MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

CRS
CATHOLIC RELIEF SERVICES

Benin's cross-programme work to digitalize malaria and NTD campaigns:

Recommendations for establishing a national geo-repository

Dr. Rock AIKPON (PNLP – Benin) & Elijah Egwu (CRS)
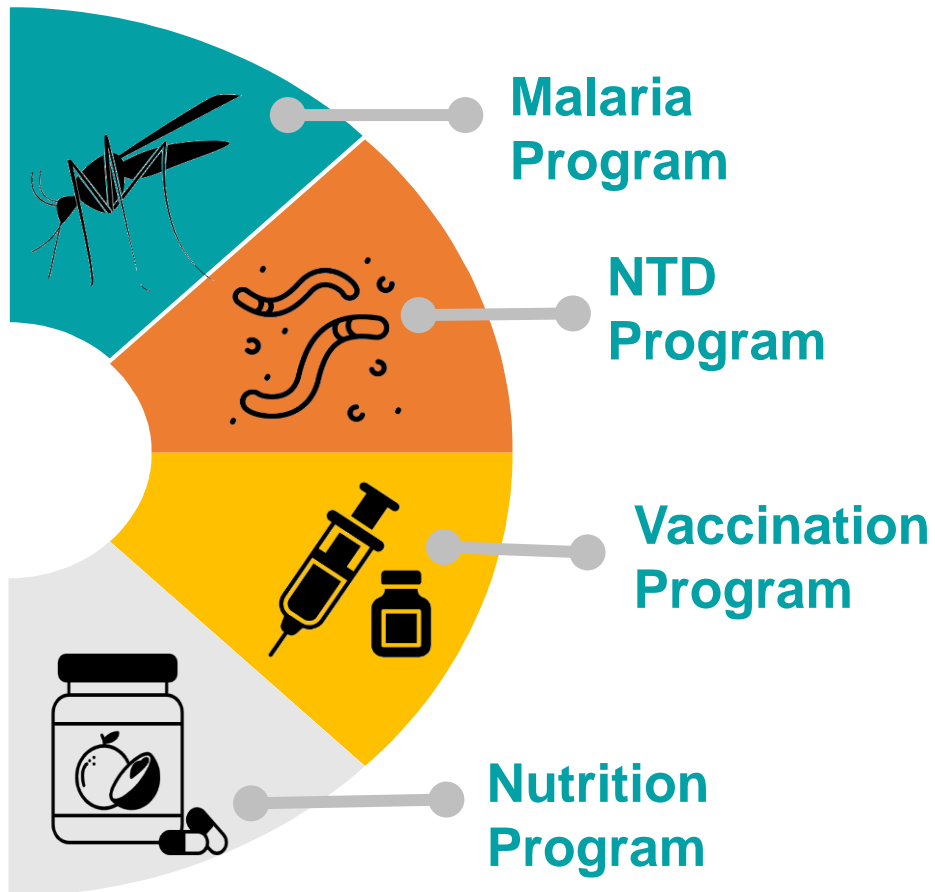
AMP Annual Meeting, 2023

Outline

- Background

- Campaign digitalization implementation experience

- Digitization approach

- Achievements/best practices

- Challenges

- Lessons learnt & Recommendations

Background

- In Benin, several health programs are in place to fight against certain major diseases

