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Supply Chain Management Newsletter

Project advisor Nora Quesada meets with staff in a warehouse in El Salvador.

To respond to fluctuations in supply and demand, or a changing policy environment, a supply chain must be agile and function with speed and flexibility. Procurement must rapidly respond to demand to bring needed products to clients.

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The Latin America and the Caribbean Contraceptive Security Regional Initiative: Country Collaboration Leads to Better Procurement

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Panama Strengthens Its Supply Chain for Health Commodities

According to the last Millennium Development Goals report, Panama's goal is to reduce maternal mortality from 53 to 13 of every 100,000 live births by 2015; however, in 2007, despite efforts for improvement in indigenous provinces and rural areas, the number was 59 in 100,000. Panama's Ministry of Health (MOH) realized that an important factor was health commodity security. See the full article below.

Supply Chain Integration: Seamlessly Linking the Pieces

USAID and other donors are increasingly focusing on health system strengthening and service integration through the Global Health Initiative, Human Resources for Health, and other initiatives. A new supply chain integration model illustrates the important connections between stakeholders, levels, and functions in a supply chain, and how these linkages bring information about supply and demand closer together. See the full article below.

The Latin America and the Caribbean Contraceptive Security Regional Initiative: Country Collaboration Leads to Better Procurement

In 2003, USAID's Bureau for Latin America and the Caribbean (LAC) launched the LAC Contraceptive Security (CS) Regional Initiative to strengthen CS and build a south-to-south exchange network to help sustain countries where USAID donations and family planning technical assistance are being phased out.

The Regional Initiative has produced promising results by bringing countries together to share lessons and solutions. When one country improves its health system, policymakers and technical managers in other countries receive support so they can draw from their neighbor's achievement. The countries participating in the LAC CS initiative include Ecuador, El Salvador, Honduras, Guatemala, Peru, Paraguay, Bolivia, Nicaragua, and the Dominican Republic.

The Regional Initiative's procurement activities illustrate how collaboration has helped to improve access to family planning. Through a multicountry approach, several countries have learned to implement an agile procurement process characterized by shorter lead times, lower-cost contraceptives and delivery options, and reduced time and funds spent on managing procurement; the result is more effective procurement and supply chain management for contraceptives.

Improving Contraceptive Procurement Using a Multicountry Approach

In 2005, the Regional Initiative recognized that procurement was a major problem in securing a steady flow of contraceptives to the LAC countries; many stockouts were caused by bottlenecks in the procurement process. To help address this challenge, the Regional Initiative convened a multipartner team—the USAID | DELIVER PROJECT, USAID | HEALTH POLICY PROJECT, USAID missions, the U.N. Population Fund (UNFPA), and host country governments—to study the contraceptive procurement situation and identify viable options for countries with similar regulatory and technical constraints.

Once the team had a plan and clear recommendations—based on extensive research, high-level discussions with UNFPA's procurement services branch, consultations with experts in procurement regulations, and local country surveys—they developed advocacy messages and targeted technical assistance to strengthen contraceptive procurement in countries, one by one, from 2006 through 2008.

In 2009, the Regional Initiative, in collaboration with UNFPA, brought together key staff from nine countries to learn from each other's successes and challenges. They used the regional research findings to think strategically about how to further improve procurement in each of their countries. Then, those individuals went back home and provided similar support at the national level.

What Are the Results of the Procurement Support?

These strategic interventions provided support both at the LAC regional and at the national level in each country. Procurement staff are now empowered to lead and take ownership of their contraceptive procurement processes.

The interventions have resulted in many improvements, including the following achievements:

- Seven countries developed more efficient procurement and substantial cost savings by using UNFPA as their procurement agent to access low-priced, quality contraceptives. In 2005, El Salvador's Ministry of Health (MOH) saved U.S.$3 million by procuring through UNFPA, rather than bidding on the local national market. Nicaragua's MOH saved U.S.$106,200 and U.S.$320,000 in 2008 and 2009, respectively.

- When procuring through UNFPA, countries also improved their management process. Most countries learned to develop advocacy tools and financial scenarios to justify using an international procurement agent. El Salvador halved the time it takes to execute procurements though UNFPA from eight months to just four months. In Peru, the MOH refined the memorandum of understanding with UNFPA to increase transparency, speed the transfer of funds, and improve each agency's understanding of their roles and responsibilities.

The Regional Initiative also identified countries actively exploring more sustainable and complementary procurement options for essential medicines and contraceptives, including reverse auction and framework agreements.

