

Accelerating the Reduction of Malaria Morbidity and Mortality (ARM3) | BENIN

Supply Chain Management for Malaria Commodities: The right amount, place and time



In its National Malaria Strategy, the Government of Benin set an ambitious 2030 target of eliminating malaria as a public health threat and reducing malaria-related mortality to near zero. Vital to this effort is building and maintaining a data-driven, dependable supply chain of commodities for malaria prevention, testing, and treatment.

Malaria is endemic in Benin, and the disease takes an enormous toll on the country's population and economy. Malaria remains the leading cause of morbidity and mortality among pregnant women and children under five. In addition, the World Bank estimates that Beninese households spend 25 percent of their income on preventing and treating malaria.

ARM3 AT A GLANCE

DONOR: USAID/PMI

PERIOD: 2011–2018

PRIMARY OBJECTIVE: To assist the Government of Benin (GOB) to rapidly and significantly reduce both the number of malaria cases and malaria-related mortality, as part of its efforts to bring malaria deaths to zero and eliminate malaria as a public health threat by 2030.

MAIN APPROACH: ARM3 technical experts worked closely with Benin's National Malaria

Control Program (NMCP) to intensify malaria interventions and surveillance at all levels, with continuous capacity building including training, coaching and mentoring of NMCP and health-facility staff.

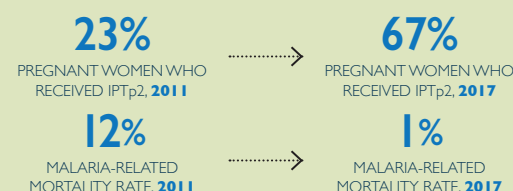
SUSTAINABILITY: The ARM3 methodology was designed for sustainability. In 2014, ARM3 transitioned from an implementing role to an advisory role. The NMCP is now fully in charge of malaria interventions.

NATIONAL IMPLEMENTERS: National Malaria Control Program (NMCP) of Benin with

technical assistance from Medical Care Development International and other partners.

POPULATION REACHED: Over 11 million—the entire population of Benin—in all 34 health zones.

OVERALL RESULTS OF ARM3:





“Monthly 100% supervision has clearly improved the management of malaria commodities. It has helped us with logistics management, using the information system and other management tools, and with following the National Malaria Policy.

Thanks to [ARM3] the completeness rate [for LMIS entries] increased from 46% in December 2015 to 100% in January 2016. The on-time rate grew from 38% to 100% during the same month...

I would rate this activity 10 out of 10.... The 100% supervision...also made a great improvement at all health facilities through the rational management of LLINs due to the LMIS; adherence to the national case management policy; and good management tools.”

**DANIEL AGODOU
WAREHOUSE MANAGER
POBE/ADJA-OUERE/KETOU (PAK)
HEALTH ZONE**

THE SUPPLY CHAIN CHALLENGE

Information systems for ordering, tracking, stocking, and distributing supplies were in place but not fully functioning. Weak management contributed to stock-outs, expirations, and other inefficiencies at storage and health facilities.

Health staff at many levels often lacked training in commodities management or in the Logistical Management Information System (LMIS).

Supply-chain management was also fragmented: donors each operated their own supply system to health zones and facilities, with little coordination or data at the national level, so it was difficult for the National Malaria Control Program (NMCP) to know exactly what supplies were needed in particular areas, where they were, or what was causing stock-outs.

STRATEGY AND METHODS

In collaboration with the NMCP, ARM3 introduced two innovations that streamlined supply-chain management throughout the country, dramatically improving the availability of life-saving commodities.

The commodity pool or “common basket”

With support from ARM3, the Ministry of Health in 2015 established a “common basket” mechanism for all malaria commodities no matter their origin. With this agreement in place, plus more accuracy in tracking and warehousing, the NMCP can now manage the entire supply chain so as to ensure uninterrupted supply.

Based on consultations and agreements with all stakeholders, the mechanism specifies responsibilities for various parts of the supply chain. Detailed in a document distributed to all relevant health providers and officials, the common basket mechanism guides procedures for quantifying, reporting, ordering, and storage.

As part of the agreement, all malaria commodities pass through the centralized warehouse (CAME.)



While promoting national ownership of malaria interventions, the common commodity pool has also led to improvements in:

- Forecasting and procurement plans
- Commodity storage
- Training plans for health workers
- Risk assessments
- Early identification and management of both overstocks and stock-outs

Establishing the common basket also permitted stakeholders to begin performing national quantification exercises for malaria commodities for the first time.



“100 percent supervision” for pharmaceutical management

To improve commodity management at all levels, and make sure that health providers had adequate training and information, Benin also introduced “100% supervision.” This supervisory technique combines in-service training with mentoring by a joint team from the NMCP and ARM3. The introductory phase has taken place monthly at every public and registered private health center in four health zones. The supervisory visits have dramatically upgraded skills in stock management, reporting and quantifying, and in the use of data for forecasting demand.

