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SUPPLY CHAIN: GETTING CONTRACEPTIVES TO USERS

Contraceptive security exists when people are able to choose, obtain, and use high-quality contraceptives and condoms for family planning whenever they want or need them.

8%

of Rwanda's family planning facilities with contraceptive stockouts in 2006, down from 37 percent in 2004.

Because some policy-makers place priority on pharmaceuticals over contraceptives, combining both into one well-supported supply chain may protect supplies for family planning programs.

Getting contraceptives into the hands of clients may appear to be a routine task, but the process requires a well-functioning supply chain, which includes the support and commitment of policymakers and the active involvement of many organizations and people. To ensure that women and couples are able to choose, obtain, and use the contraceptive method that they want—the goal of contraceptive security efforts—policymakers and program managers must focus on having a well-functioning contraceptive logistics cycle (see Figure 1).

The contraceptive logistics cycle* focuses on the needs of customers—women and men who want to use family planning. A well-functioning contraceptive logistics cycle ensures that the right contraceptive products are selected based on customers' needs; that appropriate quantities of commodities are forecast and on hand through timely procurement; and that adequate resources are available to procure the contraceptives. The contraceptive logistics cycle also includes inventory management—logistics management information systems (LMIS), warehousing, and transportation of commodities.¹

Because well-functioning logistics systems and supply chains improve contraceptive availability, they help women avoid unplanned pregnancies and help family planning programs be responsive to clients' needs.² This brief is designed to help stakeholders understand basic aspects of a contraceptive logistics cycle and the contributions of a well-functioning supply chain to the success of family planning programs.

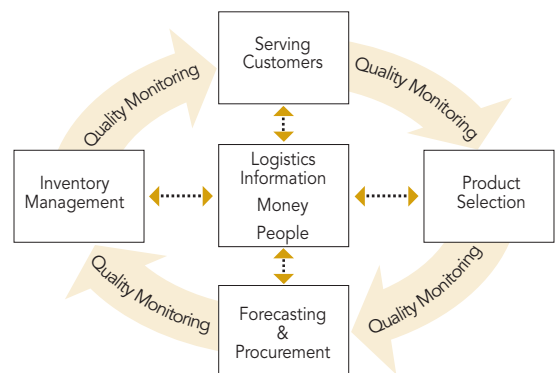
*"Contraceptive supply chain" is often used interchangeably with "contraceptive logistics cycle," but supply chain generally includes the manufacturing of commodities and the supplies of raw materials used in manufacturing, which are not part of the logistics cycle.

Strong Supply Chains Require Policy Support

Policymakers are vital to effective supply chain management.³ They are responsible for creating and communicating their vision for the health sector and how it should operate. When policymakers understand the contributions the logistics system makes to program impact, quality of care, and cost-effectiveness, they become important advocates for ensuring continued logistics support. Policymakers can support and strengthen logistics systems by focusing attention on improving supply chains with additional funding, helping staff develop their logistics management skills, holding staff accountable for using and sharing data from the LMIS, and routinely monitoring how well the supply chain is functioning (see Box 1). Policymakers can improve supply chains by ensuring adequate investment in

FIGURE 1

The Contraceptive Logistics Cycle



Source: DELIVER, *Strategic Decentralization: Centralizing Logistics*, 2001.

BOX 1

Using a Logistics Management Information System as a Decisionmaking Tool

A well-functioning logistics management information system (LMIS), whether paper-based or automated, is critical to ensuring that the contraceptive supply chain has the needed stock. The LMIS should track the following essential logistics data for each product:

- Stock on hand.
- Quantities dispensed to users.
- Losses or adjustments.

With this information, and knowing what quantities are already on order, inventory managers can respond to program needs by: placing a routine order, canceling or postponing a shipment, or requesting an emergency order.

Source: USAID, *Ready Lessons I, No. 5: Using Data for Decision Making* (Baltimore: INFO Project, no date), accessed at http://pdf.usaid.gov/pdf_docs/PNACW665.pdf, on Feb. 15, 2010.

the number of trained staff and in the infrastructure and equipment needed.

Accurate Information Is Critical to Supply Chain Operations

Accurate and timely information plays a vital role in ensuring that the right contraceptive commodities are at the right location. Information should be generated from the LMIS, which allows programs to manage and monitor the flow of contraceptive supplies. A well-functioning LMIS collects information on client preferences, contraceptive use, stock levels, and amounts on order. With this information, the LMIS can account for products in the supply chain and reduce loss, damage, waste of supplies, stockouts, and overstocks—which ultimately improve the program’s effectiveness and improve contraceptive security. Input from the LMIS is critical to forecasting demand, procuring commodities, and distribution to facilities and clients (see Box 2).⁴

Keeping Supply Chain a Priority in Decentralization

As countries go through the process of decentralizing their health sector, many aspects of family planning program management shift from the central to the regional, district, or even municipal level. Through decentralization, coun-

BOX 2

Supply Chain and Contraceptive Uptake in Rwanda

One of the programmatic factors that contributed to the increase in contraceptive uptake in Rwanda (from 4 percent in 2000 to 27 percent in 2008) was a strong supply chain. A logistics committee helped improve coordination between provider groups and donors and led to a collaborative annual forecast of contraceptive needs. Efforts have also led to new standard operating procedures and increased capacity of stock managers.

