In Angola, contraceptive commodity security faces challenges on many fronts. A fragile logistics management information system, limited human resource capacity, and a centralized distribution system pose significant systemic challenges to the provision of the full range of contraceptive methods needed by women and their families. To address these challenges, Pathfinder International’s USAID-funded Healthy Families project (2012–2015) has worked in collaboration with the Angolan Ministry of Health to strengthen the national commodity supply management system and create an enabling environment for contraceptive security.

PROJECT DESCRIPTION

The USAID-funded Healthy Families II/Muiji Wa Disanze II project is part of a broad coalition of partners including the Angolan National Directorate of Public Health (DNSP) working to improve contraceptive commodities security across Angola’s 18 provinces. In late 2013, the project’s work expanded to include support to the Luanda Provincial Directorate of Health to strengthen management of the supply chain of contraceptives and logistics throughout the province.

Led by Pathfinder International, the project continues to help mobilize local and global stakeholders to create an enabling environment for contraceptive security. Through the implementation of standards and approaches, the advances achieved by the project, both large and small, are a reflection of coordinated efforts to ensure that women and men in Angola can obtain and use the contraceptive method of their choice.
Relative stability since the mid-2000s has allowed the Angolan government the opportunity to enact much-needed health reforms to meet the health care needs of the population.¹ Yet two of Angola’s most pressing issues are the high maternal mortality rate of 610² and the high infant mortality rate of 102.³ The maternal mortality rate is among the highest in the world. These are directly linked to limited access to health care services, but are exacerbated by a contraceptive prevalence rate among married women of only 6%⁴ and a total fertility rate of 5.54.⁵

Despite a twofold increase in contraceptive prevalence for modern methods in Angola, utilization of family planning (FP) services remains low and service availability varies widely between provinces and between urban and rural areas.⁷ Within this context the Ministry of Health (MOH) in Angola requested technical assistance to improve the contraceptive security system to expand women’s access to reproductive health services. Angola’s supply chain operated in line with the National Strategic Plan for Reproductive Health implemented by the MOH. The strategy’s objectives focused on improving the health of women and men of reproductive age through quality health services, including FP. The strategic plan was implemented through a centralized health structure with decision making initiated at the central level to the provinces, districts, and ultimately the facility levels. Within this structure, contraceptive supplies were maintained in the country through a system of procurement and disbursement run through CECOMA, the MOH directorate in charge of procurement. Though the national health management information system (HMIS) did not provide data on commodities security, observational evidence reflected that stockouts of contraceptives were common across provinces. Overall, the national health system was unable to maintain a stable supply of contraceptives at service delivery points throughout the country.

¹ UNFPA Angola, 2008;
⁵ IBEP 2011.
A contraceptive security strategy must be based on an overall FP strategy—meaning that contraceptive commodity needs should be determined by the general goals dictated by a national strategy. Recognizing the need to strengthen contraceptive security within this framework, the Angolan MOH prioritized strengthening the logistics management information system (LMIS) for contraceptive supply chain. The goal was to establish a system that would improve the efficacy of a contraceptive delivery system and result in increased contraceptive options for beneficiaries across the country. With funding from USAID, Pathfinder partnered with the government of Angola to strengthen the national commodity supply management system and create an enabling environment for contraceptive security in order to deliver reproductive health commodities and services to clients.

The Healthy Families project conducted an assessment of the contraceptive supply chain across the country—mapping its organization, identifying areas of need, and diagnosing chief obstacles to effective commodities security. The analysis highlighted priority areas for action, such as strengthening and enforcing systems and mechanisms for collection of accurate data in a standardized format. Though facilities were required to maintain records on commodities, in practice municipal and provincial recordkeeping was poor, resulting in incomplete, incorrect, and late data. Inconsistent data made tracking contraceptive consumption and stock levels difficult. Physical inventories at warehouses were conducted sporadically leading to under- or overestimation of commodity needs. Findings also revealed the need to define responsibilities and develop capacity at the central, provincial, district, and service delivery levels to process and analyze data from the HMIS and make decisions accordingly.

