Leveraging the Last Mile Distribution Approach to Sustain Distribution of Bed Nets at Health Facilities in Hard-to-reach Communities in Ghana

The National Malaria Elimination Program (NMEP) improves access to life saving malaria interventions for people living in Ghana including pregnant women and children under 5 years. As part of this effort, the U.S. President’s Malaria Initiative (PMI) through the USAID Global Health Supply Chain Program—Procurement and Supply Management (GHSC-PSM) project supports the NMEP to implement malaria interventions. This includes improving access to long-lasting insecticide-treated nets (LLINs).

Problem Statement

Supply of LLINs to health facilities for routine distribution to child and antenatal clinics was through District Health Directorates (DHDs). As part of this arrangement, health facilities had to use their own resources to travel to DHDs to pick up health commodities.

Challenges included:
- Low storage and inventory management capacity at DHDs.
- Delayed replenishment of LLIN stock in some health facilities (health centres and Community Health-Based Planning Services compounds) as they lacked adequate resources to sustain timely commodity pick-ups from DHDs.

Intervention

In 2020, PMI through GHSC-PSM supported the National Malaria Control Program (NMCP) to pilot the integration of LLIN distribution into the existing Last Mile Distribution (LMD) program with other malaria and health commodities in 5 regions. GHSC-PSM:

- Provided technical assistance (monitoring stock levels, requisitioning, data capture) to strengthen distribution of LLINs in 5 regions.
- Supported RMSs to determine order quantities and stagger deliveries based on the capacity of LLIN storage containers.
- Transported LLINs from the central level to the regions through a third-party logistic firm for onward distribution to health facilities.
- Supported distribution of LLINs from RMSs to health facilities in 3 regions.
- Provided logistics and prefabricated LLIN storage containers (2x40 ft) in 3 Regional Medical Stores (RMSs) to serve 5 pilot regions.

Why it Matters

The purpose of the LLIN-LMD intervention was to resolve LLIN distribution challenges resulting from inadequate storage and inventory management capacity gaps at DHDs. This was expected to improve access to LLINs, while protecting many more pregnant women and children against malaria.

Results

- 312,367 LLINs were distributed to the doorsteps of facilities between July 2022 to February 2023.
- 96% - This helped to achieve an average LLIN coverage of 96% and 97% for children under 5 years and pregnant women respectively in the five pilot regions.
- 100% - The direct distribution of LLINs from regional medical stores to health facilities increased availability of LLINs from 93% in August 2020 to 100% in September 2022 in health facilities.
- 97% - 97% of health facilities in five pilot regions prefer receiving LLINs through LMD since it increases LLIN availability and saves health workers time. They can channel the time previously used to pick up LLINs to serving clients (NMP survey 2022).

Lessons Learned

- Ensuring a consistent supply of LLINs to health facilities is important for improving availability and access at the last mile.
- LLINs are bulky and can significantly impact storage space and distribution volumes. Effective implementation will require the provision of adequate storage space and complementary financing options to sustain distribution to health facilities.
- Effective integration of LLIN distribution in LMD arrangements can improve availability and client contact time in health facilities.

References:

GHSC-PSM: Ghana Health Service/National Malaria Elimination Program.