

LESSONS LEARNED:

Technical Assistance for the Organization of an Integrated National Medicine Supply System in the Dominican Republic

INTRODUCTION

The Ministry of Public Health (Ministerio de Salud Pública, or MSP) of the Dominican Republic has been implementing the Integrated Medicines Management System (Sistema Único de Gestión de Medicamentos e Insumos, or SUGEMI) on a nationwide scale. The US Agency for International Development (USAID) and Management Sciences for Health, through its projects Strengthening Pharmaceutical Systems (SPS)¹ and Systems for Improved Access to Pharmaceuticals and Services (SIAPS),² have provided financial and technical assistance for the design and implementation of SUGEMI. This process, which began in 2009, has not been without the complexities that challenge all developmental interventions in the framework of administrative decentralization and health sector reform. These obstacles, which have been systematically and successfully addressed, can serve as lessons for technical assistance agencies that are asked to support the integration of multiple *vertical* public supply systems for medicines and supplies.

This report is directed at public officials and consultants from aid agencies that are working on the implementation of integrated supply management systems. It is organized around the 10 lessons brought about by the implementation of SUGEMI in the Dominican Republic as of March 2016.

1. DEMONSTRATE THE PROBLEMS THAT JUSTIFY THE INTEGRATION OF THE SUPPLY SYSTEM

When technical assistance was required from SPS to improve the management of antiretroviral (ARV) medicines, baseline studies were carried out to get acquainted with the situation regarding the provisioning of medicines and supplies in the MSP³ and the situation regarding the supply of ARVs in particular.⁴ The studies revealed the fragmentation of the supply chain and resulting inefficiencies in requisitions, shipping orders, transport, and storage. Stock-outs of ARVs and other essential medicines were demonstrated at the end of the supply chain. The studies concluded that the best strategy to ensure the efficient and sustainable supply of medicines was the integration of the supply chain into a national system.

2. MANAGE TECHNICAL AND FINANCIAL SUPPORT USING A MODEL THAT ENSURES THE REINFORCEMENT OF CURRENT POLICIES AND ACHIEVES RESULTS IN THE SHORT TERM

The results and conclusions of the aforementioned studies and the advantages of an integrated system were presented in 2009 to authorities and specialists from the MSP, the Essential Medicines Program and Center for Logistical Support (Programa de Medicamentos Esenciales y Central de Apoyo Logístico, or PROMESE/CAL), and international technical and financial aid agencies, and the

backing to begin the project was obtained. The evidence presented, the reform of the health sector, and the administrative decentralization of the MSP supported the proposal to organize an integrated medicine supply management system around the following principles:⁵

- Strengthening the National Pharmaceutical Management Unit (Unidad Nacional de Gestión de Medicamentos e Insumos, or UNGM) and its equivalents in the nine Regional Health Services (Servicios Regionales de Salud, or SRS): the Regional Pharmaceutical Management Units (Unidades Regionales, URGM). These units would ensure the adequate selection and use of the medicines and carry out periodic programming for procurement exercises and distribution to the entire health facilities network.
- Concentrating the functions of procurement, storage, and distribution for the SRSs into the PROMESE/CAL, a decentralized entity created by Presidential Decree and attached to the MSP as the logistical operator in the entire public health sector.⁶
- Deconcentrating the management of supplies at the regional levels, which favored decentralization and delineation of functions, by transferring supply management from governing bodies to the service providers.
- Integrating the inventory and distribution systems for all of the *vertical* disease control programs (DCPs) under a single administration at the central and regional level.
- Improving storage and transport conditions.

On the basis of these arguments, it was agreed upon with the USAID Mission in the Dominican Republic that funds from the US President's Emergency Plan for AIDS Relief (PEPFAR) could be used by SIAPS for the comprehensive strengthening of the pharmaceutical system, as long as specific improvements were shown in the availability of ARVs in the short term.

3. MANAGE THE FORMALIZATION OF POLITICAL SUPPORT

The organization of an integrated system demanded the legal backing that would allow the decentralized entities and specific units to take over the new functions that they would be granted. The Minister of Health endorsed the Ministerial Resolution that backs the creation of SUGEMI on July 27, 2010.⁷ This assisted its design and implementation in the middle of a sectoral reform process that was generating uncertainty among officials.

4. STRENGTHEN THE ORGANIZATION AND OPERATION OF THE NATIONAL TEAMS RESPONSIBLE FOR THE IMPLEMENTATION

In 2009 the UNGM had three recently named technical specialists. In the following months, additional personnel were appointed and trained, and their roles were organized around the structure and operation of SUGEMI. During 2009 and 2010 the UNGM technical team provided support to the organization of the nine URGMs, which would be responsible for the decentralized implementation of SUGEMI in the SRSs and their health facilities network.

