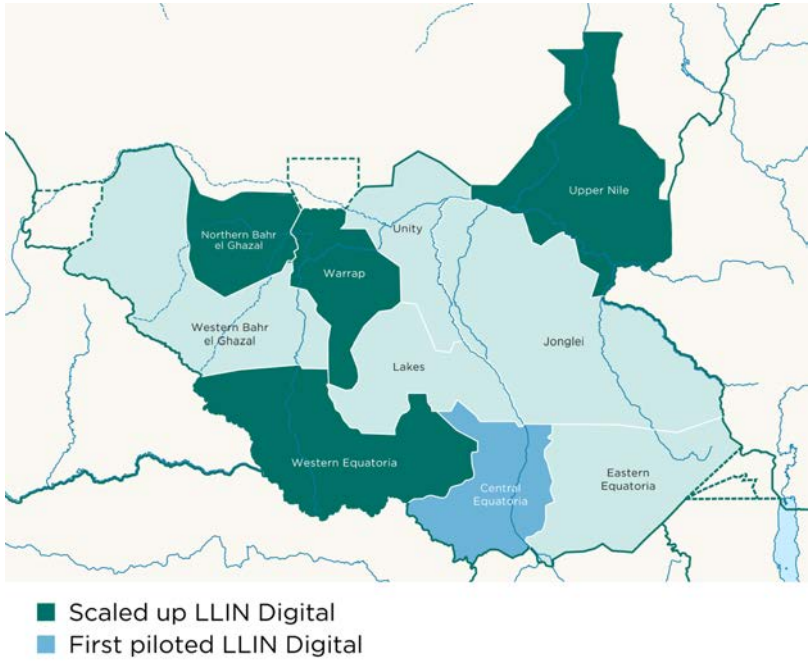
Lessons learnt and challenges from digitalisation of long-lasting insecticidal net distribution campaigns in South Sudan

Aweno Norman, Malaria Consortium South Sudan

Alliance for Malaria Prevention Campaign Digitalization Meeting
9–11 April 2025, Nairobi, Kenya