Given the above context, MOH planners at the central, provincial, and municipal levels did not have data on which to base needs and reflect procurement requests. Importantly, centralization of the distribution system led to a situation in which peripheral levels did not send in their requests for contraceptives, expecting more central levels to make decisions regarding timing and quantities to be shipped. This model—referred to as a “push” model for supply chain maintenance—caused frequent and systemic contraceptive stockouts. To address these priority areas, the project adopted a phased approach to strengthening the supply chain.
Given these findings, the project prioritized practical solutions to the country’s supply chain needs over opportunities to pilot new systems innovations. Findings suggested three areas of significant need: developing and distributing standardized tools for supply change management; building local human resource capacity in contraceptive logistics best practices; and advocating for a system that is reoriented toward data-driven decision making.

In Phase I of the project (which focused on central-level engagement), the Healthy Families project collaborated with the government of Angola, WHO, and UNFPA to strengthen the environment for FP. The project provided technical assistance to facilitate implementation of data-driven practices in supply chain management. The Healthy Families project also helped to consolidate improvements made over the past two years toward the provision of comprehensive reproductive health services to meet women’s short-term and long-term contraceptive needs.

A major focus of the project was to shift the responsibility for populating the LMIS to logistics managers and health personnel at clinics and municipalities. This was accomplished by developing tools and standard operating procedures (SOPs) and conducting capacity building activities for the MOH. Moreover, the project worked with the MOH to institutionalize best practices throughout the health system and communicate national expectations for how provinces, districts, and facilities should engage with and operationalize the supply chain.

**Tool development and institutionalizing LMIS**

Pathfinder helped to institutionalize specific tools designed to support more effective and efficient decision making—specifically, to use data to track the demand for and use of commodities over time. Pathfinder adapted and lobbied for the utilization of these standardized tools at each level of the supply chain system. For example, the project supported improved consumption recordkeeping with monthly FP tracking forms to register new and continuing users by method. Logistics forms and transaction records were used to track the movement of health products (e.g., the monthly contraceptive logistics forms registered incoming and outgoing shipments of contraceptive commodities). Lastly, the project revised and updated inventory checklists to improve stock keeping records and warehousing practices.

Additionally, in Luanda province, the project brought together statistics and logistics officers to examine commodities data from service delivery points in a systematic and standardized way before sending them on to the provincial level. A similar mechanism was established at provincial headquarters for reviewing municipal data before aggregating information and submitting to the central level. Establishing a tiered review system and building the capacity to analyze data helped to create a spirit of ownership and accountability for planning and data management. This system (where the requesters determine the quantities and timing of shipments) is what is said to be a system operating as a “pull” model.
The project also updated and revised a logistics SOP manual for personnel managing the supply chain at all levels, from the central level to the service delivery points. Pathfinder facilitated four workshops, convened by the Luanda Province Directorate of Health, with staff from provincial warehouses and municipalities, to identify gaps and weaknesses in their current practices and discuss ways to improve them. The workshops provided abundant input for the revision of the SOPs and generated considerable buy-in from directors, managers, and operational staff.

Pathfinder also worked with managers of the Luanda provincial warehouse to build their capacity in the area of inventory, internal management information systems, and proper storage of contraceptives. Pathfinder supported the central warehouse in the calculation of resupply quantities, physical inventories of contraceptives, tracking incoming and outgoing shipments of commodities, building staff skills, and knowledge of other warehousing practices.

The project helped to strengthen institutional capacity at the central-level MOH by leveraging their role both as data users and decision makers. Technical support included review of data and the potential for logistics-oriented data-driven decision-making. The central-level MOH was supported to improve data synthesis and analysis to guide decisions on contraceptive disbursement and to improve the system’s performance.

