



Providing quality medicines for people  
living with and affected by HIV and AIDS



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### State of the Project

Recent news stories in Washington, DC have reported President Obama's negotiations with the Secret Service to be able to keep his Blackberry. We can sympathize. We now have a specialized vocabulary for technologies and tools that few outside of public health could understand: RTKs, CD4 machines, MACS, PipeLine, and General Packet Radio Service. And we can't imagine life without any of them.

Our teams of dedicated staff have utilized both innovative and tried-and-true technologies to make a difference for the people living with HIV/AIDS in the countries where we work. The results are impressive.

- We have virtually eliminated stockouts of ARVs and rapid test kits for clients who procure these commodities regularly through SCMS.
- We have delivered more than \$247M of commodities, most of it in the last two years.
- By purchasing generic antiretroviral drugs and through price discounts based on our pooled procurement volume, we have saved the US taxpayer \$367.7M to date in our ARV purchases.
- We have saved more than \$6.7M in freight costs to date (compared to air freight) by shifting deliveries for clients who plan ahead from air freight to sea and road.
- We have guaranteed the chain of custody for our products, through physical measures, quality assurance testing, and the visibility provided by our information systems. There has been only one theft to date, of a single carton.
- By introducing world-class technologies, including logistics management information systems; hand-held inventory devices; temperature controls and cold chain facilities; expiry and batch control; and racking and bar coding, we are helping transform warehousing in many countries, including Ethiopia, Guyana, Mozambique, Namibia and Rwanda.

All of these accomplishments have relied on a variety of sophisticated technologies—computers equipment and software, the Internet, quality assurance laboratories and many more.

In this issue of Supply Lines, you will read about inspiring efforts in Côte d'Ivoire, Ethiopia and Guyana, and learn about our efforts to help you and others connect with each other to share your experiences, ideas and best practices. You'll notice all these stories address how technology, from hand-held devices to sophisticated warehouse management systems, is helping create sustainable solutions and save lives. Enjoy!

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### SCMS Project Team

Affordable Medicines for Africa | AMFA Foundation | Booz Allen Hamilton | Crown Agents Consultancy, Inc. | The Fuel Logistics Group  
IDA Solutions | JSI Research & Training Institute, Inc. | Management Sciences for Health | The Manoff Group | MAP International  
North-West University | Northrop Grumman | PATH | UPS Supply Chain Solutions | Voxiva | 3i Infotech

## Quarterly Trends

Each quarter Supply Lines reports on global trends in HIV/AIDS supply chains. For further information, e-mail [SCMSInfo@pfscm.org](mailto:SCMSInfo@pfscm.org). Here are the current highlights:

### **Procurement**

#### *Nutrition products on the leading edge of new product lines*

Responding to PEPFAR's increasing support to food and nutrition programming as part of care and treatment for people living with HIV/AIDS, SCMS is working to ensure that a safe and reliable supply chain for food and nutrition products is established for PEPFAR programs. Because this is a new product area for SCMS, we have undertaken internal and external analysis as well as strategic planning for food and nutrition products. These activities include issuing a Request for Information (RFI) to potential suppliers, identifying qualified suppliers, identifying ways to ensure product safety and quality, and developing appropriate supply chain processes. In addition to developing the preferred procurement process for food-by-prescription, SCMS has also initiated outreach within the donor and NGO communities to gather best practices, and is developing practical guidance documents about food and nutrition products for SCMS field offices, as well as PEPFAR Missions and partners.

#### *Forecast needs for Tenofovir to compensate for longer lead times*

SCMS has recently seen a significant increase in the demand for the fixed-dose combination tablet Tenofovir disoproxil fumarate/Emtricitabine 300mg/200mg (TDF/FTC), as many programs move TDF/FTC to their first-line ARV regimens. With the increase in demand, we are seeing longer lead times to fulfill orders. Until further notice, we recommend that those procuring Tenofovir assume estimated lead time of 15-20 weeks for new orders for TDF/FTC.