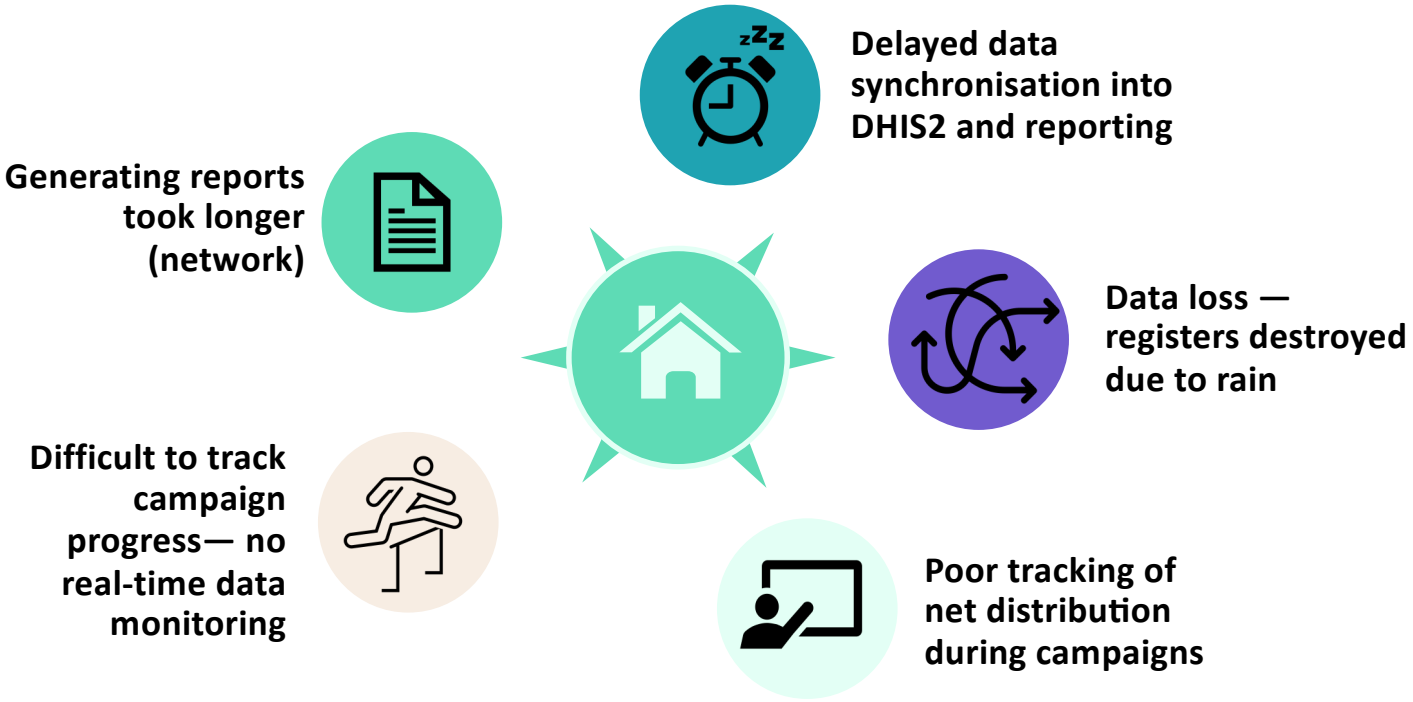
Background and context

- Long-lasting insecticidal nets (LLINs) have been the backbone of malaria prevention in South Sudan for decades.
- Overall, 63.9 percent of households own a net and 68 percent of them use their nets.
- LLINs are typically distributed by volunteers, with campaign data collected using paper-based systems.
- South Sudan has prioritised digitalisation to support attainment of universal health coverage by 2030 in South Sudan (National Malaria Strategy).
- Use of digital solutions in healthcare has increased rapidly over the last two decades (World Health Organization).



Digitalised LLIN distribution campaigns in South Sudan

Challenges faced before digitalisation



Campaign digitalisation implementation experience

- In 2022, Malaria Consortium supported the South Sudan Ministry of Health (MoH) to transition from paper-based to digital LLIN campaigns.
- A digitalised LLIN campaign was piloted in two *payams* (second lowest administrative division) in Central Equatoria state and later scaled up to four other states.
- The MoH engaged HISP Tanzania to develop DHIS2 for digitalisation of South Sudan's health system and provide ongoing capacity strengthening.
- The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and Against Malaria Foundation (AMF) extended the scope of LLIN campaigns to incorporate digitalisation.
- Community structures were placed in charge of campaign micro-planning and community mobilisation.

Unique or innovative aspects of digitalisation

- Online troubleshooting of challenges identified in the field (MoH M&E department)
- Volunteers marked households (with unique numbers) so targeted households could be easily identified where GPS failed
- Volunteers linked to facilities with available solar power for charging tablets
- Charging booths in towns identified for volunteers to charge tablets
- Offline mechanism incorporated into the application, allowing data capture and storage until online connection and synchronisation available.

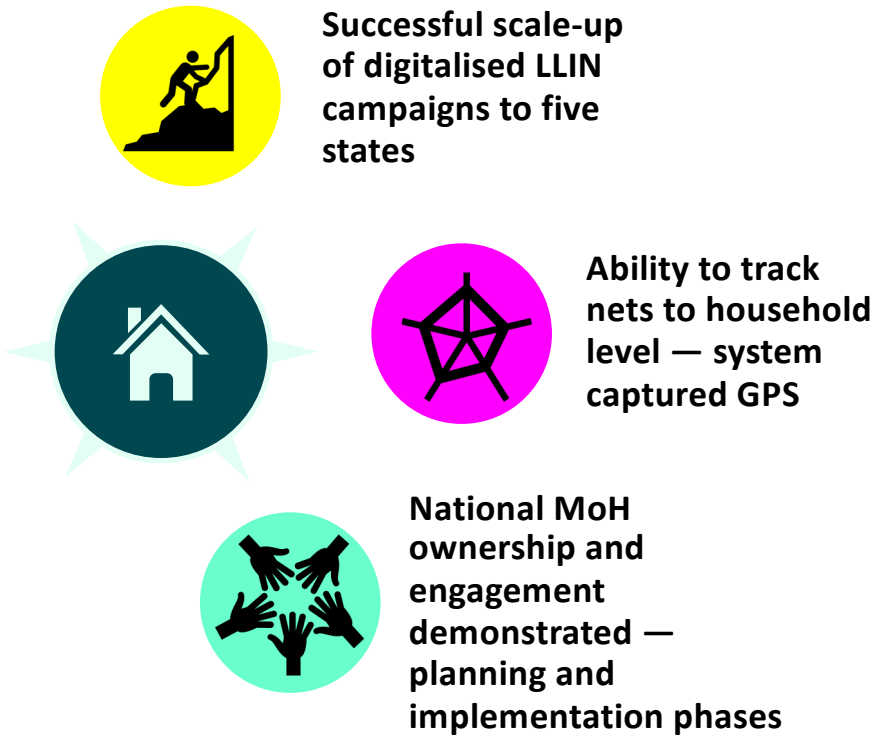
Collaborations and partnerships

- Technical support group formed for system support: Health Management Information System (HMIS) and National Malaria Control Programme (NMCP)
- Collaboration with security agencies to ensure safety of tablets, staff and nets
- Coordination framework established linking national, state and community implementation
- Collaboration with HISP Tanzania (application developer) to strengthen capacity
- Data validation taskforce including HMIS, NMCP, UNICEF, Global Fund, AMF, country coordination mechanism.