Reverse auction is a bidding process by which the supplier of a good is chosen based on the best price offered and not on the technical characteristics of the good. All other characteristics, including quality, are predefined and applied as a minimum standard for participating in the auction. A framework agreementis an arrangement between buyer and supplier where both parties agree to the terms of future dealings between them (volumes, price, etc.) without committing to a specific purchase or contract.

The Regional Initiative's interactive approach—sharing challenges, solutions, and successes—has motivated countries in LAC to develop customized CS strategies that work.

Using reverse auction, Peru successfully procured quality low-priced contraceptives and essential medicines, which led to several improvements:

- Prices for injectable contraceptives were reduced from U.S.$1.18 through UNFPA in 2005 to U.S.$0.38 through national procurement in 2010.
- In 2006, various government agencies pooled their needs and procured 165 essential medicines through reverse auction. Compared to previous years, these entities saved approximately U.S.$14 million.
- The length of the procurement process was reduced from seven to two months.
- Holding the auction online and in public improved transparency.

Costa Rica passed a law to streamline procurement for essential medicines and prequalify suppliers, and several countries are considering framework agreements to streamline procurement, a best procurement practice used in many developed countries:

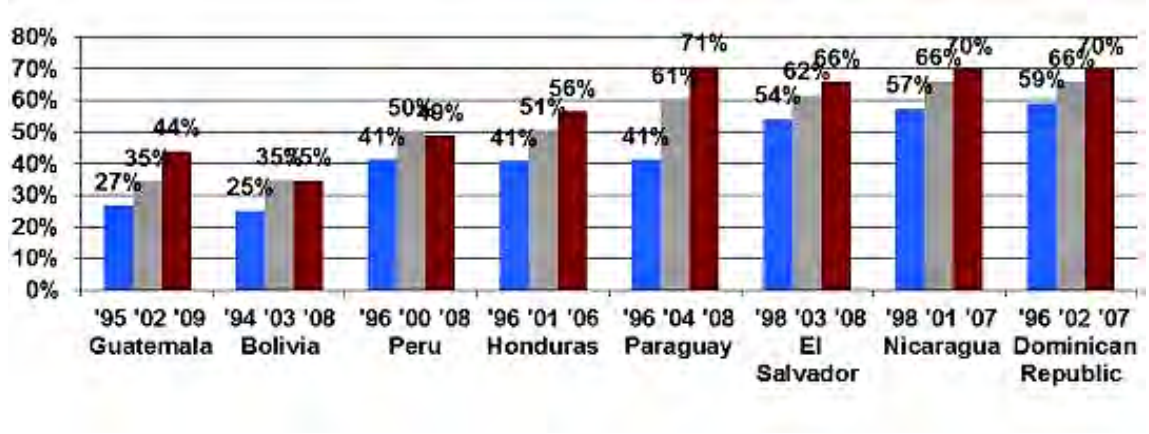
- Chilean government agencies jointly procure many products using framework agreements, saving the Chilean government nearly U.S.$8,000 per procurement in management costs. The MOH is considering procuring essential medicines this way.
- Honduras recently passed a law allowing the government to procure goods through framework agreements.

Conclusion

To respond to fluctuations in supply and demand, or a changing policy environment, a supply chain must be agile and function with speed and flexibility. Procurement must rapidly respond to demand to bring needed products to clients. Streamlined policies and procedures—such as using procurement agents, reverse auction, prequalification, and framework contracts—improved the procurement and supply chain management process in several LAC countries.

These activities, and their results, underscore the impact that collaboration and knowledge sharing can have when countries work together. Most of the Latin American countries have made dramatic gains in contraceptive prevalence rates (CPR) since the mid- to late-1990s (see Figure 1). Increased CPR rates in Latin America point to an increased level of service—an improvement that would not have been possible without an increase in availability of the commodities needed to provide these services. Even with political will and a favorable policy framework, without a robust supply chain and procurement process, contraceptives would never have been made available to those who needed them.

Figure 1. Modern Contraceptive Use in LAC Countries, 1995 to 2010 (women in union)



Notes: Data from the Demographic Health and Reproductive Health Surveys for all countries and years (www.measuredhs.com/accesssurveys/ and www.cdc.gov/reproductivehealth/surveys/SurveyCountries.htm).