This situation again emphasizes the benefits of well-planned procurement. Clients who have placed orders with SCMS well in advance of need can expect timely delivery, as SCMS will in turn be able to place timely orders on manufacturers.

SCMS has been in discussions with several pharmaceutical manufacturers in India regarding submission of product dossiers to the FDA of TDF/FTC for tentative approval. Once a generic version is approved and available, we expect lead times for the product to decrease markedly and also anticipate that prices will drop due to increased competition.

#### *Lower ARV prices now stabilizing*

Over the past several years, governments and donors have succeeded in lowering the price of ARV treatment for developing countries from about \$1,500 per year a few years ago to about \$100 per year or lower for many common first-line treatment regimens. SCMS's purchase price is equal to or less than all other buyers for 85 percent of first-line ARVs and for all five second-line ARVs we have purchased recently. With the broad availability of cheaper generic ARVs, cost is no longer the severe barrier to providing treatment in PEPFAR focus countries it once was.

## Freight & Logistics

### *Plan ahead to avoid delays*

The amount of available global cargo capacity has been decreasing as airlines retire less fuel efficient airplanes and is also more limited during major holidays. SCMS has seen a particularly sharp decrease in the amount of available cargo space to and within Africa, and an increase in airline tariff rates. To compensate for these challenges, the project took a proactive stance in scheduling orders during the year-end holidays by planning to make as many of our deliveries as possible before or after the month of December, and by taking advantage of the agile and robust supply chain that flows through our regional distribution centers (RDCs) in Ghana, Kenya and South Africa. We recommend that clients forecast needs far in advance to avoid delays caused by reduced freight capacity during national and international holidays.

### *Downward trend in transportation costs*

As global oil prices fall, global shipping costs have recently trended downward. In addition, SCMS is working with clients to save additional shipping costs by switching from air freight to sea and land. As of end of December, savings for road transport (vs. air freight options) was over \$801,000 and over \$ 5 million by using sea freight instead of airfreight thanks in most part to strong collaboration with in-country teams. SCMS is increasingly shipping ARVs from India by sea to reduce transportation costs, realizing an average savings of over \$500,000 USD per month in shipping costs to RDCs and to clients. Clients who develop and share forecasts and demand plans will be best positioned to save money shipping by sea or land.

## In Côte d'Ivoire, a “handy” solution for more efficient data reporting

As the old saying goes, “Information is power.” In fighting HIV/AIDS, quality information saves lives.

Côte d'Ivoire's Ministry of HIV/AIDS (MLS) has struggled to collect accurate data from health facilities for use in national-level decision making and to produce the national HIV/AIDS report. In fact, since the establishment of the national HIV/AIDS report in 2005 until December 2008, MLS has been unable to complete the report due to late, faulty and insufficient data.



The obstacles to data collection and reporting are many: Organizations reporting to the MLS use a paper-based process that is lengthy and cumbersome. Facilities are frequently understaffed, lacking the time and resources to aggregate data on a monthly basis, let alone a daily basis. Staff often fail to see the importance of programmatic nonclinical data reports. They don't view these reports as critical compared to clinical or logistics data. And not all the information collected is needed by the MLS, requiring its staff to search out the data they need.

After a thorough review of the current paper-based process and the country's cell phone infrastructure, SCMS recommended automating the system by using personal digital assistants (PDAs) for data collection at health facilities and subsequent transmission of data through the PDAs via General Packet Radio Service (GPRS) to a web-based national data repository. This will enable the MLS, donors and implementing partners to access and analyze data via a secure website. SCMS reasoned that the new system would increase reporting rates and data quality by making the process of submission both faster and easier than the old processes.

MLS accepted the recommendation and piloted the system with SCMS in 20 facilities for three months at a cost of \$115,000. After the pilot, reporting rates rose to a remarkable 95 percent, timeliness of reporting was also good with MLS receiving the data almost instantaneously. Only one facility had to travel to the neighboring town to get GPRS reception.

As technology advances, the costs of data transmission services (e.g. GPRS) go down. During the pilot, the cost for data transmission was \$12 per facility per month. The cost one year later is now half the price.

