

Three years of saving lives

through stronger HIV/AIDS supply chains





Dr. Leslie Ramsammy, Guyana's Minister of Health, is a man with a mission. In 2001 he set out to transform Guyana's public health system. Taking a holistic view, he understood that "procurement, storage and distribution of health commodities are as critical as providing doctors, nurses and x-rays." Partnering with SCMS since 2006, Guyana has transformed its supply chain to become the most advanced warehouse management system in the Caribbean.

All public health indicators—including life expectancy, child and maternal health, and incidence of HIV infection—have improved markedly. 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," Dr. Ramsammy said on a visit to SCMS.

Supply chains are a critical prerequisite for the success of community-based health programs. With vastly increased funding from international donors, countries have been able to rapidly scale up antiretroviral treatment (ART) programs over the past few years. But many were faced with an unpleasant reality. They lacked the basic infrastructure and systems to deliver the medicines, test kits, laboratory equipment and other medical supplies needed to test and treat people living with HIV/AIDS.

In the fall of 2005, PEPFAR launched SCMS to help meet this challenge.* Administered by USAID, the project strengthens and, where necessary, establishes sustainable supply chains to deliver an uninterrupted supply of high-quality, low-cost products for people living with or affected by HIV and AIDS.

In three years**, the project has achieved impressive results:

- SCMS has offices in all 15 PEPFAR focus countries plus Zimbabwe, providing procurement services, technical assistance (TA) to transform supply chains, and coordination of stakeholders globally and in the countries where we work.
- We have delivered more than \$247M of commodities, most of it in the last two years.
- SCMS is now a major provider of systems strengthening TA in the 15 focus countries plus Zimbabwe, and we have provided short-term TA in another eight countries. Focus areas include warehousing and distribution, management information systems, quantification and laboratory logistics.
- Products delivered through the SCMS supply chain now support more than 750,000 patients on anti-retroviral treatment (ART).
- We have virtually eliminated stockouts of anti-retroviral medicines (ARVs) and rapid test kits for clients who procure these commodities regularly through SCMS.
- We have saved the US taxpayer \$365 million in our ARV purchases by purchasing generic ARVs rather than branded drugs.
- We have saved more than \$6.7 million in freight costs to date by shifting deliveries for clients who plan ahead from air freight to sea and road.
- We have prevented loss or theft of our products through physical measures, quality assurance testing, and the visibility provided by our information systems.
- In 2008, we ordered \$8.5 million worth of products (out of a \$218.9M total) to cover emergency requests, of which \$21.4 million (out of \$115.8M) were ARVs.
- In three years we have emerged from being an unknown entity to a respected collaborator and source of expertise.

This report provides more details about these and other results achieved by SCMS in our first three years.

Under PEPFAR, strengthened supply chains are helping quickly transform HIV/AIDS programs—and public health in general. As of December 31, 2008, SCMS had delivered \$247 million in HIV/AIDS commodities, including \$153.2 million of antiretroviral (ARV) drugs, \$39.8 million of HIV test kits and \$42.8 million of laboratory supplies.

* SCMS (The Supply Chain Management System) brings together 16 private sector, nongovernmental and faith-based organizations that are among the most trusted names in supply chain management and international public health and development. We aim to improve the lives of people living with HIV/AIDS in some of the countries most severely impacted by the pandemic.

** All the data in this document are through December 31, 2008.



Providing HIV/AIDS medicines and supplies at best value

A new paradigm for procuring public health commodities

In three years, we have delivered more than \$247M of commodities that now support more than 750,000 patients on anti-retroviral treatment (ART). SCMS' global staff has successfully managed the procurement and distribution of more than 3,300 separate items, 1,067 orders and 3,121 deliveries.

On World AIDS Day 2008 (December 1), listeners of Public Radio International's *The World** were introduced to "Grace," a woman in Côte d'Ivoire who had recently started treatment for HIV/AIDS. The story traced the journey of her medicines from a manufacturing plant in India, through SCMS' regional distribution center (RDC) in Ghana and then Côte d'Ivoire's central medical warehouse, to her remote village near the Liberian border.

