Increasing Access to Malaria Commodities through Improved Logistics Data Management and Mentoring in Kebbi State, Nigeria

Authors:
Oludayo Adekunle1, Ogoza Anne Ugye1, Olumide Oyebamiji1, Michael Audu2, Kabiru Galadima3, Nasiru Umar4, Cassandra Elagbaje5, Emmanuel Ogwuche5, Veronica Momoh5, Jules Mihigo5

1USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project, Abuja, Nigeria; 2GHSC-PSM, Kebbi, Nigeria; 3 Ministry of Health, Kebbi, Nigeria; 4 State Malaria Elimination Program, Ministry of Health, Kebbi, Nigeria; 5 United States President’s Malaria Initiative, USAID, Abuja, Nigeria

Background
Kebbi State, located in northwestern Nigeria, is burdened with the highest malaria prevalence in the country among children under five at 49% in 2021 and the highest mortality rate, with malaria being the leading cause of death (Malaria Indicator Survey, 2022).

Between 2018 and 2022, the U.S. President’s Malaria Initiative (PMI), through the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project, increased support to reduce the malaria burden in Kebbi State.

Why does this matter?
Non or inconsistent availability of malaria medicines is a key causative factor of malaria-induced infant mortality. This study looks at the impact of improved artemisinin-based combination therapies (ACTs) supply to service delivery points in Kebbi State, achieved by increasing the capacity of health facility officials to manage malaria commodity logistics.

ACTs Stockout Trend in Kebbi State

Statement of Problem
Frequent stockouts of ACTs in Kebbi State health facilities stood at 21.3% in 2018. This might have contributed to the elevated mortality rate among children. A significant reason for this was the limited capacity of health facility officials to record and transmit commodity logistics data with minimal errors and inadequate monitoring and supervision of health facility managers.

Interventions from PMI
1. Trained 527 health facility officers on Malaria Commodity Logistics System (MCLS).
2. Trained an additional 200 Kebbi State officials to supervise MCLS operations in the state.
3. Last-mile distribution of 16.4 million doses of ACTs.

Kebbi State Under-5 Mortality Rate

Results
1. Decline in stockouts of ACTs from 21.3% in 2018 to 4.7% in 2022 (NHLMIS).
2. Prompt resolution of logistics issues.
3. Improved malaria data quality.
4. Improved commodity resupply decisions.
5. Decline in under-5 mortality rate from 627 to 468 deaths per 1,000 live births between 2018 to 2022.

Lessons Learned
1. Enhanced capacity of health facility operators on MCLS is key to commodity resupply decisions.
2. Ensuring commodity availability was critical to the decline in infant mortality rate.
3. Regular supervision and mentoring will enhance sustainability.
4. These lessons can be replicated in other provinces or states in the country.

Abstract Presentation: LB-8333
The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. GHSC-PSM serves as a technical and commercial partner to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure that essential health commodities are available to millions of people in need. For more information, visit http://ghsc-psm.org. The views expressed in this poster do not necessarily reflect the views of USAID or the U.S. government.