The Regional Initiative's interactive approach—sharing challenges, solutions, and successes—has motivated countries in LAC to develop customized CS strategies that work. The results of this collaborative, multilevel approach to CS confirm it as a model for other programs in the LAC health sector, and in other regions of the world. Much work is still needed; but the regional platform has helped spur many country-level CS advances.

In May 2011, the Regional Initiative will hold a south-to-south exchange in Peru to share the new procurement options and continue to find solutions to the remaining procurement challenges. For more information on the event, please contact Anabella Sanchez.

Panama Strengthens Its Supply Chain for Health Commodities

This program is supported by the U.N. Population Fund (UNFPA) with technical assistance from Proyectos en Informática Salud Medicina y Agricultura (PRISMA).

According to the last Millennium Development Goals report, Panama's goal is to reduce maternal mortality from 53 to 13 of every 100,000 live births by 2015; however, in 2007, despite efforts for improvement in indigenous provinces and rural areas, the number was 59 in 100,000. An important factor in reducing maternal mortality remains access to family planning and reproductive health supplies.

Panama 's Ministry of Health (MOH) realized that one of the main challenges in reaching health commodity security is the need to strengthen the capacity and knowledge of human resources to properly manage the health supplies logistics system. Regulation, organization, and procedures for logistics at Panama's MOH were not clearly established, constraining comprehensive management of the logistics cycle.

PRISMA facilitators provide support during working group sessions.

The MOH decided, as one of their strategic objectives, to end the health supplies shortage in 100 percent of their regions, thus improving general health and reproductive health in the population. With technical assistance from PRISMA, funded by UNFPA, the MOH's Health Supplies Provision Department took on this challenge.

Ten people from the Health Supplies Provision Department formed a special team, the Central Conduction Team (CCT), which committed to leading the supply chain management (SCM) strengthening process. To give the team a solid foundation for understanding the work ahead, PRISMA trained the CCT members by taking them through the four comprehensive SCM training courses developed by the USAID | DELIVER PROJECT.

The Living Standards Survey estimated that by 2003, 55.8 percent of women aged between 15 and 49 used a contraceptive method (surgery, pills, condoms, injections, rings, rhythm, and foam). For 2008, this percentage increased to 57.7 percent, but in indigenous areas contraceptive use is only 20.2 percent.*

An additional 57 MOH officials from the country's 14 regions attended the courses in preparation for creating Regional Conduction Teams (RCT) and strengthening the systems at the local level. A teaching plan was created to further train RCTs in logistics management, leadership strengthening, and technology tools to manage data and reports.

Involving local staff and motivating them to take responsibility of the process was a challenge the team overcame by involving people from the very beginning. By sharing all tools and results openly and providing support, the team generated an environment of inclusion, demonstrating that responsibility for the work is something everyone has to take on.

The following key strategies and interventions guided the supply chain strengthening process in Panama:

- Maintain active political support and effective government commitment to keep health supply availability, and particularly reproductive health availability, at the top of the agenda.
- Strengthen the capacity for provision of supplies among staff from programs, especially those working in reproductive health programs and those in charge of health supplies, and support the infrastructure and equipment necessary for management.
- Ensure that leadership of the strengthening process is taken on by staff from the MOH.
- Identify relevant stakeholders in the management system who can assume responsibility for critical supply chain roles, such as product selection, forecasting and supply planning, procurement, warehousing, distribution, issues and consumption, logistics management information systems, and capacity building.
- Integrate technology transfer to local staff into the system, from process design to implementation, to generate a sense of ownership of the system strengthening effort.

- Include all segments of the Panama Health System in the system strengthening process, from the central level to the service delivery point.
- Include monitoring and evaluation in every step of the process.

For these strategies to be successful, certain elements have to be in place, including:

- Clearly defined objectives for what the MOH intended to achieve
- A defined strategy outlining the main interventions
- An active interest and commitment from key stakeholders
- Proper coordination among stakeholders
- Availability of financial resources
- Availability of human resources open to change, with positive attitudes and potential capacities to be strengthened, who are capable of taking ownership of the process and manage the technology transfer to country staff
- Leadership taken on by staff from the Health Supplies Provision Department
- Clear allocation of roles and functions targeting a common goal, with coordination of work and verification of actions
- A commitment to comply action plans and achieve performance indicators
- A commitment from everyone to take responsibility of the process according to established roles.

There is a clear inequity in access to family planning methods and counseling between rural and urban areas, which results in underserving marginal and indigenous populations; only 60 percent of the family planning service delivery points provide counseling and at least six contraceptive methods.