Improvements in campaign planning and implementation

- Strengthened accountability — easier to monitor net distribution
- Reference to dashboard during campaign planning (data-informed decision-making)
- Bottom-up approach to planning adopted — from *boma* (lowest administrative division) to state and national levels
- Data generated can be used inform planning of future campaigns
- Ability to track nets to household level by capturing GPS.

Achievements resulting from digitalisation



Achievements resulting from digitalisation

Challenges faced during implementation

- Low human resource capacity (limited personnel, high digital illiteracy, staff turnover)
- Logistical challenges (poor roads and bridges)
- System challenges (poor internet/call connectivity, tablet charging issues)
- Insecurity – some people suspicious of tablet use (due to collection of GPS data).

Lessons from the digitalisation process

- In total, 94 percent of volunteers agreed that the digital tool was an improvement from the paper-based system (usability research).
- Despite operational challenges, digital tools were preferred over traditional paper-based systems.
- Users found the tools helpful for managing workflows, reducing workloads, and supporting stock management and campaign monitoring.
- Including security organisations in the LLIN digital campaigns was essential for safety and completion.
- DHIS2 review (event reports) and LLIN campaign reports found that the digitalised net tracking system recorded movements of insecticidal nets more quickly and easily, and records were harder to fake (GPS tracking).

Recommendations for future digitalisation efforts in similar campaigns

Encourage multisectoral collaboration and robust governance structures, with active private sector engagement to effectively and sustainably scale up digital LLIN campaigns across the country.

- The national MoH should develop a digital strategy with a clear partnership framework with the private sector.
- Establish localised state/regional frameworks for system support and to secure digital health investments (data privacy, cybersecurity practices and related country regulations, tailored to local context).
- Co-opt the private sector into strategy planning, costing and roadmap development to reduce overreliance on donors.

Recommendations for future digitalisation efforts in similar campaigns

Advocate for localisation as a pathway to sustainability, with a particular emphasis on strengthening local capacity.

- Strengthen in-country technical capacity to reduce the turnaround time in addressing existing system issues (HISP South Sudan).
- Establish state or regional frameworks for system support.
- Connect local talent from NGOs or government with institutions and organisations that have better digital capacity (UN, INGOs).

Recommendations for future digitalisation efforts in similar campaigns

Support government-led advocacy for sustainable and improved ownership of health digitalisation efforts.

- Improve government commitment and funding for the health budget given the reduction in donor funding.
- Ensure LLIN and other campaign digitalisation is part of a broader digital health strategy with shared infrastructure and governance structures to ensure efficiency.
- Plan for national scale-up — discuss national scale-up considerations from the initial stages of digitalisation efforts, including the total cost of ownership.

Scan to read the research

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disease control, better health