- Implementation of several community-based interventions

Malaria Program

NTD Program

Vaccination Program

Nutrition Program

ITN

IRS

SMC

LES MÉDICAMENTS QUI AIDENT À PROTÉGER LES ENFANTS DU PALUDISME PENDANT LA SAISON DES PLUIES

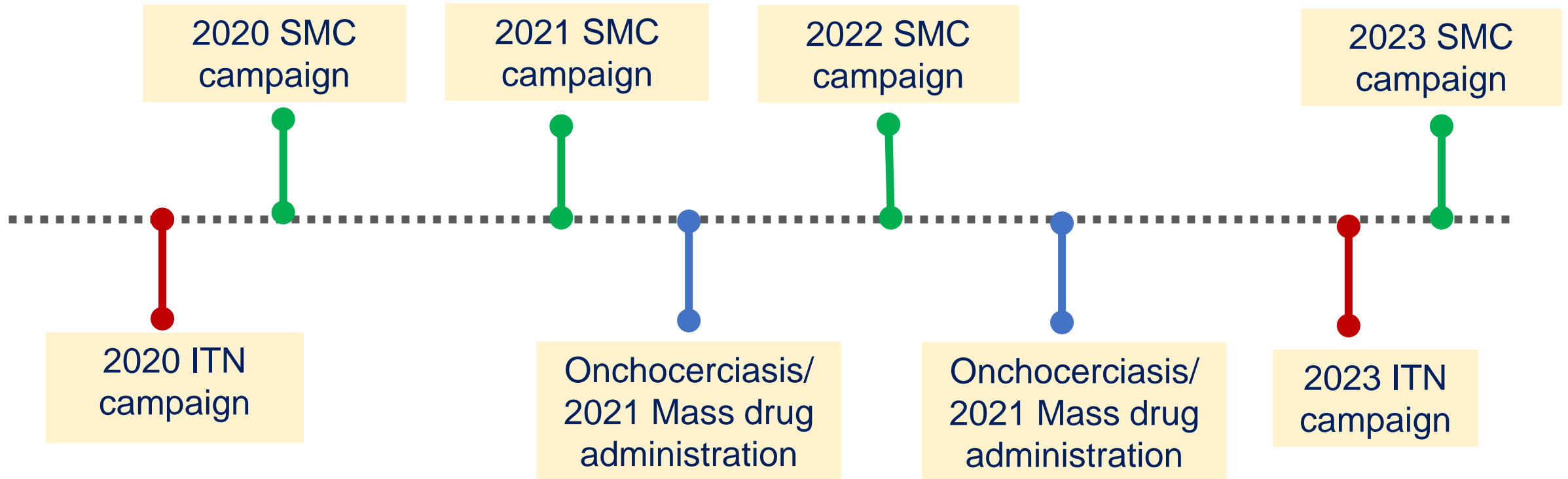*Onchocerciasis/ Mass drug administration*

Background

- Several issues were reported in the implementation of community-based campaigns

- These issues are often related to:

  - Suboptimal data quality

  - Poor health commodity management

  - Poor visibility to campaign progress

  - Delayed and incoherent payment to campaign staff

  - Over/under estimation of target population leading to waste or overburdening

- To resolve these challenges, digitalization option has been taken to improve the campaign outcomes

Campaign digitalization implementation experience

- The BMGF and CRS supported NMCP with the digitalization effort to establish an approach that gradually enabled campaign integration

- We established a national geo-data repository which has served as household enumeration data for over 3 years across the ITN, SMC and Oncho campaigns.

2020 SMC campaign

2021 SMC campaign

2022 SMC campaign

2023 SMC campaign

2020 ITN campaign

Onchocerciasis/ 2021 Mass drug administration

Onchocerciasis/ 2021 Mass drug administration

2023 ITN campaign

Campaign digitalization implementation experience

Digitalized aspects of Benin Health Campaigns

Microplanning

- Data repository for micro-plan data comparison
- Digital maps for identification of villages and designation of Community Health Workers (CHW)

Household Enumeration

- Collection of Individual/household level information
- Identification of targets groups
- Geo-referenced database of households

Health Commodity Distribution/ Management

- Traceability of health commodity from central level warehouse to end-user
- Real time identification of stockout and losses
- Prompt reverse logistics of health commodity after the campaign digital timesheets

Campaign digitalization implementation experience

Digitalized aspects of Benin Health Campaigns

Payment

Accountability Framework, Monitoring & Supervision

Campaign Financial management

- Digital database of CHW

- Integration with Mobile money operator to verify phone number before payment

- Digital timesheets

- Monitoring & supervision report are received in real-time enabling rapid resolution of challenges

- Quality control and actionable information on adherence to campaign protocols

- Campaign budget generated from digital campaign historical data

- Easy to derived and document campaign payment documentation

# Benin Digitalization Approach

- Benin Digitalization was developed based on lessons learnt from other countries and the need to tryout a more sustainable integrated health campaign digitalization.

- The primary digitalization platform was the Red Rose platform whose functionalities were extensively engineered to deliver more functionalities in the context of the Benin Digitalization approach which birthed the Health Campaign management platform HCMS

  ❑ Household enumeration was remodeled from Household level data collection to individual level data collection

  ❑ Standardization of the baseline data for health campaign digitization with focus on Malaria and Neglected Tropical diseases which was sufficient for other health campaigns as well

Benin Digitalization Approach

❏ A central database was created, and the same population data set was updated and used as baseline enumeration data for each campaign.