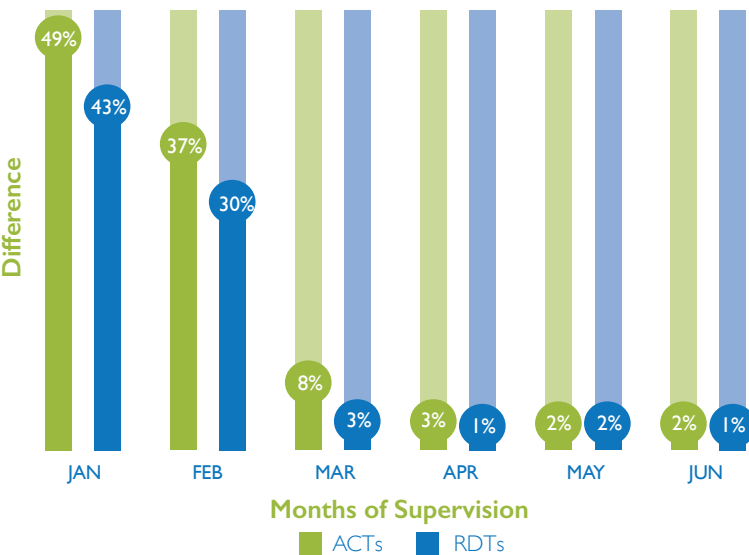
The monthly visits include physical stock inspection for data quality control and validation through the Logistics Management Information System (LMIS), used by health facilities and pharmacies.

RESULTS

When supplies are well managed and data is well collected, reported and used, quantities of drugs dispensed at a health facility should match the quantities prescribed. Large differences signify inefficiencies or data problems.

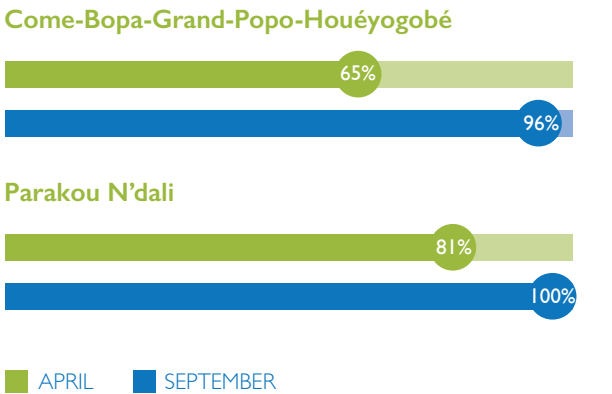
When ARM3 with the NMCP addressed supply chain and data issues, discordance between prescribed and dispensed drugs and RDTs plummeted within months.

Below: The decrease in discordance for three health zones (Pobè/Adja-Ouèrè/Kétou) in 2016.



Timeliness of data submission is vital to forecasting and stocking.

Below: Results on timely submission of data from health facilities in two health zones to the Health Zone warehouse manager in 2016.





GLOBAL RECOGNITION

Pharmacy and logistics experts from the NMCP, USAID/Benin, and ARM3 presented the commodity pool and “100% Supervision” at the Global Health Supply Chain Summit in Tanzania in 2016. International judges recognized this work with a global prize for innovation.

www.mcdinternational.org



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CONCLUSION

An emphasis on data collection, management, and use; coordination of stakeholders and supply lines; development of standard operating procedures, manuals, and trainings; mentoring and supportive supervision; and a focus on local problem-solving combined to produce a more rational and reliable supply chain for malaria commodities.

Based on the success of the outreach, training and supportive supervision (OTSS) pilot in four health zones, this approach is poised for geographic scale-up and for use with other health commodities as well.

TOWARD SUSTAINABILITY

ARM3 personnel have worked hand-in-hand with their colleagues at the National Malaria Control Program to significantly strengthen the organization so that it can meet government targets of nearly eliminating malaria by 2030.

In addition to developing standards, manuals, and trainings, ARM3 has employed an innovative capacity building method designed to foster sustainability. ARM3 personnel, mostly Beninese themselves, are integrated into NMCP teams, and each work directly with an NMCP counterpart. ARM3 experts provide technical guidance, coaching and mentoring to their counterparts as needed—an extremely effective form of capacity building. NMCP staff frequently note improvements in confidence well as technical skills.

Thanks to the vision and concerted efforts of both ARM3 and NMCP personnel, the NMCP is now fully in charge of implementing malaria interventions throughout Benin. In 2014, ARM3 transitioned from an implementing role into an advisory role.

ACKNOWLEDGEMENTS

ARM3 and MCDI would like to thank the many dedicated staff and consultants who have contributed their time and expertise to the Accelerating the Reduction of Malaria Morbidity and Mortality project.

We recognize the Ministry of Health in Benin for its close partnership in making ARM3 an outstanding and sustainable success.

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