Three years earlier, the journey her medicines took would have been impossible. In 2005, the idea of factories in India producing a range of affordable generic medicines for Africa seemed a laudable but distant goal. Pharmaceutical warehouses with temperature and inventory controls, computerized inventory management and strict security measures—such as SCMS' RDCs—were virtually unknown in sub-Saharan Africa outside of South Africa. One of the ARVs Grace takes was approved for use by the US Food and Drug Administration (FDA) in January 2007. And the clinic in Grace's village only began receiving ARVs in 2008.

* An audio recording and transcript of the *The World*'s story about the SCMS supply chain are available at <http://www.theworld.org/?q=node/22808>

At the beginning of PEPFAR, a key concern was whether HIV/AIDS commodities could be reliably delivered in sufficient quantities to countries in sub-Saharan Africa and elsewhere, particularly to rural areas. But step by step, SCMS has introduced strategies and systems recognized as industry best practice to change the way governments, implementing partners and donors provide medicines and other health supplies to people like Grace.

Taking a new approach to warehousing and distribution

Strategic stocks of frequently purchased products go to RDCs in Ghana, Kenya and South Africa, where they are positioned close to their eventual country of destination. This strategic approach has helped to virtually eliminate stockouts of ARVs and test kits in programs supported by SCMS.

In addition to sending regularly scheduled shipments to neighboring countries, SCMS' RDCs have filled millions of dollars in emergency orders, including, for example:

- After a fire gutted a warehouse serving Harvard's AIDS Prevention Initiative in Nigeria, an emergency order of three ARVs from two RDCs.
- To cover a potential gap while Ethiopia transitioned to fixed-dose combination ARVs, an urgent order for stavudine.
- From Zimbabwe's Ministry of Health and Child Welfare, an emergency order for zidovudine. The SCMS RDC in Ghana responded with a three-month supply from its strategic stock.

➤ In 2008, SCMS provided about \$28.5 million of products to cover emergency requests, of which about \$21.4 million were ARVs.

RDCs are a prime example of innovative public-private partnerships. They were developed without funding from the US government (USG) as commercial entities supporting global supply chains on a pay-as-you go basis. Although initially established to support SCMS, the RDCs are quickly becoming a sustainable commercial enterprise, attracting commercial suppliers of such products as laboratory supplies, pharmaceuticals and bed nets.

Partnering to lower the cost of medicines

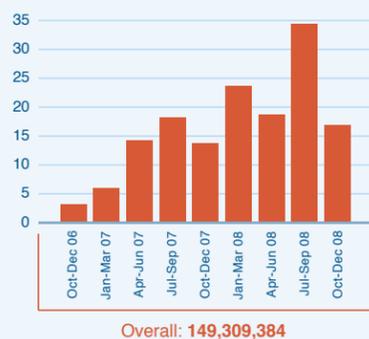
When SCMS began, a year's supply of HIV medicines cost about \$1,500 to \$2,000 per patient in developing countries. Thanks to the efforts of many worldwide, today a year's supply can cost as low as \$90 or less.

SCMS and others submit the prices paid for commodities to the World Health Organization's (WHO's) Global Price Reporting Mechanism, an online database tool that helps anyone buying ARVs know what others are paying. Using these publicly available data, buyers can negotiate better prices with vendors.

