USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

LEVERAGING NEW TECHNOLOGIES AND GLOBAL STANDARDS FOR IMPROVED SUPPLY CHAIN SECURITY & PATIENT SAFETY FOR MALARIA PRODUCTS

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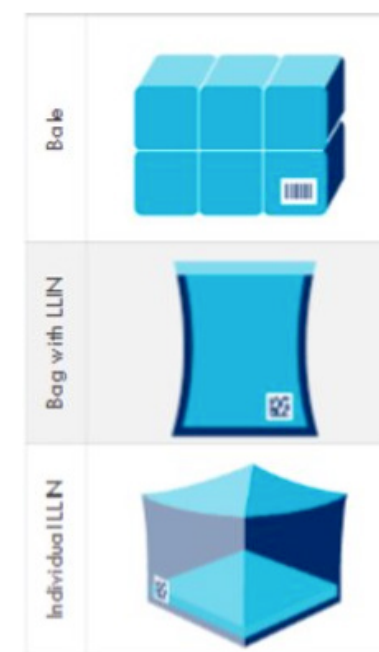
BACKGROUND

The U.S. President's Malaria Initiative's (PMI) 2015-2020 strategy reflects PMI's leadership in removing substandard and counterfeit drugs from the market. By adapting technologies and introducing emerging technologies to health care programs, countries are benefiting from increased visibility and reliability of their health commodity supply chains, improving treatment insight for clinicians, and better serving patients.
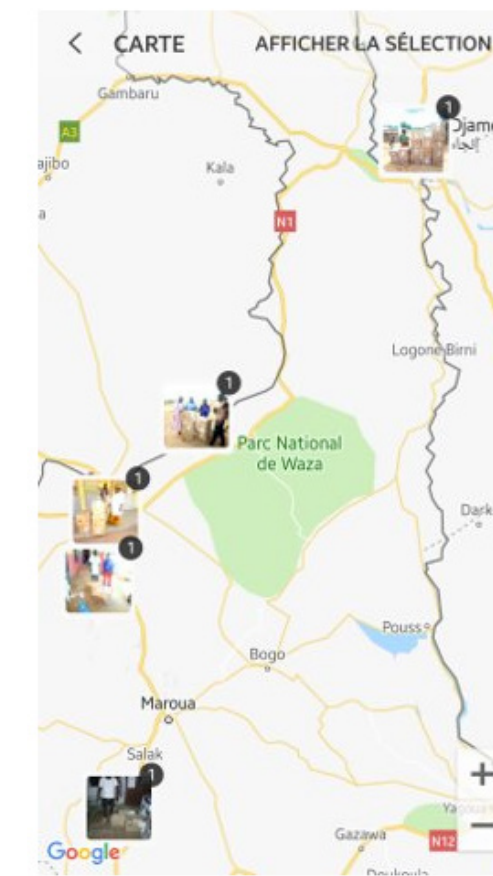
GLOBAL STANDARDS (GS1)

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project supports adoption of global data standards that enable globally unique identification of products and locations, including barcode scanning. GS1 standards facilitate increased data quality and exchange, and greater efficiency within the supply network.

The TraceNet working group, co-convened by PMI and the Global Fund, defined recommendations for standard identification requirements for long-lasting insecticide-treated nets (LLINs). All of GHSC-PSM's LLIN suppliers responded by assigning standard item identifiers that will allow the same unique identifier to be used as shipments change custody in the supply chain, enabling stakeholders to efficiently exchange information and verify the product source. PMI, through GHSC-PSM and other partners, continues to provide technical assistance to health systems to enable countries so that they may realize the full benefits of these advancements.

Example of LLIN Barcoding

CLOUD-BASED TRANSPORTATION MANAGEMENT

TransIT is an electronic tool that transmits real-time proof of delivery at health facilities to a central data base. By enabling to end-to-end data visibility and transparency, TransIT helps ensure effective delivery of malaria commodities, even when managed by third-party logistics providers. Development partners play a key role in building the skills of drivers and warehouse workers to utilize smartphone applications consistently.

TransIT in Cameroon

TEMPERATURE MONITORING

To ensure quality and conformance of malaria medicines, GHSC-PSM uses Internet of Things (IoT) sensors for temperature monitoring of shipments from the sources (suppliers) to the district or provincial level, allowing quick reaction to temperature excursions. Corrective actions can maintain artemisinin-based combination therapies' (ACT) quality and help reduce artemisinin resistance. Development partners must commit to taking these corrective actions to guarantee product quality. GHSC-PSM continues to collect data from temperature and humidity data loggers at central warehouses and (in some countries) regional warehouses in Burkina Faso, Cameroon, Ghana, Guinea, Mozambique, and Zimbabwe.

Temperature monitoring

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