As prevalence has increase in Rwanda, stockouts have decreased and data are being collected and used to guide decisions. For example, in 2004, 37 percent of facilities experienced condom stockouts at the time they were visited. Stockouts improved to only 8 percent of facilities by 2006. Warehousing of commodities also shifted to central ministry of health facilities and staff were trained to better manage inventory.

Rwanda’s commitment to family planning is highly regarded, and with improvements to the supply chain, the country has been able to achieve significant increases in the use of family planning products and services.

Source: USAID | DELIVER PROJECT, *A Strong Supply Chain Responds to Increased Demand for Contraceptives in Rwanda* (Arlington, VA: John Snow, Inc., 2009).

tries expect to be better able to meet local needs and offer higher-quality and more efficient programs. Because local managers are closer to the clients than central-level officials, they should be able to make more timely and relevant decisions. While health-sector reforms like decentralization are generally beneficial, contraceptive security needs to be prioritized so that women and couples have continuous access to commodities as the health system changes. When supply chain and commodities are considered a priority throughout the process of change, the integrity of the supply chain can be maintained. Some logistics functions are handled most efficiently at the central level, while others are better handled at the subnational level. Procurement, for example, is usually best handled at the central level to take advantage of economies of scale. Budgeting and forecasting, on the other hand, may be handled more efficiently at the subnational level as long as the necessary information flows between levels of decisionmaking.

By encouraging central-level family planning program leaders to be vigilant of these challenges, national family planning policies, programs, and systems—including contraceptive logistics systems—can continue to be implemented effectively at

subnational levels. Training staff at the local levels, clarifying new roles and responsibilities, and sharing information throughout the logistics system are all vital to successful decentralization. These efforts can help ensure that contraceptive availability is not compromised during this period of transition.⁵ Supply chain efficiency can be strengthened by coordination at all levels of decisionmaking and by central management of some logistic functions.⁶

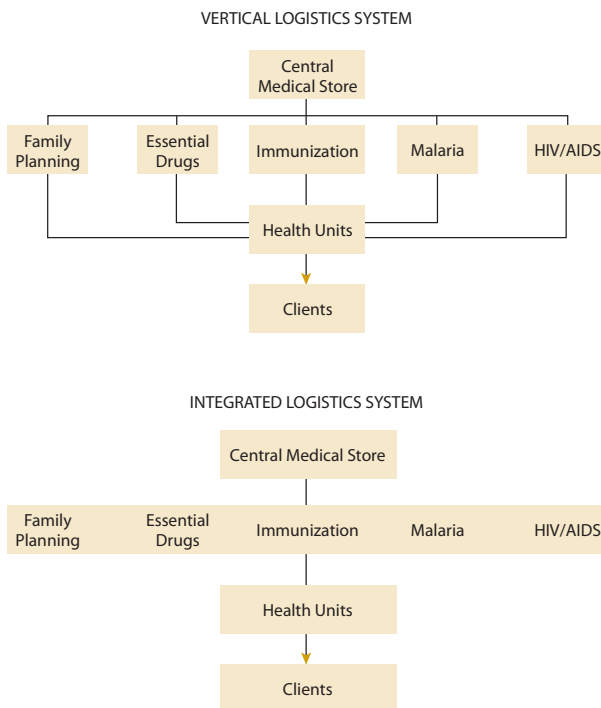
Keeping Family Planning a Priority in Program Integration

In the past two decades, integration of family planning programs into other health services, particularly other reproductive and maternal and child health services, has become increasingly common. Integration of services refers to the merging of separately managed health services and management activities into a single, coordinated effort (see Figure 2). As it applies to supply chain management, integration could result in the creation of a single, integrated logistics system for all essential medicines, rather than separate systems (often referred to as “vertical” systems) for contraceptives, immunizations, HIV/AIDS, and other

program-specific commodities. Integrated logistics systems can make service delivery more effective and efficient by distributing the costs of purchasing commodities, warehousing, and transport across a number of program areas (see Box 3). Because integrated supply chains keep track of a broad range of products, they are generally more complex and require more coordination. Including a few contraceptives as “tracer medicines”—especially in an integrated supply chain—can help track how well commodities flow through the distribution system to make sure the needed mix and volume are on hand at service delivery points.⁷ Forecasting and procurement for integrated supply chains can also become more intricate, making information systems to support them essential.⁸ One of the biggest challenges to an integrated supply chain is tracking consumption of many commodities, especially when vertical programs keep track of only a limited number of commodities.

Integration is often considered as a continuum, with each element of the supply chain finding its correct place within the continuum. Storage and transportation, for example, have relatively high fixed costs and should be allocated across as many items as possible, which encourages fuller integration. Product selection, on the other hand, can be a vertical program element, with program staff making the key recommendations about the methods to be procured. Forecasting, which requires both program staff—with in-depth knowledge of program history, plans, and activities in the field—and supply chain experts—with technical knowledge of forecasting techniques—falls somewhere in the middle of the continuum. Even in an inte-

FIGURE 2
Vertical and Integrated Logistics Systems



Source: Nadia Olson, Anabella Sánchez, and Nora Quesada, *Nicaragua: Integrating Logistics Functions at the Ministry of Health: A Case Study Assessing the Effects of Integration on Supply Chain Performance and Contraceptive Security* (Arlington, VA: USAID | DELIVER PROJECT, Task Order 1, 2008).

