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# Sierra Leone Program Update

July 2017

## Strengthening quantification practices

### BACKGROUND

Sierra Leone lacked a pharmaceutical systems infrastructure to deliver essential products, and the problem was compounded by the 2014 Ebola outbreak. A high proportion of health facilities experienced stock-outs of essential medicines and those related to Ebola, TB, and HIV treatment. At the same time, a number of health facilities were carrying huge stocks of expired health products. Previous quantification exercises were conducted by consultants in isolation without proper methodologies or sustainable systems and with very little local knowledge and capacities on how these exercises were conducted. District health management teams relied on quarterly quantifications and procurements for stocking, which was time-consuming, led to delays in delivery of orders, and resulted in wasted products due to duplications and over estimations.

In 2015, with support from SIAPS and other partners, the country began rebuilding and improving its pharmaceutical supply and management system. One of the major support and capacity building areas is quantification of health commodities.

Quantification is the process of estimating quantities and costs of pharmaceutical products required for a specific period and determining when shipments of the products should be delivered to ensure optimal and uninterrupted supply. Quantification results have multiple applications in the management of health programs, including:

- Calculating estimated order quantities, costs, and shipment delivery dates for procurement
- Planning, mobilizing, and securing financial resources
- Estimating storage needs
- Assessing rational use of commodities
- Facilitating procurement and logistics coordination among donors, suppliers, health facilities, and other stakeholders
- Informing manufacturers and suppliers on future demand for manufacturing, procurement, and logistics management decisions

Accurate quantification of pharmaceutical requirements is essential for effective procurement, efficient stock management, and rational medicine use. Evidence-based quantification exercises conducted in a systematic and coordinated manner following the proper processes and using the right methodologies and tools can contribute to better access to health care products.

## INTERVENTION

SIAPS supported the establishment and initial training of a national quantification committee and seven quantification technical working groups in October 2016. The national quantification committee and the technical working groups are coordination mechanisms for effective management of pharmaceuticals in the country. Relevant health sector stakeholders—including all health programs, the DDMS, district health management teams, different department of the Ministry of Health, health facilities, and development partners—are represented in these coordination platforms.

SIAPS also supported the DDMS and the Free Health Care Initiative (FHCI) technical working group in conducting a multiyear quantification of pharmaceuticals. Data from multiple sources, including the SIAPS-supported [Continuous Results Monitoring and Support System](#), were used to support evidence-based decision making. SIAPS also trained all members of the tuberculosis quantification technical working group on the use of [QuanTB](#), a quantification and early warning tool SIAPS developed to improve quantification and procurement processes for TB medicines. This training was followed by an actual quantification exercise.

## RESULTS

The DDMS and Department for International Development approved quantification results for the 2017 and 2018 procurement of FHCI supplies, and the procurement of orders to be delivered in 2017 is ongoing through UNICEF. The results are informing government procurements for 2018, too. The tuberculosis quantification working group also conducted a quantification exercise on TB medicines and supplies to estimate requirements for 2017 to 2019. The multiyear quantifications were breakthrough system strengthening exercises for Sierra Leone.

In addition, quantification exercises provided the platform and opportunity to identify, discuss, and begin to tackle major supply chain, patient and data management challenges and represents significant progress toward a more rational, evidence-based clinical and supply chain decision making process in the country. For example, the country's national TB program is now standardizing its data collection and reporting tools and schedules and revising its standard treatment guidelines.

Report Request & Issue Voucher and treatment registers have also been revised based on feedback and recommendations from the FHCI quantification exercises. Quantification also provided long-term estimates that will support advocacy for more funding from the central government and donors and created and strengthened local capacity to lead, coordinate, and conduct similar quantification exercises.

## NEXT STEPS

Currently, SIAPS is providing technical assistance to the National HIV/AIDS Secretariat and the HIV quantification working group to develop a three-year (2018–2020) quantification that is to be used in a funding application to the Global Fund. The country health programs for malaria and family planning have already sought support in conducting similar long-term quantifications, and plans for those are under way. SIAPS will continue to support and strengthen all seven program-specific quantification technical working groups and the national quantification committee in regularly revising their quantifications and procurement status to ensure optimal availability of life-saving health products.

The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, implemented by Management Sciences for Health (MSH), received two years of funding in September 2015 from the US Agency for International Development (USAID) to provide technical assistance for rebuilding and strengthening the post-Ebola pharmaceutical supply chain management system in Sierra Leone. The project covers health management teams, medical stores, hospitals, and peripheral health units in all 13 districts and involves the country's Directorate of Drugs and Medical Supplies (DDMS), which is responsible for coordinating and providing pharmaceutical services (including promoting rational medicine use) in Sierra Leone; the National Pharmaceutical Procurement Unit; and the Pharmacy Board of Sierra Leone.