In its second year, the project continued providing technical assistance to the central level, and added assistance to Luanda province to its scope of work. Capacity building for sustainability continued as an overarching goal of the project. Through project activities, training and supervision were provided to the MOH to build capacity to operate and contribute to the LMIS. Key topics addressed in all capacity building activities included forecasting calculations, recordkeeping tools and best practices, and demand-driven supply chain management. The trainings demonstrated how small adjustments and improvements in data management (e.g., in determining and reporting their commodity needs) affect the supply chain over time. Trainings devoted considerable attention to demonstrating the linkage between data completeness and accuracy and downstream performance improvements in forecasting and distribution.

In Phase II, the project invested in provincial-level (Luanda province) capacity building and systems strengthening efforts. The project extended beyond support at central level to ensure that the supply chain was functional from facility to district to province. Given that Luanda province accounts for approximately half of the total contraceptive use in the country, ensuring availability of contraceptives at service delivery points throughout that province can make a significant contribution to overall contraceptive use in the country and, by extension, to reducing maternal and infant mortality.
Pathfinder continues advocating for the importance of having accurate, complete, and timely data on stocks and movement of contraceptive commodities at every level of the supply chain. In the two years following the start of project activities, the Angolan health system has integrated recommended logistics best practices into the supply chain management system. The introduction of standardized forms and practices has improved the health system's ability to maintain and monitor contraceptive supplies and prepare forecast and distribution plans on a regular basis, using available data from the HMIS and LMIS.

**Improved data availability and quality**

The central-level MOH is now basing decisions on commodity needs communicated by lower levels in the system. Data from contraceptive logistics forms are consolidated at each level and are being used by DNSP to calculate the average monthly consumption (national and provincial), assess stock levels (national and provincial), and prepare procurement and disbursement requests. Additionally, DNSP (with Pathfinder oversight) is able to provide donors (USAID and UNFPA) with procurement plans for contraceptives based on projections of anticipated needs.\(^8\)

By September 2014, 83% of provinces were submitting their reports regularly to the central level and 56% were doing so on time, compared with 44% and 28%, respectively, in 2012. Having this data available at the central MOH has made it possible to base procurement decisions on actual contraceptive needs and consumption across the country. This has resulted in improvements in the central-level MOH's ability to send the right amount of contraceptive commodities to the provinces at the right time. Additionally, over the past years the central-level MOH has reported reductions in the need for sending data clarification requests back to the provinces because of improved quality. Relieving the system of these types of clarification requests has improved the overall efficiency of the system.

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\(^8\) In 2011, UNFPA and USAID donated 60% and 40%, respectively, of all contraceptives procured for the public sector.
Reduction in contraceptive stockouts

Efforts to strengthen data use and quality have led to improvements in the availability of contraceptives. Shipments from the central warehouses are going out to the provincial capitals on a more regular schedule and the quantities being shipped are now based on demand and existing stocks. Project activities have offered a continuous flow of information of contraceptive commodity security from central levels to provinces, and vice versa. The most important and visible result of these improvements is that there have been no stockouts of contraceptives at any of the 18 provincial warehouses. Table 2 highlights some of the changes observed over the project’s two years.

Efficiency Of The Supply System

Provinces Receiving Supplies From Central Level

2012

Provinces Receiving Timely Supplies Replenishment From Central Level

2014
LESSONS LEARNED

Improving data availability and use is crucial for a more accountable supply chain management system. Accurate, timely, and quality data at both operational and strategic levels are vital to ensuring that the right contraceptive commodities are at the right location. Time and diligent technical support are required to make the link between upstream data-driven decision making and feedback loops, and downstream reductions in loss, damage, waste of supplies, stockouts, and overstocks. Building human resource capacity to manage data is crucial to a program’s overall effectiveness and to improving contraceptive security.

Leadership and political will are key to a successful LMIS to ensure contraceptive security. The project delivered program achievements in a relatively short period of time. Through capacity building efforts, LMIS strengthening was positioned as a strategy for improving the reproductive health situation nationally. Close collaboration with the MOH helped equip political leaders and decision makers with the information they needed to support and advocate for a demand- and data-driven supply chain management system for contraceptive security.