❏ The population data was incrementally updated with newborns, deaths, relocated persons and HHs

❏ Ability to drill, mine and represent multi campaign intervention on same dashboards and reports to enable deeper impact analysis of the various disease intervention

❏ Same devices were reused over with same or different users
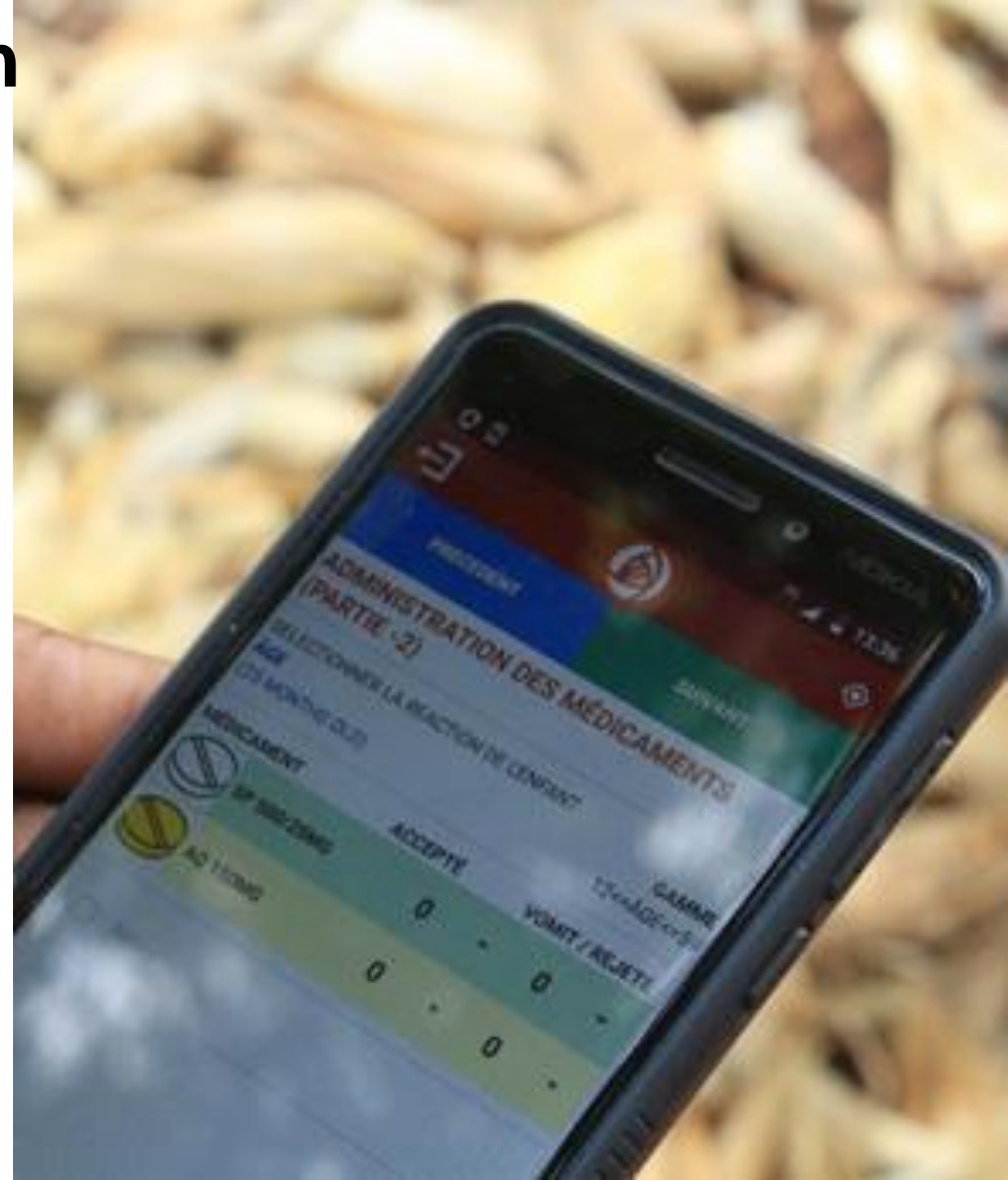
Achievements

- There have been no household enumeration for SMC and Oncho campaigns in Benin for past three (3) consecutive years as the national geo-data repository for health campaign was deployed as household enumeration data, lowering the cost of these campaigns.