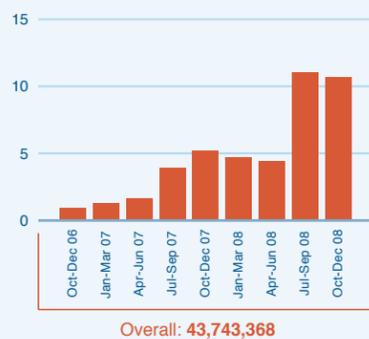
Three state-of-the-art regional distribution centers ensure a rapid and reliable supply of frequently requested items



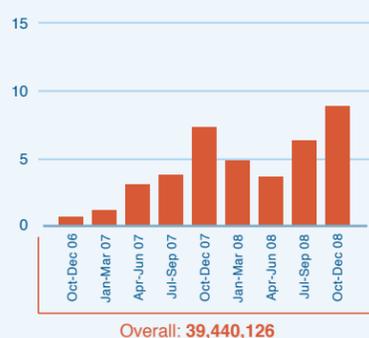
ARV MEDICINES (in millions)



LABORATORY SUPPLIES (in millions)



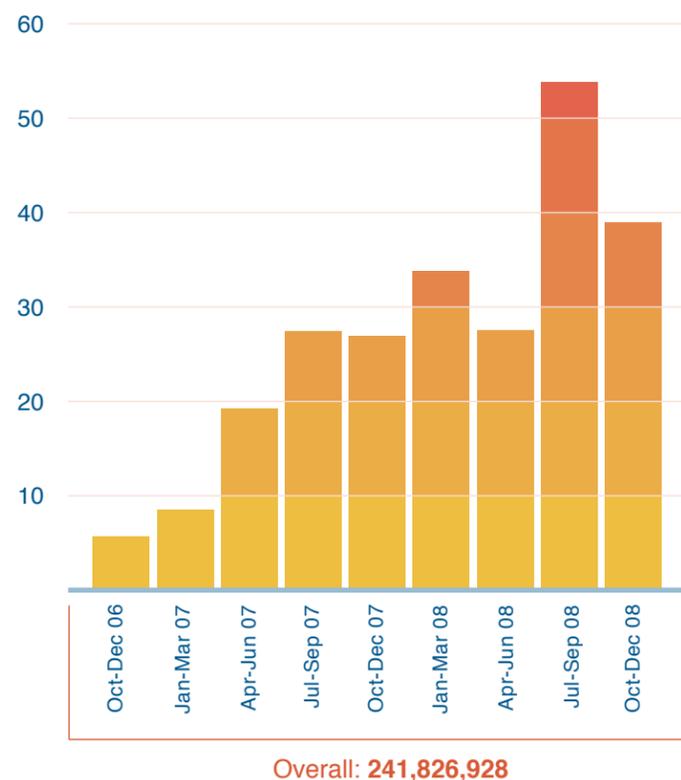
TEST KITS (in millions)



Acting under congressional mandate, the FDA has sped the approval of less costly generic versions of branded ARVs for purchase by PEPFAR programs.* In 2005, 12 such drugs were approved or tentatively approved for use. As of Dec. 31, 2008, there were more than 75. Consistently, more than 90 percent of ARVs SCMS purchases are generic products. To date, we have saved the USG \$365 million compared to the price of equivalent branded products.

SCMS helps obtain lower prices for our clients by negotiating long-term contracts with key suppliers of medicines, HIV test kits, laboratory supplies and other commodities. Aided by our RDCs, we aggregated procurement volume across all SCMS clients; as a result, our prices for ARVs beat or match those of every other international supplier of the same products in almost every instance.

Procurement totals (in millions)



* To support PEPFAR's goals, the FDA introduced an initiative in 2004 to ensure that antiretroviral drugs produced by manufacturers all over the world could be rapidly reviewed, their quality assessed and their acceptability for purchase with PEPFAR funds confirmed.



Using world-class freight and logistics

Even though ARV prices have dropped considerably, most countries still have more patients needing treatment than they can serve with available funding.

Traditionally, programs have used costly air freight for shipping HIV/AIDS commodities. SCMS, now the largest procurer of ARVs for PEPFAR programs, has succeeded in drastically reducing shipping costs in order to help clients redirect money to other purposes, such as providing treatment to more people like Grace.

SCMS has worked with clients to develop forecasts and demand plans for a range of HIV/AIDS commodities. Forecasts and demand plans allow SCMS and our clients to schedule deliveries farther into the future and to switch appropriate shipments from air freight to sea and/or road, avoiding periods of peak shipping prices. These strategies have enabled us to reduce shipping costs by as much as 90 percent for some shipments.