Thank you

www.malariaconsortium.org

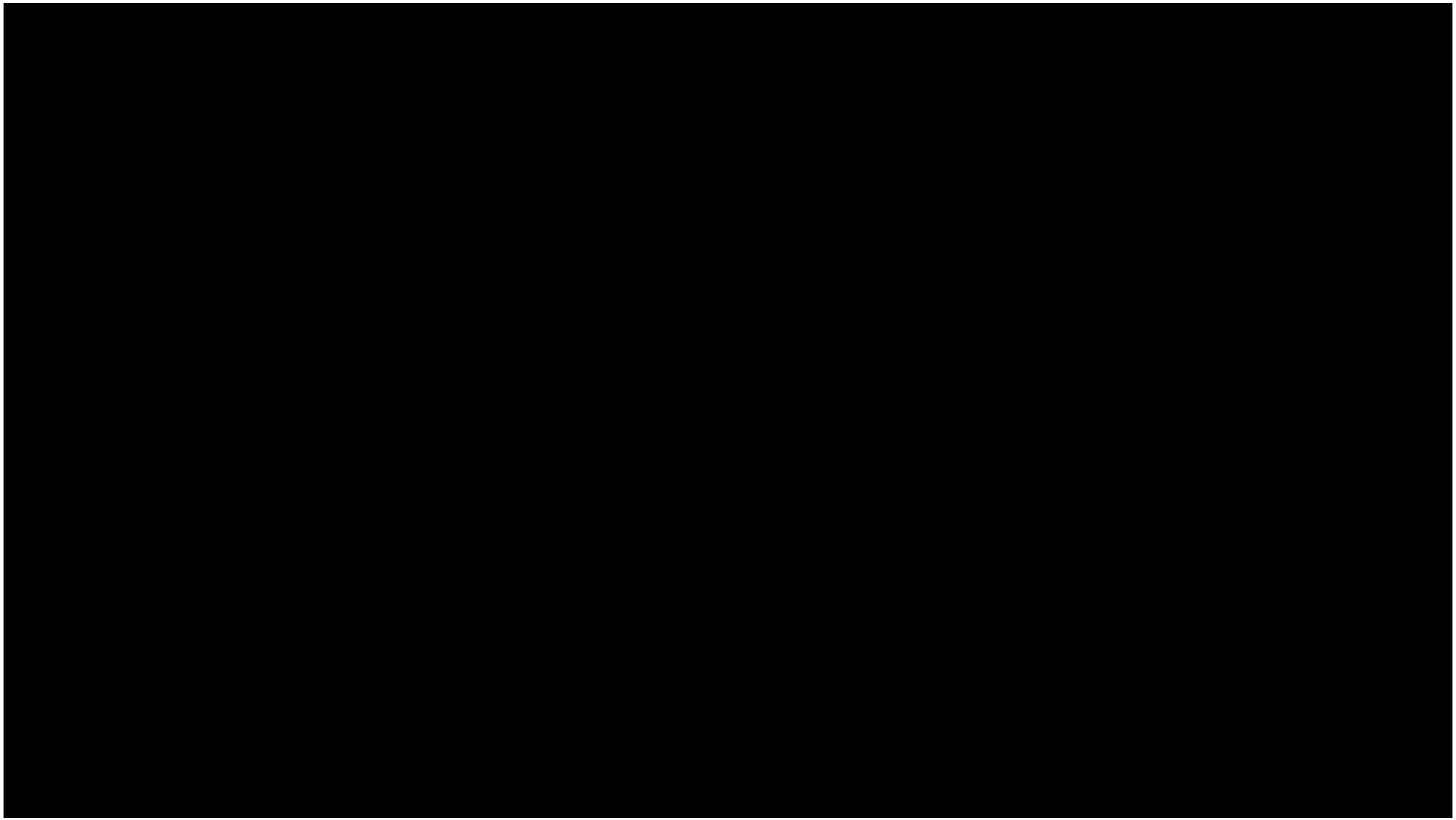
Strengthening integrated campaign digitalization: WHO and UNICEF guidance for navigating digitalization and tool selection

AMP Campaign Digitalization Meeting
April 2025

World Health Organization
African Region

unicef

CLINTON HEALTH ACCESS INITIATIVE



Thank you

Obrigado

Merci

WHO Contact: Chipo Ngongoni ngongonic@who.int

BILL & MELINDA GATES *foundation*

CLINTON HEALTH ACCESS INITIATIVE

World Health Organization
REGIONAL OFFICE FOR Africa

Digital Tool Selection Guidebook for Health Campaigns

unicef
for every child

AMP Campaign Digitalization Meeting
Nairobi Apr 10-11, 2025

Cristina Lussiana
Health Specialist, Digital Health and Information Systems
UNICEF HQ

Digital Tool Selection Guidebook for Health Campaigns

What is it? A structured resource designed to help governments and partners select digital tools to optimize health campaigns.

Why use this Guidebook? The Guidebook supports decision-making during the planning phase of digitized campaigns, helping stakeholders identify the most appropriate solutions to enhance campaign effectiveness. It complements the WHO Integrated Campaign Digitization (ICD) Toolkit, providing clear criteria for selecting digital tools based on campaign needs and technical capabilities.

Who should use this Guidebook? It is intended for stakeholders involved in planning and executing health campaigns, particularly at the country level, including decision-makers from national governments, UNICEF, WHO country offices, and implementing organizations.

3 user needs:

"I want to **understand the digitization of health campaign phases**."

"I want to **compare digital tools within a campaign phase**."