- Ability to leverage data to cross reference intervention with more visibility into cross cutting issues enabling the Government to identify solutions to resolve these challenges across campaigns.

- Campaign implementers are more aware of the impact of the process of each campaign and how it affects other intervention, and thus ensure to maintain quality of campaign data collection and process.

Challenges

❑ Rigorous justification needed to approve individual level data collection from households

❑ Slow processing and management of big data

❑ Some additional time needed to update population of both the target and non target group for each campaign.

❑ Some extra time, financial and human resources needed for application development and platform management

❑ The equipment (smart phones) are not sufficient to cover all campaigns even if the system can support all campaign leading to timeline conflict etc.
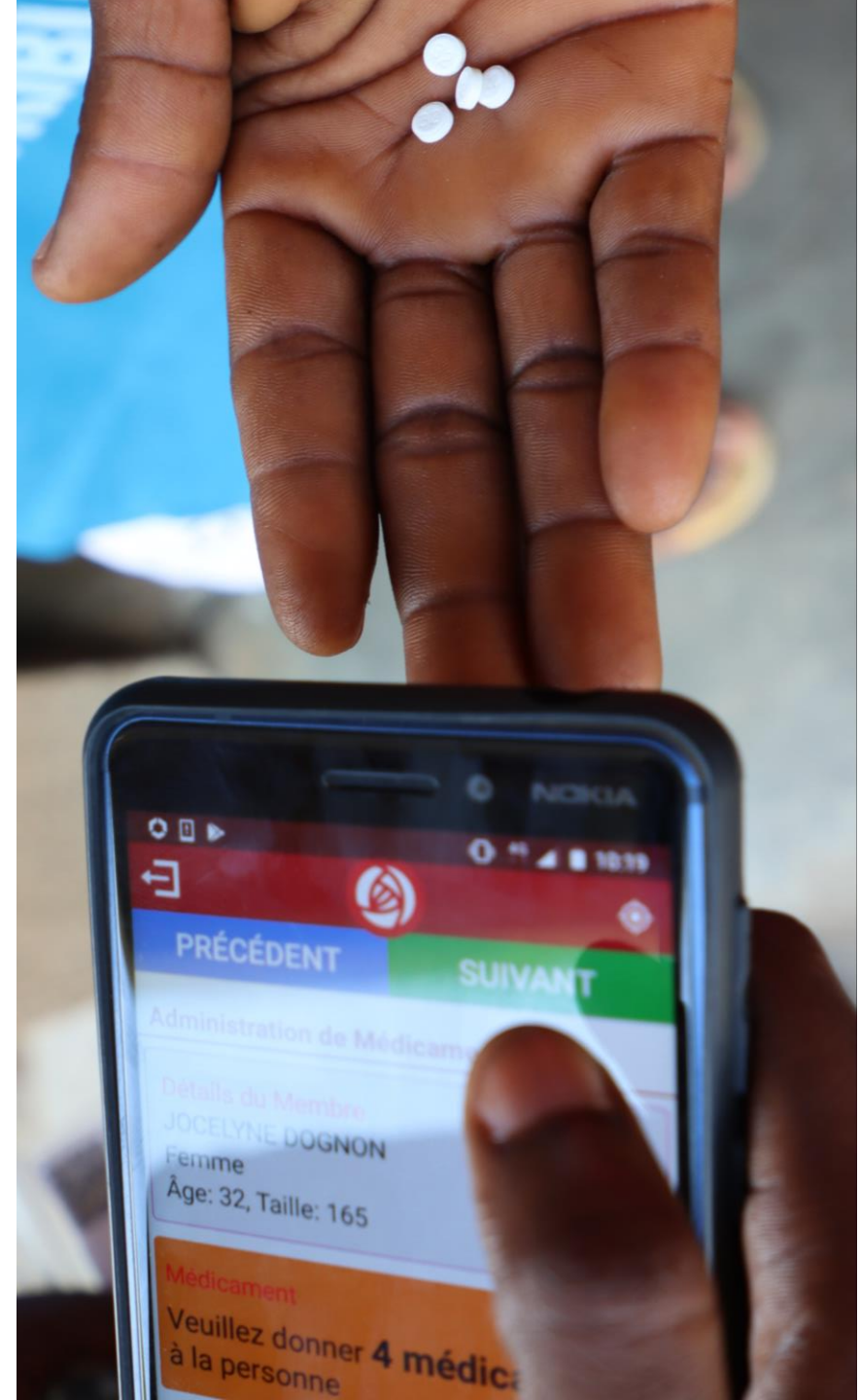
Lessons learned & Recommendations