The technology transfer process included MOH staff in the development of assistance activities, which generated a sense of ownership of the results of the work. This interactive process created a clear vision of the country's commodity security needs and identified the system's main stakeholders.

Formation of a CCT with enough capabilities to take on leadership and responsibility of the strengthening process was critical to the success of the effort. Local leadership of the strengthening process ensured access to key stakeholders in Panama's health system, which endowed the process with national, regional, and local coverage.

Critical elements that contributed to scalability of the strengthening process included having a common commodity security framework and adjusting it to the country's conditions, and implementing technology transfer and ownership of the process in local environments. Adjusting tools to local conditions facilitated their application and allowed for collection, processing, and analysis of data according to local needs.

The team generated sustainability of the intervention by strengthening capacities across the whole system and its resources in an integrated way. Assistance would have little or no effect if it only focused on one level or one aspect of the system.

The MOH has shown strong political support and commitment to improving the health of the population by providing funds to complement support from international donors. In the last few years, Panama has increased its budget for health supplies on a continuous basis—from 2009 to 2010, it went from U.S.$25

million to U.S.$38 million. With steadfast support from the government and the right technical assistance, Panama is well on its way to ending shortages of public health supplies.

> *"…Currently, at the Medications Storage, there has been a change in attitude, since staff feels supported, we are now aware of the importance of our work, taking care of every detail that our supply chain involves, keeping coordination flowing among all staff, understanding this communication is necessary to do a good job, we are also aware of new negotiations that authorities may carry out in order to improve our supplies system and provide them with all necessary support for a proper supply chain, at the time it is needed and trying to comply with storage best practices."*
>
> *–Lic. Ana Gough, National Medication Storage Chief and CCT member*

- Sistema de Naciones Unidas/Gobierno de la República de Panamá. 2009. *Objetivos de Desarrollo del Milenio, III Informe de Panamá, 2009*. Primera edición

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Supply Chain Integration: Seamlessly Linking the Pieces

USAID and other donors are increasingly focusing on health system strengthening and service integration through the Global Health Initiative, Human Resources for Health, and other initiatives. In the March 2010 edition of this Newsletter, we presented the article *Putting Integration into Perspective: Proven Practices to Strengthen Public Health Supply Chains*, which described how supply chain integration can strengthen systems, both improving customer service and lowering costs. Based on the country experiences of the USAID | DELIVER PROJECT, a well-functioning supply system is the backbone for achieving these goals.

Supply chain integration reflects how a large part of our supply chain strengthening work relates to connecting the pieces. Under the USAID | DELIVER PROJECT and its predecessors, we have worked for years to strengthen entire supply systems for many product categories; where previously we might have focused on strengthening a particular logistics function—such as a logistics management information system (LMIS), a specific level of the logistics system, a specific program, or a certain stakeholder—increasingly we focus on weaving all the functions, levels, and stakeholders together to develop a well-performing supply system. The cohesive system is greater than the sum of its individual parts, and it has collateral benefits for the health system.

During the past year, we explored the key characteristics that underpin a seamlessly linked supply chain and documented country examples that show how linking—or integrating—the supply chain can improve service delivery. We developed a new supply chain integration model that illustrates the important connections between stakeholders, levels, and functions in a supply chain, and how these linkages bring information about supply and demand closer together.

The model reflects the best practices that we have developed over the lifetime of the project. While the concepts in the model may not be new to you, some of the terminology may be—*integrated supply chain* refers to the way levels and functions are linked together. This definition, commonly used in the commercial sector, allows us to focus on the importance of the cohesiveness of the supply system; it also provides a common vocabulary for engaging supply chain professionals from across the industry.

Figure 1. A Seamlessly Linked Supply Chain

Figure 1 illustrates how functions in a supply chain (e.g., product selection, procurement, storage, and distribution) are linked. For example, program managers must use logistics data during the quantification process so the right quantities of products are procured. Likewise, product selection can have an impact on storage and distribution, as the attributes of products—whether they need cold storage or are bulky and need a larger space—can influence warehouse and transportation requirements.

People at different levels (central, regional, district, and service delivery points) must have clearly defined roles and understand how their responsibilities relate to those of others in the supply chain. The tools we develop—such as inventory control systems and LMIS forms—must be used appropriately at each level so data and products move efficiently through all levels of the system.

Furthermore, there need to be linkagesbetween stakeholders, such as donors. Fostering communication and information sharing can help ensure that all participants are working under the same assumptions and with the appropriate information to make budgetary and strategic planning decisions.