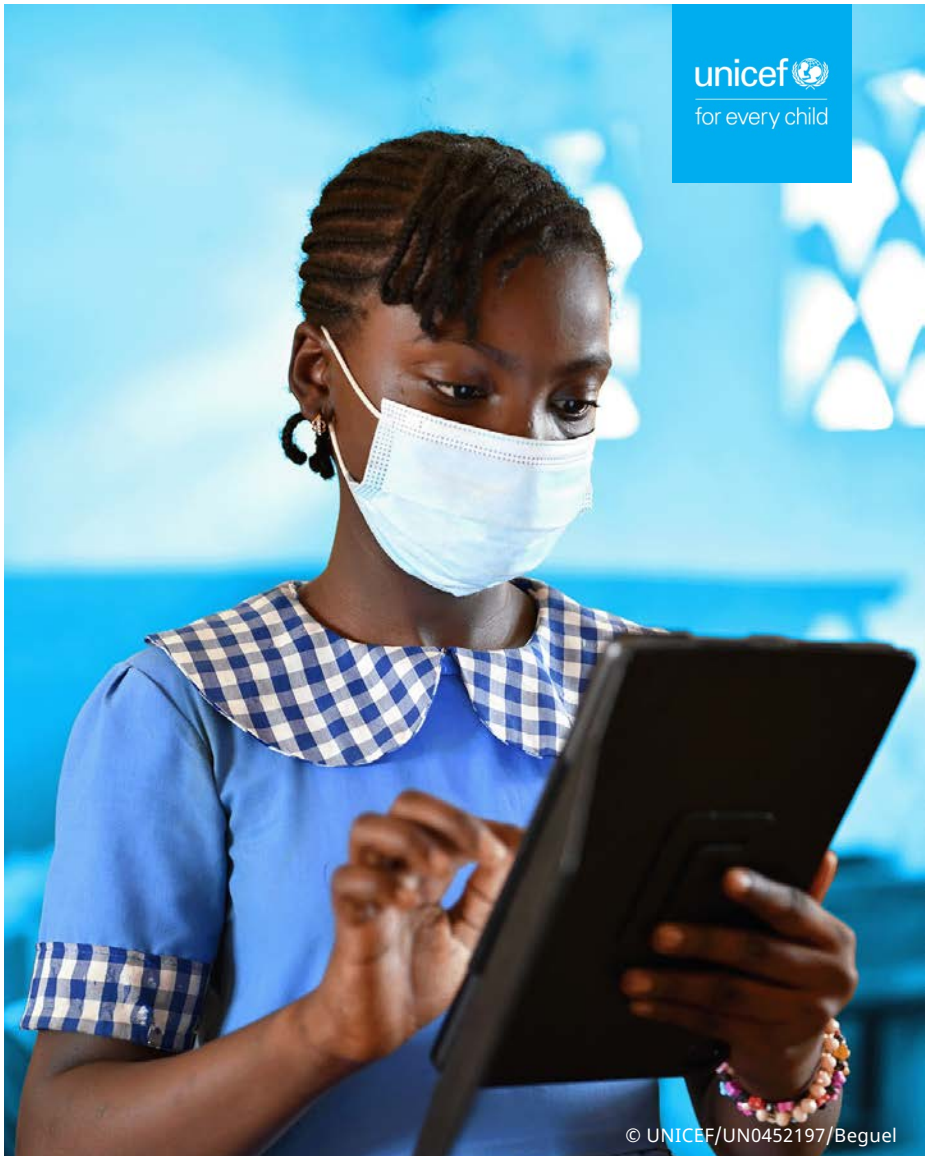
"I want to view the **functionality of a digital tool across all campaign phases**."

Tool selection criteria

Digital tools were selected that meet the following criteria:

