

# PIONEERING ELECTRONIC FORMS AND REPORTING IN SEASONAL MALARIA CHEMOPREVENTION IMPLEMENTATION AMID INSECURITY IN ZAMFARA STATE

Comfort Kingsley-Randa<sup>1</sup>, Abdulmajid Idris Safana<sup>2</sup>, Abba Abdullahi Sagagi<sup>2</sup>, Abimbola Olayemi<sup>3</sup>, Arja Huestis<sup>4</sup>, Aderonke Omokhapse<sup>3</sup>, Kabiru Mohammed Bungudu<sup>5</sup>, Mujahid Aliyu Idris<sup>6</sup>, Yusuf Na Allah Jega<sup>2</sup>, Muhammad Sahabi Gurusu<sup>2</sup>, Munira Ismail Mustapha<sup>2</sup>, Sherifah Ibrahim<sup>2</sup>, Shiwan Dlakwa<sup>2</sup>, Murtala Muhammad<sup>2</sup>, Olugbenga Mokuolu<sup>4</sup>, Justice Adaji<sup>3</sup>, IniAbasi Inglass<sup>3</sup>, Uchenna Nwokenna<sup>3</sup>, Chukwu Okoronkwo<sup>7</sup>, Perpetua Uhomoibhi<sup>7</sup>, Erkwagh Dagba<sup>8</sup>, Veronica Momoh<sup>8</sup>, Jules Mihigo<sup>8</sup>

## Introduction

- Malaria is the leading cause of morbidity and mortality in children under the age of five (CU5) in Nigeria (1).
- Seasonal malaria chemoprevention (SMC) implementation began in 2015 in Zamfara State.
- Implementation contended with difficulties around payment of SMC personnel (community drug distributors [CDDs], health facility workers, and local government teams) and incomplete submission of data, specifically with heightened security risks.
- To mitigate these challenges, E-tools—CDD nomination, CDD attendance, call-in data, and in-process monitoring forms—were introduced in 2021 to overcome these challenges, and SMC personnel were provided practical training on their use.
- Throughout SMC implementation, monitoring and supervisory support was provided by state trainers on use of these tools.

## Methods

The team compared the SMC implementation processes and outcomes before and after the introduction of the e-tools in 2020 and 2021, respectively.