SCMS uses UPS, a third-party logistics (3PL) provider, to plan and coordinate shipments and negotiate pricing with carriers worldwide. Working closely with clients, SCMS reduced the percentage by volume of air shipment versus sea from 100 percent in 2006 to 85 percent in 2007 and to

65 percent in 2008, saving clients more than \$6.7 million in freight costs to date. At current shipment volumes, we predict saving the USG and our other clients \$500,000 per month in shipping in 2009 and beyond.

Examples of freight cost savings include:

- Cote d'Ivoire has saved more than \$600,000 (81 percent over air freight) by switching from air to sea and more than \$12,000 (55 percent) through use of road freight.
- Haiti has saved more than \$248,000 (84 percent) with sea shipments.
- Rwanda has saved more than \$200,000 (63 percent) with sea shipments and more than \$24,000 (57 percent) with land shipments from our RDC in Kenya.
- Zambia has saved more than \$415,000 (91 percent) with sea shipments and more than \$224,000 (54 percent) with land shipments.

❖ SCMS has saved clients more than \$6.7 million in freight costs by switching from costly air freight to sea and road.

Applying best practices in quality assurance

Spending more than necessary for commodities and shipping is just one of many risks that public health programs face while scaling up ART. Many countries lack adequate quality assurance (QA) procedures to prevent substandard or counterfeit pharmaceuticals from entering their supply chains and potentially harming people who seek medical treatment.

Unique among HIV/AIDS programs in developing countries, SCMS's QA program incorporates physical measures, QA testing and the visibility provided by our robust information systems to preclude substandard products from entering our supply chain, and to prevent or detect diversion. For product testing, SCMS uses the WHO-prequalified laboratories at North-West University (NWU) in South Africa. Physical security measures appropriate to each product and shipping route—up to and including armed guards—along with automated shipment tracking from source to final consignee ensure that the chain of custody is not broken.

The success of this QA strategy has been demonstrated repeatedly. To date, we have:

- Found no incidents of substandard or counterfeit ARVs.
- Managed manufacturers' recalls, such as withdrawing Viracept from our entire supply chain in 2007 in a matter of days after Roche recalled the product.
- Identified QA issues and stopped product before it reached patients, such as a recall of cotrimoxazole in 2008.
- Identified non-FDA compliant product before distribution.

We are also working to ensure quality of test kits, latex gloves, laboratory supplies and product categories new to SCMS, such as food-by-prescription.

Preventing product expiry

In addition to stockouts, theft and counterfeit, expiration of products due to overstock is a tangible threat in HIV/AIDS programs. To prevent product expiry, SCMS uses sophisticated inventory management processes that focus on stock rotation and constantly monitors the shelf life and inventory levels of stocked products.

For SCMS, product expiry as a percentage of the value of stocks managed by SCMS warehouses is 0.09 percent. Industry standards are four to seven percent, and a recent analysis by WHO of some supply channels reported expiry rates of 18 percent.

In most cases, the SCMS supply chain ends at the central or regional warehouses of the countries where we work. Each country is then responsible for storing and distributing medicines, test kits, laboratory equipment and other supplies to treatment sites within their borders. Therefore, we are working to ensure that all of the best practices SCMS has implemented in the global supply chain are adapted for use in each country where we work.



Building capacity to transform supply chain performance

In each country, supporting lasting change

Different countries have unique challenges. SCMS is now a major provider of technical assistance for systems strengthening in the 15 PEPFAR focus countries plus Zimbabwe, and we have provided short-term technical assistance in another eight countries. Focus areas include warehousing and distribution, management information systems, quantification and laboratory logistics.

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 patients in March 2006 to 155,000 in early 2009.