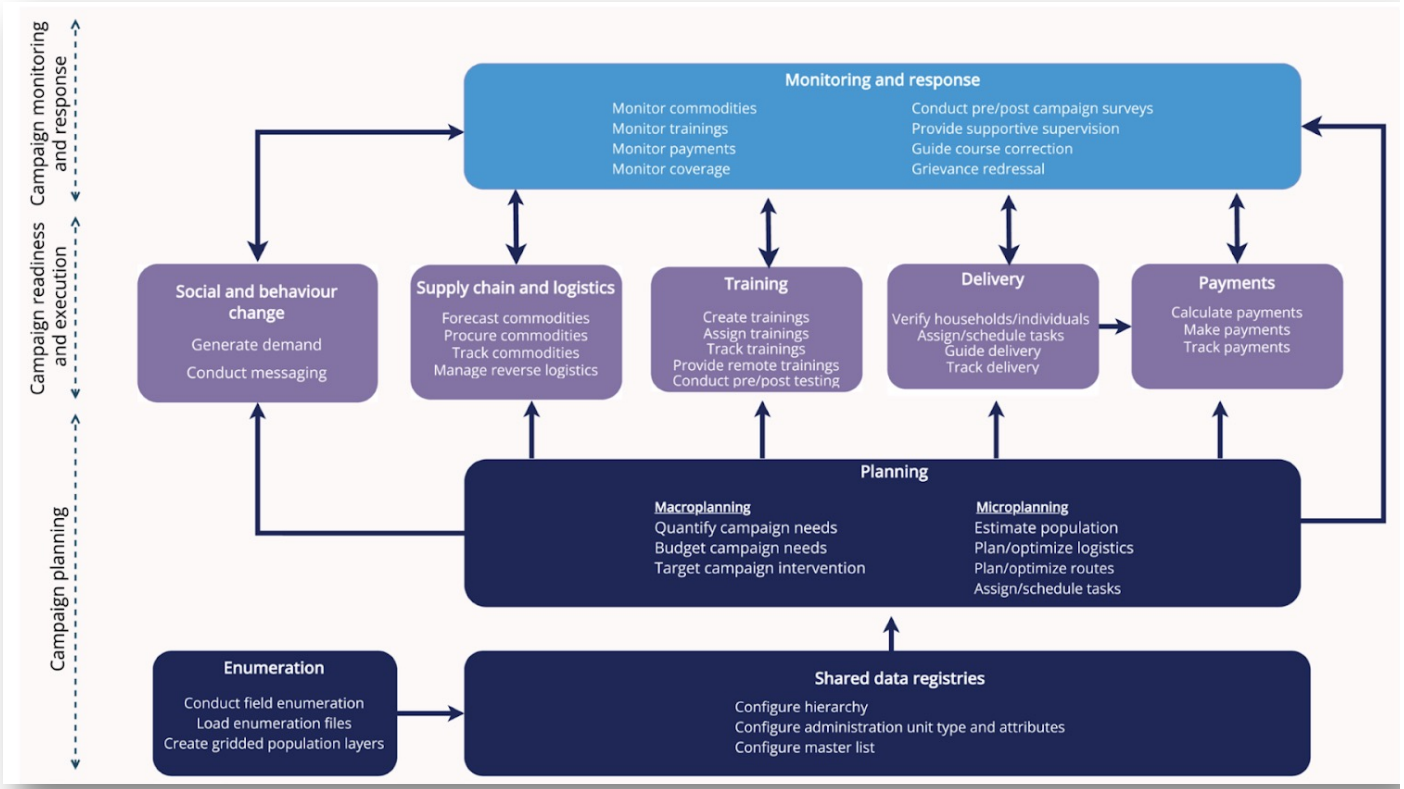
- Free and open-source: Free and open-source tools should have an open-source license to ensure that countries can freely access, modify, and implement them without significant licensing fees,
- Digital Public Goods: tools must meet the criteria to be classified as DPGs or Global Goods for Health which ensures they promote inclusive access, sustainability, and cross-sectoral use, particularly for public health needs.

Tools included in the Guidebook have been validated by their respective product owners or implementing organizations to ensure accurate and up-to-date information. Outreach was conducted to confirm technical features, use cases, and implementation details aligned with the selection matrix indicators. Tools for which no response was received will be reconsidered for future Guidebook updates.



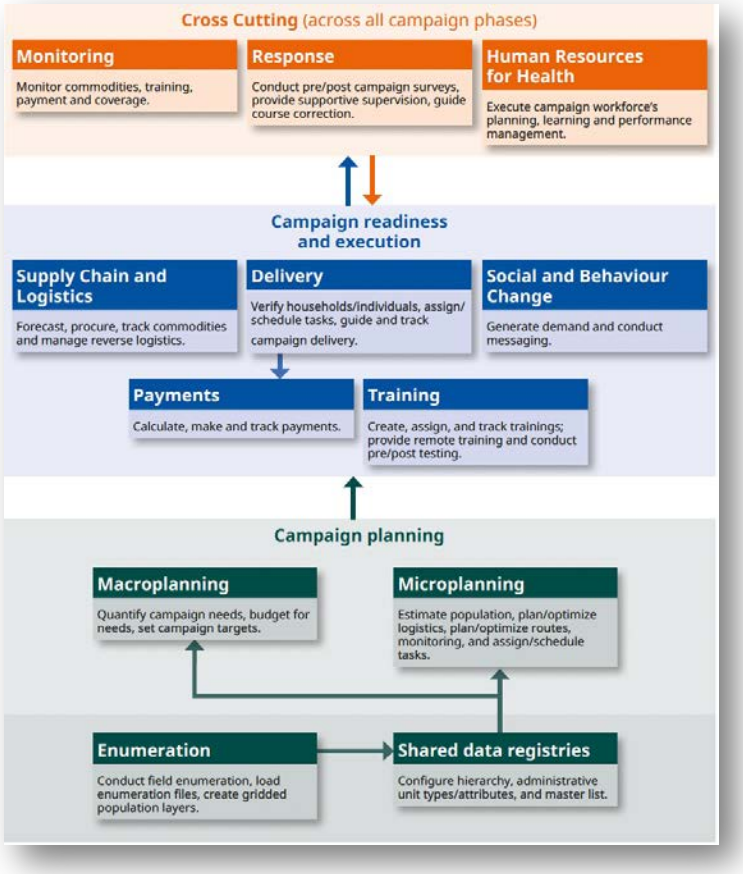
Campaign digitization use cases and workflows

https://iris.who.int/handle/10665/380775



How to select digital tools for health campaigns?