As a result of the successful test of the new system, the MLS requested that SCMS launch the system countrywide. Scale-up is currently underway, and the first national HIV/AIDS report will be produced later this year.

The challenges faced by the MLS in gathering data are not unique. Many countries grapple with inefficient systems and overworked individuals who are critical to obtaining quality data and saving lives. If the infrastructure is in place, the use of mobile data technology can greatly improve quality, timeliness and accuracy of reporting. To ensure the success of this type of program, the system as well as the synchronization must be simple so that stakeholders easily buy into it, trainings should be conducted for both managers and users of handhelds on data collection (especially for users new to the technology), and a system should be established for responsive technical support.

## Connecting supply chain professionals on the World Wide Web

Requests for warehousing training continue to increase as countries build their infrastructure to support scale up of HIV/AIDS programs. Participants of training programs often need support afterwards as they return to work and implement what they have learned.

Alumni of our warehousing training programs can now connect through online forums hosted at our web site, [www.scms.pfscm.org](http://www.scms.pfscm.org). The first of other similar efforts, the forum assists program alumni in their ongoing learning after completing the warehousing course.

ALUMNI TRAINING	
	<p><b>Quality Assurance: How do you include quality standards in your work?</b> Please join this forum to discuss Quality Assurance. Total quality is a description of the culture, attitude, and organization of a company that strives to provide customers with products and services that satisfy their needs. Moderator: Alumni Champion</p>
	<p><b>Distribution: To outsource or not to outsource?</b> Please join this forum to discuss Distribution. The part of the supply chain that determines how, when and where products are delivered. Moderator: Alumni Champion</p>
	<p><b>Inventory Management: ABC Classification, is it working for you?</b> Please join this forum to discuss Inventory management. The ordering, supplies, receiving, storing, reordering and accounting for stock. Moderator: Alumni Champion</p>
	<p><b>Information Systems: Are you getting what you need?</b> Please join this forum to discuss if you are getting the right information to the right people in a timely manner. What are the information gaps and how are you resolving this issue? Moderator: Alumni Champion</p>
	<p><b>How has the Warehouse Training Course helped you?</b> This forum has been created for graduates of the Warehouse Operations Management course to discuss how they are applying knowledge and skills gained during the training, as well as provide suggestions on how to make the training better. All alumni are invited to share their comments and respond to comments posted by other alumni. Moderator: Alumni Champion</p>

Alumni can log into the site and ask SCMS resident technical advisors questions about a number of topics, including information systems, inventory management and distribution. When the first course of 2009 is completed this month, we will have trained 75 participants in warehousing.

“The creation of this forum is an excellent opportunity for alumni to keep in touch, share ideas and be kept abreast of the latest developments in warehouse management. We urge those already registered on the forum to spread the word in an effort to get past participants to join our online community,” says Diane Reynolds, Head of Consulting for PHD International.

As SCMS enters its third year of providing technical assistance services, we will expand our activities to foster collaboration among technical experts through online communication. Anyone interested in connecting with other supply chain professionals can register to join the SCMS community by visiting the SCMS website at <http://scms.pfscm.org/scms>. For more information on joining the SCMS community or the training forums, contact the SCMS Senior Web Manager at [adinardo@pfscm.org](mailto:adinardo@pfscm.org).

### **In Ethiopia, a successful approach to scaling up national laboratory logistics systems**

Through a variety of tests, from viral load diagnostics to testing for opportunistic infections, laboratories support both testing for HIV and subsequent treatment of patients. For this reason, scaling up HIV/AIDS treatment requires a similar scale up of laboratory systems.

The demands on Ethiopia’s laboratory system were significant as the country increased access to treatment from 24,400 in March 2006 to 104,000 as of May 2008, the vast majority of whom live in isolated rural areas. As a result, the country’s laboratory system experienced constant stockouts of critical items that impeded quality care for patients.