BOX 3

Nicaragua’s Integrated Supply Chain

Nicaragua’s supply chain was vertical until 2005, when the essential drugs unit of the ministry of health decided to take advantage of the successes of the contraceptive logistics system and integrate essential medicines with contraceptives. A pilot test of the new integrated system led to positive and promising results, although during the transition, limited stockouts occurred. Gradually, additional products are being added to the integrated system. Eventually, the logistics management information system (LMIS) will be automated and integrated to include all essential medicines. This decision will reduce the number of vertical supply chains from seven to one and will include warehousing and distribution of commodities. The integration effort is moving forward successfully due to careful planning and coordination, and is expected to result in savings for the health ministry, in both human and financial resources.

Source: Nadia Olson, Anabella Sánchez, and Nora Quesada, *Nicaragua: Integrating Logistics Functions at the Ministry of Health: A Case Study Assessing the Effects of Integration on Supply Chain Performance and Contraceptive Security* (Arlington, VA: USAID | DELIVER PROJECT, Task Order 1, 2008).

grated environment, contraceptives, and other commodities require different types of attention.⁹

Integrated supply chains can offer advantages to family planning programs:

- Because some policymakers place priority on pharmaceuticals over contraceptives, combining them into one well-supported and integrated supply chain may provide a level of protection for family planning programs.
- An integrated supply chain can help ease the controversy that family planning still faces in some countries.

A disadvantage of integrated supply chains for family planning programs is that contraceptives may be neglected or forgotten because other health products are favored, prioritized, and receive greater levels of funding.¹⁰

Supply Chain Effectiveness: Lessons From the Commercial Sector

The commercial sector has long understood the important role of the supply chain. The fact that certain commercial products are available at retail outlets in the most remote areas of the world is indicative of well-developed and well-operating supply chains. The following points illustrate ways that policymakers, program managers, and advocates can contribute to stronger family planning supply chains, which are vital to contraceptive security.

Build customer loyalty. In most cases, if consumer products do not arrive at the retail outlet when customers want them, sales will drop and customers will begin to shop elsewhere. The same is true with contraceptive commodities. Building customer loyalty and being responsive to customer needs is essential for the success of any business. Similarly, ensuring the availability of the types of contraceptives that people want also plays a role in family planning program effectiveness and sustainability. Achieving customer loyalty may require changes in attitudes and procedures among staff involved in the supply chain—from policymakers to service providers to pharmacists and retailers.

Manage scarce resources effectively. While being responsive to client needs, supply chains must also be streamlined and efficient—eliminating unnecessary expenses. In an attempt to improve efficiency and reduce costs, the Directorate General of Family Planning in Bangladesh removed one of the five distribution tiers of its supply chain, resulting in a one-time savings of US\$5 million. At the same time, Bangladesh will continue to realize savings because it has developed a more efficient way to manage its contraceptive supply chain.¹¹

Next Steps

Effective logistics cycles and supply chains are essential to the success of family planning and other public health programs. A strong supply chain, with committed leadership, capable staff, necessary resources, and accurate logistics data, helps ensure that family planning clients can get quality contraceptives when they want them. With adequate resources and policy-level support, the supply chain returns far more to an organization than it costs.

To ensure a smoothly operating supply chain and a high-quality family planning program, stakeholders should:

- Support necessary investments in a strong logistics management information system to monitor contraceptive availability at all levels and help minimize stockouts and overstocks at facilities.
- Advocate for policymakers to invest in the public health supply chain—including an adequate number of trained managers and personnel and the required equipment, infrastructure, and systems.
- Explore a range of distribution networks, including integrated and commercial-sector options, to ensure that contraceptives are in warehouses and facilities when needed.
- Incorporate condoms and one or two other contraceptives into a list of “tracer drugs,” as a way to monitor supply chain performance.
- Keep the supply chain customer-focused. A customer culture helps stakeholders focus on ways to improve the supply chain to ensure that the customer has a reliable supply of contraceptives and other health products.
- Understand the role of the supply chain in improving family planning and broader health outcomes. When facilities and providers have the range of commodities that clients want to use, programs help women avoid unplanned pregnancies and other adverse consequences.

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For More Information

Supply chain and logistics systems

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Contraceptive Security: A Toolkit for Policy Audiences

A seven-part series of briefs designed to explain different aspects of contraceptive security to policymakers, program managers, media, and civil society. The topics included in the toolkit are:

- Contraceptive Security for Policy Audiences: An Overview
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- Financing Contraceptives: A New Funding Environment
- Procuring Contraceptives: Options for Countries
- Supply Chain: Getting Contraceptives to Users
- Policy Environment: Understanding the Context for Contraceptive Security
- Priority Actions and Recommendations for Contraceptive Security

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