SCMS worked with the Ethiopian Health, Nutrition and Research Institute (EHNRI) to design and implement a national laboratory logistics system. Under the new system, treatment and monitoring sites send reports and requests to hubs of the Pharmaceutical Fund and Supply Agency (PFSA), which in turn supplies the sites with the ordered products. Laboratory staff now manage inventory, order and receive products, set maximum and minimum stock levels for their sites, record consumption and stock levels, and report commodity data.

Before the new system was in place, stockouts were frequent and hospitals waited three months or longer for critical commodities. Since implementation, no stockouts have occurred, and emergency orders have dropped dramatically. Laboratory reagents and related supplies now arrive on time and in the quantities needed. The logistics system is now serving more than 155,000 patients, many of whom live in isolated rural areas.

✦ SCMS also has provided technical support for laboratory logistics in Botswana, Côte d'Ivoire, Haiti, Mozambique, Namibia, Rwanda, Uganda, Vietnam and Zambia.

Where We Work

Botswana: Working with the Drug Regulatory Unit (DRU), SCMS helped streamline and strengthen the drug registration process, aiming to speed approval of safe, effective and less expensive generic ARVs. The DRU has eliminated a backlog of 400 applications for pharmaceuticals and is reviewing new applications as they arrive.

Côte d'Ivoire: The pilot of a new data collection system, using hand-held PDAs, reduced the time needed for health facilities to collect and report data from six months to almost instantly. Reporting rates to a central database rose to 95 percent, and SCMS is now rolling out the system nationwide.

Ethiopia: SCMS has helped eliminate stockouts of laboratory supplies. A new laboratory commodities distribution system, now serving 380 sites nationwide and more than 155,000 patients, is ready for integration with other HIV/AIDS commodities such as ARVs, ensuring a comprehensive package of services to patients.

Kenya: SCMS is now scaling up our activities in Kenya. Impact has been immediate: After implementing better coordination and planning among partners, our staff uncovered a potential overstock of laboratory reagents and canceled two very large orders valued at more than \$1.3 million, preventing waste of both funding and product.

Mozambique: The USG has consolidated ARV procurement for all PEPFAR programs through SCMS. This centralized system, which maintains a national buffer stock, has greatly reduced stockouts and is now being expanded to include other essential medicines as well as rapid test kits.

Namibia: SCMS helped expand access to ART by almost 500 percent in the last three years by helping upgrade the Central Medical Stores (CMS). The improvements more than doubled storage capacity, and also improved inventory control and distribution. Since then, Namibia has had no stockouts, expiry, loss or theft of ARVs.

Nigeria: SCMS supported the first-ever PEPFAR-wide quantification and supply plan for ARVs, which has enabled pooled purchasing of key products to reduce costs and improve reliability of supply.

Rwanda: SCMS works with CAMERWA, the central medical store, to strengthen financial systems so that CAMERWA can be qualified as a direct recipient of USG grants. SCMS also supports CAMERWA to evaluate vendor bids for ARVs, essential drugs and laboratory commodities; and to improve management of warehouses.

South Africa: SCMS procures ARVs for the South African National Defense Force; sponsors provincial pharmacy staff to attend warehouse operations training; and supports improvements to the Mpumalanga and Limpopo provincial warehouses.

Tanzania: SCMS redesigned the logistics system of the National AIDS Control Program to support the country's ambitious scale-up plan for ART. The system requires that ARVs and test kits be distributed simultaneously with essential medicines through 692 ART sites, ensuring treatment for even hard-to-reach and underserved populations.

Uganda: In 2008, SCMS led a joint quantification exercise for 50 USG partners. For the first time, consolidated estimates of numbers of adults and children on ART—as well as the respective costs for first- and second-line regimes—are available for use in planning and procurement.

Zambia: Through technical assistance and training in laboratory logistics and commodity security, SCMS works with the government of Zambia to reduce stockouts centrally. As a result, stockout rates of 185 major laboratory commodities have fallen from 70 percent in October 2007 to six percent in October 2008.