SCMS worked with the Ethiopian Health, Nutrition & Research Institute (EHNRI) to address these challenges by designing, building and implementing a national logistics system. A constant flow of information on quantification needs and product specifications is critical in serving patients effectively. SCMS developed and implemented standardized reporting formats to capture inventory and order information from health facilities along with standard operating procedures (SOPs) to simplify and standardize the performance of the laboratory logistics management information system.



Under the new system, treatment and monitoring sites send reports and requests to hubs of the Pharmaceutical Fund & Supply Agency (PFSA), which in turn respond to the sites with ordered supplies. The SOPs were developed to provide consistency nationwide on how staff maintain adequate laboratory supplies, order and receive products, set maximum and minimum stock levels for their site, record consumption and stock levels, and report commodity information.

Prior to system implementation, approaches to laboratory logistics were inconsistent: Stockouts were frequent, and hospitals waited two to three months or longer for critical commodities including

CD4 reagents. Since implementation no stockouts have occurred, and emergency orders have dropped dramatically. Laboratory reagents and related supplies arrive on time in the quantities needed. The laboratory commodities distribution system, now serving 380 sites nationwide and more than 155,000 patients, is now ready for integration with other HIV/AIDS commodities such as ARVs, ensuring a comprehensive package of services to patients.

### On the SCMS e-catalog, new products and streamlined product lists

SCMS's e-catalog (<http://scms.pfscm.org/scms/ecatalog>) is the primary source of information about the products we procure. Current and prospective clients search the product category database by key words and can generate a downloadable product list



To better serve our clients, the e-catalog continues to grow beyond product lines such as ARVs and HIV test kits to include new categories like food-by-prescription and blood safety products. We have also streamlined the product database to provide better information on the most requested commodities.

SCMS's procurement clients will soon receive a survey designed to help us identify other ways to improve the e-catalog. Others may also participate by requesting to be including in the survey: send your request to [SCMSInfo@pfscm.org](mailto:SCMSInfo@pfscm.org).

### Guyana's Minister of Health says progress is "contagious"

Dr. Leslie Ramsammy, Guyana's Minister of Health, has lead efforts to improve healthcare by adopting world-class supply chain technologies. Challenging a common misperception that public health means only training health workers, Ramsammy has said, "Procurement, storage and distribution of health commodities are as critical as providing doctors, nurses and x-rays."

According to Ramsammy, before SCMS began the Ministry received some limited supply chain assistance, "then SCMS came along, and we set out to change the way we do business." The Ministry of Health and SCMS "reinvented technical assistance" from a process in which experts visited the country and left technical



reports to “a long-term partnership on the ground to build something.”

Partnering with SCMS, Guyana has transformed its supply chain to become the most advanced warehouse management systems in the Caribbean. Guyana has deployed new technologies to drive a reliable procurement, storage and distribution system; adopted standard software tools for national forecasting and supply planning; deployed a modern computerized warehouse management system at the Materials Management Unit; and developed an electronic requisitioning and issue voucher system, linking major hospitals directly with the warehouse management system over the Internet. Dr. Ramsammy has been careful to ensure that efforts in health systems strengthening, including supply chains, were applied to all areas of the health system, not just HIV/AIDS.

All public health indicators – including life expectancy, child and maternal health and incidence of HIV infection – have improved markedly in the last seven years. And although Guyana is training hundreds of new doctors and nurses each year, “The most significant factor is that we now have a viable supply system in place.”

In a country where aspirin was difficult to find not too long ago, surgeons now perform open heart surgery and kidney transplants, and doctors and nurses demand access to all kinds of medicines for their patients. “It is a contagious effect,” said Ramsammy. “People have come to expect that supplies are available.”

But success is contagious outside both the public health sector and Guyana’s borders. Delegations from other countries now visit to learn what they can do to improve public health. Equally impressive, and in a reversal of common practice, private sector companies in Guyana visit the public health sector for ideas for improving warehousing and distribution.

The benefits of Guyana’s partnership with SCMS extend even beyond public health. The national airport now has a cold storage facility that stores not just pharmaceuticals for import but also fruits and vegetables for export. Contagious, indeed.