Campaign phases



For each phase: Goal, Use case, Essential workflows and Opportunities for digitization

How to select digital tools for health campaigns?

Campaign phase

Enumeration

Goal

Systematically count and record target populations and key objects such as households, household members, buildings, and other relevant entities to generate accurate data for effective campaign planning and delivery.

Use case

Digital enumeration tools capture and organize data on target populations and key objects, linking them to defined campaign delivery areas. These tools support downstream activities including microplanning, resource allocation, and monitoring, and can incorporate existing datasets or gridded population layers where needed.

Essential workflows

Conduct field enumeration: Register new enumeration objects (e.g., households, facilities, health workers), update existing records, and remove duplicates or ineligible entries as needed.

Opportunities for digitization

Standardize and streamline the registration, updating, and deletion of (geo-located or non-geolocated) enumeration objects.

Enable efficient import, validation, and integration of existing enumeration data (e.g., shapefile, JSON, CSV).

Integrate gridded population layers to support population estimation, particularly in areas where field enumeration is impractical or detailed data is unavailable.

Implement approval workflows to review and authorize creation, updates, and deletions of enumeration objects and their attributes.

Overview of digital functionalities vs tool performance

Enumeration

	CHT	CommCare	CrossCut	DHIS2	DIGIT	IASO	mSupply	ODK	Reveal	SORMAS
Conduct Field Enumeration of Non-geo-located objects *The tool allows full field enumeration workflows, enabling enumerators to register, update, or delete non-geo-located objects supporting multi-devices seamlessly.*	●	●	▬	●	●	●	●	●	●	●
Conduct Field Enumeration of Geo-located Objects *The tool allows full field enumeration workflows, enabling enumerators to register, update, or delete geo-located objects supporting multi-devices seamlessly.*	●	●	▬	●	●	●	◉	●	●	●
Load Enumeration Files *The tool supports the seamless import of all standard file formats (shapefile, GeoJSON, CSV) and handles large datasets efficiently.*	●	●	◉	●	●	●	◉	●	●	◉
Load Gridded Population Layers *The tool supports advanced integration and visualization of gridded population layers, offering robust population estimation and insights where enumeration data is lacking.*	●	◉	●	●	◉	●	◉	◉	●	▬

● Fully supported ◉ Partially supported ▬ Not supported

How to select digital tools for health campaigns?