Zimbabwe: With support from SCMS, Zimbabwe was the first PEPFAR country to take over management of forecasting and demand planning. Data generated by the SCMS-developed Zimbabwe information system for HIV/AIDS commodities have enabled the Ministry of Health to all but eliminate stockouts. Reporting rates have improved to between 84 percent and 92 percent from 113 ART sites.



Vietnam: In addition to supporting the launch of Vietnam's groundbreaking methadone program, SCMS is a major provider of technical assistance and training on supply chain management, dispensing and counseling, and other related topics.

Haiti: In this country with very poor infrastructure, SCMS manages the whole supply chain, delivering directly to treatment sites. Even after hurricanes weakened or destroyed infrastructure in 2008, SCMS averted stockouts entirely and completed over 90 percent of quarterly deliveries using every form of transport from wheelbarrows to helicopters.

Guyana: In addition to helping transform warehousing and distribution of health commodities, SCMS supports the annual National Testing Week. In 2008, consumption of rapid test kits was double the target. SCMS helped avert a stockout by expediting an already-planned shipment and obtaining stock from our Haiti program.



Different countries have unique challenges. SCMS is now a major provider of systems strengthening technical assistance (TA). Like our work in Ethiopia, our technical assistance seeks to identify and build sustainable solutions for the scale up of HIV/AIDS programs.

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

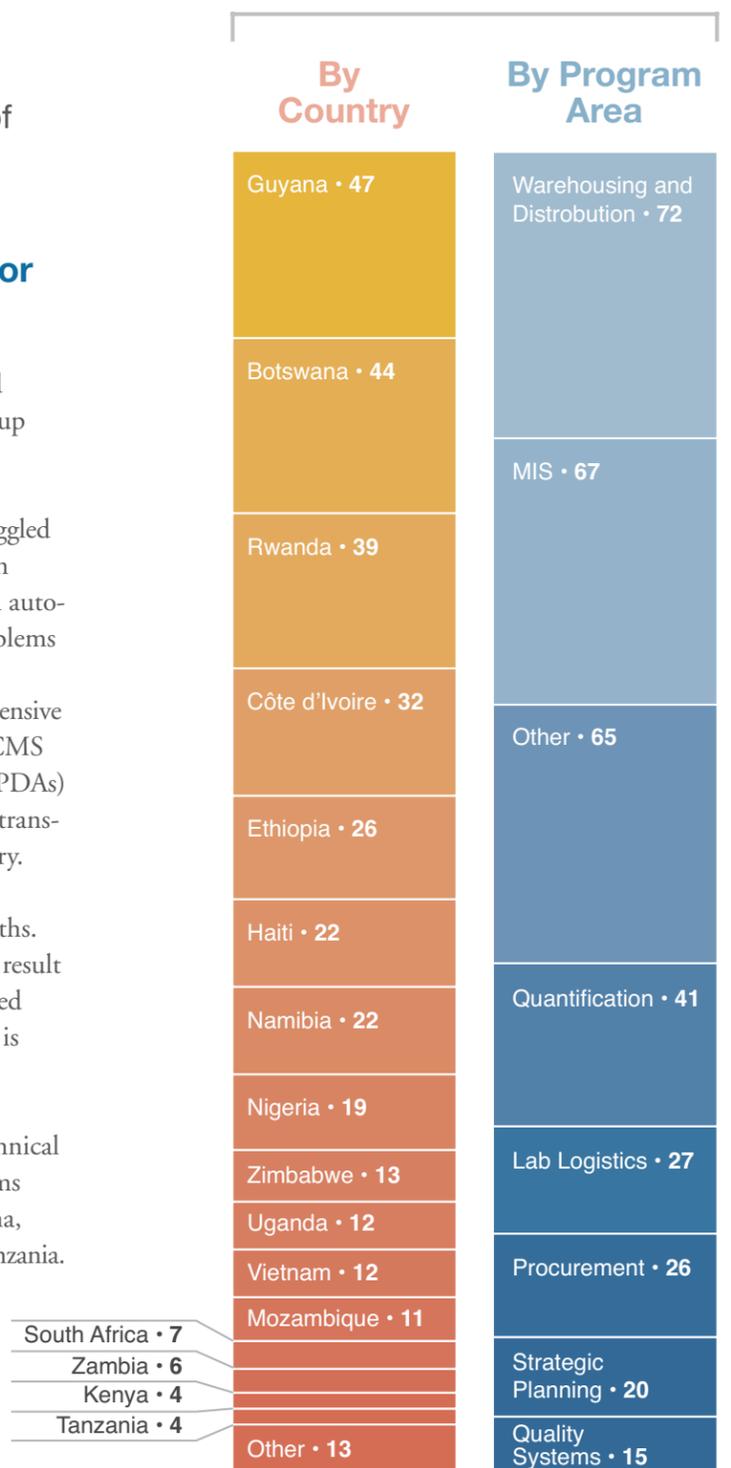
Many countries grapple with inefficient and outdated information systems that hinder their efforts to scale up testing and treatment programs.