The integrated supply chain has multidimensional linkages, with connections moving horizontally, vertically, and diagonally—some of which are illustrated in Figure 1. Well-functioning supply chains are characterized by the following features that support the linkages between functions, levels, and stakeholders:

- *Clarity of roles and responsibilities:* I ncludes establishing and publicizing roles, responsibilities, and processes (such as reporting or resupply procedures) throughout the supply chain.
- *Agility:* Logistics functions should be performed quickly, accurately, and effectively so products, information, and decisions can move swiftly through the supply chain to respond promptly to customer needs.
- *Streamlined processes:* Eliminating bureaucratic hurdles that can separate supply and demand information, as well as processes that do not add value to the supply chain or impede the flow of information and commodities.
- *Visibility of information:* Data are visible throughout the supply chain so stakeholders at different levels can see where products are and what the demand is, thus narrowing the gap between supply and demand and improving transparency of information.

- *Trust and collaboration:* Nurturing a collaborative environment can help to break down existing functional and organizational barriers to improve supply chain performance.
- *Alignment of objectives:* H aving compatible vision, goals, and objectives across organizations and levels to ensure consistency in direction within the supply chain.

We can find numerous examples of the characteristics of a seamless supply chain in the USAID | DELIVER PROJECT's work in the field:

Clarity of roles and responsibilities
In Zambia, the Ministry of Health (MOH) established a logistics management unit (LMU) at the central warehouse. The LMU helps ensure exchange of information between the central and provincial levels about consumption, resupply, and performance, and supports training and supervision activities. Staff responsibilities are clarified by specific job descriptions, and an organizational chart maps out respective roles and reporting structures. Furthermore, standard operating procedures outline the roles and responsibilities of personnel at the different levels of the system.

A staff person in Zambia checks stock.

Agility
Public financing can have rigid budget cycles and slow fund disbursement; therefore, introducing a diverse mix of financing—including donor support, cost recovery, and revolving drug funds—can enhance the flexibility of the procurement process. The MOH in Burkina Faso implemented a resource diversification strategy whereby the government uses multiple public sector funding streams in tandem to finance regularly planned contraceptive procurement, as well as swiftly respond to delays. If waiting for the release of government funds will delay procurement, cost recovery fees can be accessed promptly to ensure products are available. In many countries, diverse funding streams can create a flexibility that helps the supply chain adjust to changes in supply or demand.

Streamlined processes
With the Delivery Team Topping Up system in Zimbabwe, a delivery truck brings product directly from the central warehouse to facilities. In this streamlined, two-level system, delivery team leaders have been trained to complete reports, calculate resupply quantities, and deliver product all in one visit, thus reducing the lead time, decreasing the amount of stock on hand at a facility, and task shifting responsibilities. Consequently, facility staff are able to spend more time serving customers and less on completing logistics forms.

Visibility of information
Automated LMISs, such as those implemented in Bangladesh, Tanzania, and Ethiopia, allow users to capture, analyze, and produce reports from data that run through the logistics system. The process of sharing these reports with players at all levels of the system strengthens linkages between stakeholders, which can result in great efficiency. Computerization of the LMIS, with online reporting of logistics data, can help improve data visibility throughout the system.

Trust and collaboration
In Rwanda, the Family Planning Technical Working Group was formed to improve coordination between partners and minimize duplication of efforts. Through regular meetings and sharing information, the group has fostered trust among partners. Greater trust and collaboration have, in turn, contributed to considerable improvements in commodity security in Rwanda.

Alignment of objectives

In many countries, there is a misalignment of objectives between the Central Medical Stores (CMS) and programs within the MOH. The role of CMS is to procure and distribute medicines; the MOH is responsible for ensuring the right medicines are available at the point of use. An LMU—whose objective is to ensure products are available at point of use—can bridge the gap between the MOH and the CMS and help to align their objectives around reducing stockouts and ensuring product availability.

These building blocks of clarity of roles and responsibilities, agility, streamlining processes, visibility of data, trust and collaboration, and alignment of objectives are key to improving the logistics functions within the supply chain. A seamlessly linked system—the integrated supply chain—is able to collect sufficient, accurate information about demand and supply and ensure that this information flows to the right people at the various levels, in a timely manner, so that supply chain decisions are well informed.

For more information, please refer to the brief *Supply Chain Integration: Seamlessly Linking the Pieces* on the USAID | DELIVER PROJECT website.

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