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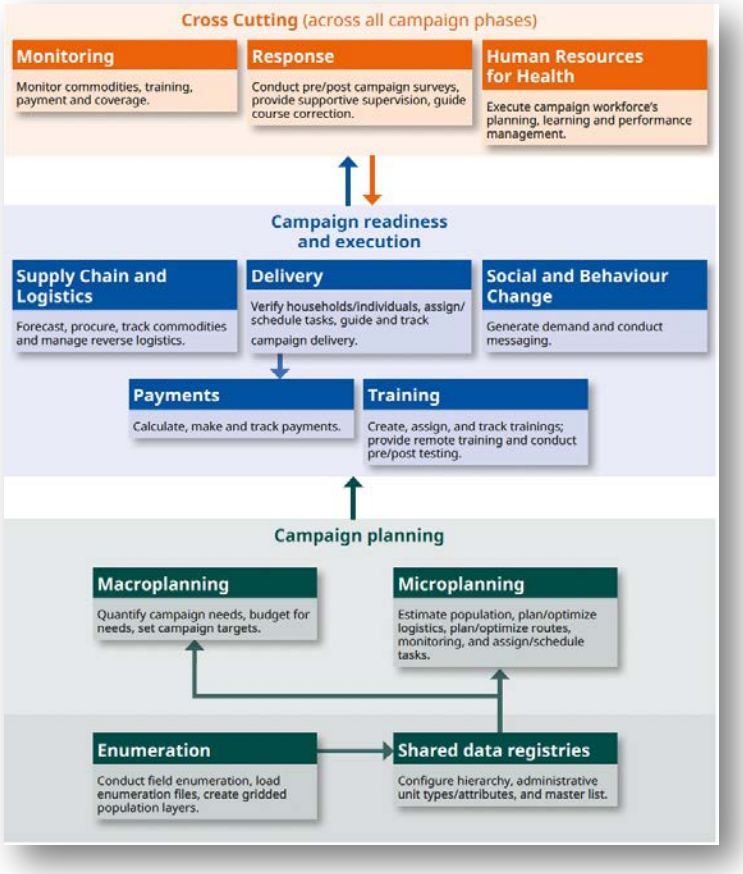
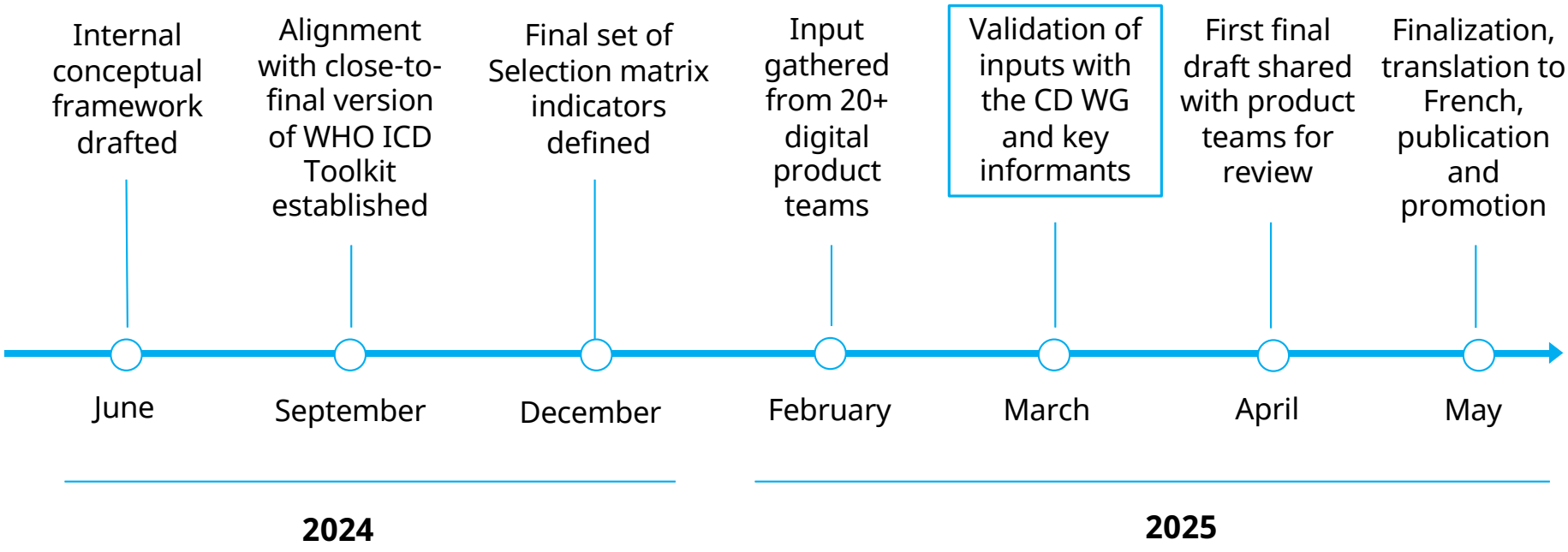
Campaign phases



Tool functionality across phases

Timeline


Internal conceptual framework drafted
Alignment with close-to-final version of WHO ICD Toolkit established
Final set of Selection matrix indicators defined
Input gathered from 20+ digital product teams
Validation of inputs with the CD WG and key informants
First final draft shared with product teams for review
Finalization, translation to French, publication and promotion
June
September
December
February
March
April
May
2024
2025

Your inputs and feedback matter!

Scan the QR code or go to this link to review the most up-to-date version of the Selection Guidebook and provide your inputs and feedback by **Apr 25th**.


Thank you.
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Workshop 1 – *Use of Bring Your Own Device (BYOD) for ITN Campaigns*
Baobab 1 (fourth floor)

Workshop 2 – *Integrated Campaigns and Cross-Program Digitalization*
Almasi 1 (fourth floor)

Workshop 3 – *Optimizing Campaign Data Reuse: Establishing a Framework for Leveraging Malaria ITN Distribution Data Across Health Campaigns and Multi-Purpose Health Initiatives*
Almasi 2 (fourth floor)

Workshop 4 – *Enhancing Payment Efficiency through the Use of Digital Tools*
Zambezi 1 (fifth floor)

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Campaign Digitalization Meeting

Réunion sur la numérisation des campagnes

Lunch Break

Pause-déjeuner

We will return shortly

A tout à l'heure

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