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. SCMS recommended automating the system after a thorough review of the problems resulting from a cumbersome paper-based process. Recognizing the potential provided by the country's extensive cell phone infrastructure, and working with MLS, SCMS designed a system that uses personal digital assistants (PDAs) for data collection at health facilities and subsequent transmission of data to a web-based national data repository.

MLS piloted the system in 20 facilities for three months. Reporting rates rose to a remarkable 95 percent. As a result of the successful test of the new system, MLS requested that SCMS launch the system countrywide. Scale-up is currently underway.

In addition to Côte d'Ivoire, SCMS has provided technical assistance in logistics management information systems (LMIS) to most PEPFAR countries, including Guyana, Ethiopia, Haiti, Rwanda, Mozambique, Nigeria and Tanzania.

Short-Term Technical Assistance Assignments 333 Total



In Uganda, improvements to warehousing support scale-up of HIV/AIDS programs

Rapid scale-up of ART must often be accompanied by upgrades to warehousing and distribution systems. SCMS has introduced world-class warehousing technologies, including LMIS; temperature controls and cold chain facilities; expiry and batch control; and racking and bar coding.

In Uganda, SCMS has worked with the Joint Medical Store (JMS), a faith-based organization serving the needs of mission hospitals and clinics throughout the country. In addition, JMS is specifically tasked with managing 20 percent of all essential drugs, storing these for Ministry of Health (MOH) facilities and holding ARVs for several PEPFAR recipients. As JMS grew, so did the need for more storage. SCMS recommended various improvements, including a new warehouse management information system that uses radio frequency devices to speed up transactions, perpetual inventory procedures to replace annual inventories, and first-to-expire, first-out practices to reduce the risk of expiry. These changes have resulted in a streamlined, warehouse management system—one that enables a more secure, reliable supply of drugs and other health commodities that meets Uganda's scale-up needs and delivers to those who most need treatment.

➤ SCMS has helped strengthen warehousing and distribution systems in many PEPFAR countries, including Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Mozambique, Namibia, Rwanda, Tanzania and Zimbabwe.



In Vietnam, a landmark program to provide methadone

Unlike sub-Saharan Africa, Vietnam has a large numbers of people who contract HIV by sharing needles while taking drugs. SCMS is supplying methadone for Vietnam's drug substitution therapy program, in which patients reduce their risk of contracting or spreading the virus by taking the medicine orally.

Because methadone is classified as a controlled substance, import and export is a complex process, subject to international regulations on such commodities. Therefore, in addition to simply procuring the drug, SCMS has ensured compliance with international rules, treaties and documentation requirements. SCMS helped acquire permission for export of narcotics from the US FDA and authorization for import from the Vietnamese government.

SCMS is also helping search for a viable, long-term alternative to importation, providing technical assistance to the MOH on the local production of liquid methadone. Local production would avoid potential difficulties in importation and contribute to a sustainable supply of the drug for the country's highly successful program.