❑Health Campaign digitalization should be conceptualized with not just a singular campaign in mind but with a broader picture for multiple campaign use cases to maximize the resources and opportunity

❑High level Government engagement and support is needed to foster decision making around leveraging the same population data for several campaign even if there is positive evidence for adoption

❑Developing such systems requires adequate time for planning and application development testing and deployment
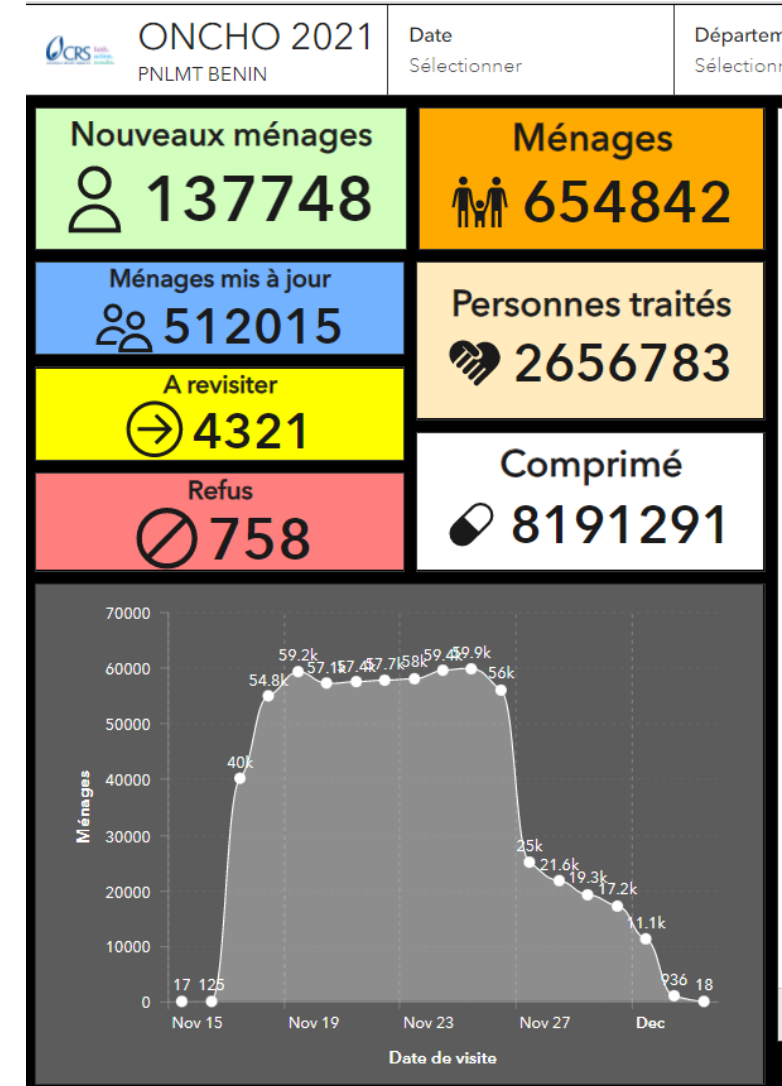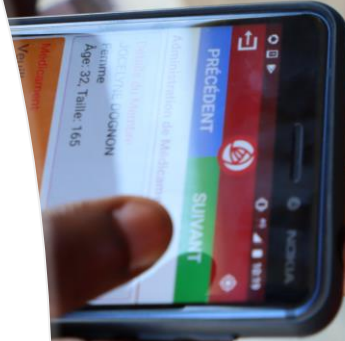
Recommendation

❑ Change management mechanism must be put to place to enable stakeholder feel safe with making changes to their data collection approaches

❑ Having a standard baseline of health campaign data for each countries fosters faster campaign integration and lowers campaign cost

❑ Donor willingness to fund and support these initiative and associated risk is a key success motivator

❑ Further platform development is needed to manage the data, reporting indicators etc. for the various campaigns in different disease areas when using one platform as more functionalities are needed (this is progressive)

Thank you