5. ORGANIZE A SIMPLE SUPPLY INFORMATION SYSTEM TO SHOW RESULTS AND PROMOTE DECISION MAKING

The continuation of political and financial support for the SUGEMI depended upon demonstrating the impact of SUGEMI on the availability of medicines, particularly ARVs, given the source of financing for

technical assistance. Because of the absence of information on supplies in all of the health facilities, an information system was developed early on for strategic decision making that was to record, at least, the availability of medicines at three levels: (a) the central warehouse, (b) regional warehouses, and (c) a sampling of health facilities.

The information was recorded in a quarterly bulletin that would be shared with technical specialists, MSP authorities, and consultants from technical aid agencies.⁸ These data were collected systematically since the fourth quarter of 2010.⁹ The first bulletins made the problems in the stock of essential medicines public for the first time and, afterward, showed the progressive increases in the availability of some critical medicines.¹⁰

The implementation of SUGEMI brought with it a more extensive and automated information system that compiles essential data at all levels of the supply chain, providing information on the situation of supplies at the national and local levels.

6. DRAW UP OPERATING PROCEDURES WITH THE PARTICIPATION OF THE SYSTEM OPERATORS

Between 2010 and 2011, operating procedures were developed sequentially for all of the components of medicine supply management.¹¹ Participating in the design were the personnel who would be responsible for its implementation, to ensure that the new work routines will resolve problems regarding the fragmentation of provisioning without imposing additional workloads on the personnel responsible for its operation. The simplification of the supply management procedures and the reduction of time that personnel dedicated to system administration were key components for ensuring the viability and sustainability of SUGEMI.

7. PROMOTE A PHASED IMPLEMENTATION, PRIORITIZING THE COMPONENTS THAT WILL SHOW RESULTS IN THE SHORT TERM

Although most of the operating procedures were finished at the end of 2011, their implementation was phased to ensure that the components implemented early on strengthened the others and to demonstrate results in the short term. The adopted sequence was as follows:

- Support was provided for the planning of medicine purchases.¹² The first exercises were based on information about historic consumption with little reliability. For the most recent planning exercises, the SUGEMI consumption reports constituted the basis for needs planning.
- Requisition and dispatch procedures were implemented¹³ to ensure the integration of the supply chain into a model coherent with sectoral reform and decentralization of the MSP. The requisition and dispatch forms were the primary source of data for the information system, which simultaneously improved the supply information system.
- With the requisition and dispatch procedures in operation, it was feasible to move stocks of ARVs and tuberculosis control medicines to the SRS stores, the point from which a unified distribution system to health facilities would be organized.¹⁴ Programs with a more efficient supply chain, such as immunizations, would be integrated afterward.
- The assessment of the storage and transport situation allowed for the mobilization of domestic resources and external aid to improve the conditions and practices in regional warehouses. The *Good Storage Practices Manual (Manual de Buenas Prácticas de Almacenamiento)* served as a reference for setting up warehouses and training all of the personnel.¹⁵

- With more precise needs estimation exercises, the financial gaps between planned sums and budgetary allocations were analyzed.¹⁶ Alongside domestic counterparts, alternative purchasing mechanisms to optimize the use of financial resources were identified.
- Only until the supply chain began to function more efficiently, a system of supervision was implemented at health facilities,¹⁷ and the issues of medicine selection and use were addressed. In 2015 the National Essential Medicines List (Cuadro Nacional de Medicamentos Esenciales)¹⁸ was revised and published, and in 2016 a certification program was started for the development of human resources that would support the rational use component.

8. INVOLVE OTHER NATIONAL PLAYERS AND AID AGENCIES

Given SUGEMI's national and integrative nature, its implementation required the support of various units within the MSP (DCPs, administration departments, purchasing, budgetary planning), decentralized government bodies (the National Health Service, the national HIV/AIDS council, PROMESE/CAL), and technical and financial aid agencies (projects financed by USAID, the World Bank, and projects from the Global Fund). This process of participatory construction legitimized SUGEMI as a national strategy for improving access to medicines and for strengthening the health system.¹⁹