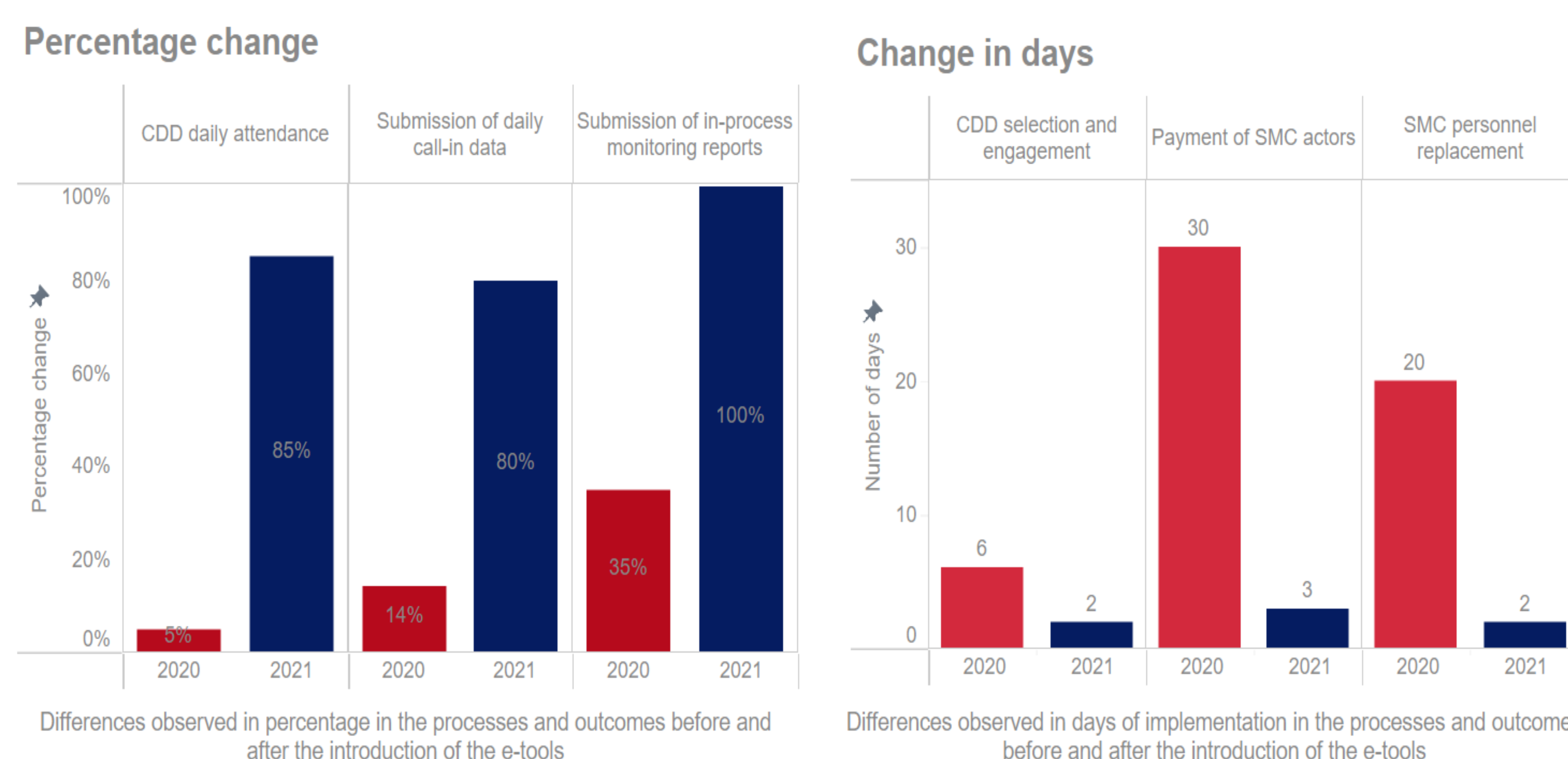
## Reference

1. Ayoola OO, Orimadegun AE, Akinsola AK, Osinusi K, 2005. A five-year review of childhood mortality at the UCH, Ibadan. West Afr. J. Med. 24:175–179.

## Results

Analysis of processes and outcomes of the data for 2020 and 2021 showed that:

- Deployment of CDDs' e-nomination forms reduced the number of working days for CDD selection and engagement from 6 to 2.
- The deployment of the e-attendance increased CDDs' daily attendance submission from 5% to over 85%.
- The daily call-in data received from health facilities on delivery of the SMC drugs increased from 14% to 80%.
- The field supervisors' submission of in-process monitoring reports increased from 35% to 100%.
- The duration of personnel replacement reduced from 20 to 3 working days due to the establishment of a replacement protocol aided by the unique ID numbers linked to every registered personnel.
- The timeline for payment of SMC actors reduced from 30 to 3 working days.



## Discussion

- The e-tools contributed to improved microplanning by facilitating the inclusion of and provision for CU5 in internally displaced persons camps and hard-to-reach communities.
- The e-tools had a positive impact on overall program management, monitoring, commodity availability, personnel management, and payment processes.
- They also contributed to the increased availability of real-time data for prompt decision-making, cost efficiencies throughout the process, and improved SMC delivery, including in security-challenged areas.

THE USE OF ELECTRONIC TOOLS DURING SMC IMPLEMENTATION PROVIDES IMPROVED EFFICIENCY. TRAINING STATE AND LGA TEAMS AS ADMINISTRATORS PROVIDES AN OPTION OF SUSTAINING THE USE OF THE E-TOOLS



Figure 1. Supervisor supporting a CDD to complete the electronic CDD daily attendance

"[...] In the past, our daily attendance was on paper, this caused a lot of problems especially delayed payments of up to a month, it affected our ability to go to work when the next round comes. Some of us would not have funds for transportation. A lot of us were demotivated, we found it difficult to move to the community to distribute SPAQ. Times have changed [and] with the introduction of the e-attendance our successes are numerous, payment is timely and without delay, if there is a delay then we wait for up till 3 days after the cycle. This has motivated us to work harder. We hope it continues, we are happy and grateful."

- Aisha Lawali CDD WCWC Anka from 2019 to date

<sup>1</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Nasarawa, Nigeria; <sup>2</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Zamfara, Nigeria; <sup>3</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Abuja, Nigeria; <sup>4</sup>Management Sciences for Health, Arlington, VA, United States; <sup>5</sup>State Malaria Elimination Program, Ministry of Health, Zamfara, Nigeria; <sup>6</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Plateau, Nigeria; <sup>7</sup>National Malaria Elimination Programme, Abuja, Nigeria; <sup>8</sup>United States President's Malaria Initiative, United States Agency for International Development, Abuja, Nigeria