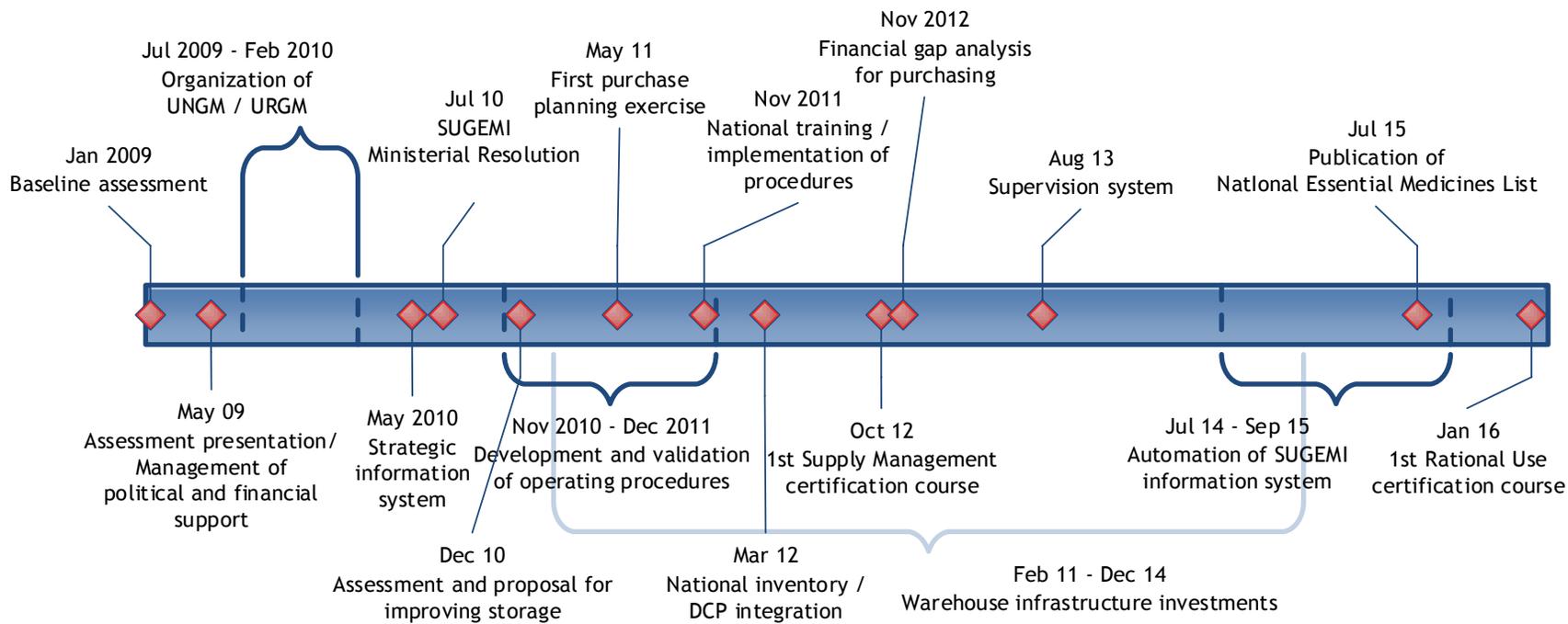
9. DOCUMENT THE RESULTS AND IMPACT WITH INDICATORS

The political backing of the MSP and the National Health Service as well as the financial support from USAID were maintained thanks to the generation and sharing of information that demonstrated the impact of the intervention in terms of the mobilization of financial resources for building infrastructure and procurement of medicines, and, of even more importance, in the increased availability of medicines, particularly ARVs.²⁰ Even the return on the investment made by USAID since the start of the SIAPS project was documented (cost of SIAPS technical assistance/mobilized or saved financial resources resources).²¹

10. EDUCATE PERSONNEL SO THEY HAVE AN IN-DEPTH UNDERSTANDING OF MEDICINE SUPPLY MANAGEMENT

More than 6,000 technical specialists with responsibilities in medicine supply management in the public health sector were trained on the implementation of the SUGEMI operating procedures. Nevertheless, in the long term, the sustainability of the system depends on the education of professionals who critically evaluate its strengths and weaknesses, develop and adjust the methodologies and tools currently in use, and carry out the integration of DCPs and elements that are still not incorporated in SUGEMI.

With these ends, two certification courses were developed and implemented, one in medicine supply management²² and the other in rational use. The adopted methodology is partially classroom based, in the sense that the students use their place of work as a laboratory for identifying problems, reinforcing SUGEMI procedures, and documenting the impact of the interventions. Since 2012, more than 90 professionals have graduated from public and private universities. Most of these graduates work as high-level technicians in different points of the supply chain of the Dominican Republic.



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