Forecasting and demand planning benefit all programs

Forecasts and demand plans for commodities help save money in commodity costs and shipping, and ensure on-time delivery and availability. Encouraging our clients to plan ahead has been a central focus of our field offices, and their work has paid off.

In Botswana, scale-up of ART has been challenged by persistent stockouts of critical reagents, tests kits and other laboratory supplies, resulting in interruption of testing services. In 2008, SCMS, in collaboration with the Clinton HIV/AIDS Initiative (CHAI), MOH and BOTUSA (United States-Botswana Partnership), sponsored the country's first-ever training and national quantification exercise for laboratory commodities for the HIV/AIDS program. The process helped streamline the number of products used and reduced stockouts for tests related to HIV/AIDS by 95 percent.

In years past, PEPFAR implementing partners (IPs) in Nigeria developed individual drug quantifications using different methods with differing assumptions and data. In July and August 2008, SCMS worked with IPs to review individual quantifications and compile the first PEPFAR-wide aggregated quantification for ARV drugs in Nigeria. The resulting data were also used to identify two high-value, high-volume ARV drug combinations for pooled procurement by SCMS under the country operational plan for 2009, resulting in significant savings (especially in shipping and handling) and an improved negotiating position with manufacturers on capacity constraints due to limited availability of raw materials.

❖ Through support from SCMS, all PEPFAR countries are using robust forecasting to plan future commodity purchases.

Collaboration harmonizes laboratory procurement

In recent years, ART programs have rapidly increased procurement of laboratory commodities. However, weak laboratory supply chains and the lack of tools for forecasting commodity needs have made planning and scale-up difficult. To address this problem, CHAI, SCMS and the USAID | DELIVER PROJECT developed a new automated forecasting tool to determine HIV/AIDS laboratory program product requirements for CD4, chemistry, DNA polymerase chain reaction, hematology and viral load testing. The tool, which is not limited to these HIV/AIDS-related tests, is currently being used in a number of countries, including Botswana, Côte d'Ivoire, Ethiopia, Haiti, Namibia and Rwanda.



Collaboration for long-term, local solutions

Innovative partnerships to benefit all

Many of the organizations working to provide treatment to people living with HIV/AIDS, such as the Clinton Foundation, PEPFAR, SCMS and UNITAID, did not exist 10 years ago. Yet they are now working together to combat the disease.

In just three years, SCMS has emerged from being an unknown entity to become a respected collaborator and source of expertise.

Our global partners, in addition to the US government, include the Clinton HIV/AIDS Initiative, the Global Fund, UNICEF, UNITAID, WHO and the World Bank. Our local and regional partners include ministries of health, faith-based and nongovernmental organizations and private-sector companies.

The innovative partnerships that SCMS is creating to deliver commodities worldwide are just one example of our work to foster to partnerships worldwide. At the 2008 International AIDS Conference in Mexico City, we reported on our collaborative efforts to reduce the cost of ARVs. Panelists at the event represented our collaborators CHAI, the Global Fund, UNICEF and WHO. In three years SCMS has built a number of partnerships with organizations worldwide to leverage each organization's strengths. Working together, we have accelerated change far beyond what many thought possible.



Working together to improve procurement planning

Key to procuring HIV/AIDS commodities is coordinating the activities of governments, providers and funders. Without a unified procurement effort, gaps and redundancies can result—leading to stockouts, overstocks, and ultimately, wasted time and money.

As part of an initiative originally led by the World Bank, the Global Fund and the USG, SCMS serves as the technical secretariat to facilitate coordination for procurement in Ethiopia, Guyana, Haiti, Mozambique, Rwanda and Vietnam. The program, known as the Coordinated Procurement Planning (CPP) Initiative, has now been joined by WHO and UNITAID and is being extended to new countries.

Supporting the availability of ARVs for rapid scale-up

As countries rapidly scale up ART and their orders for medicines used in treatment, manufacturers often have to guess how many drugs to produce. Shortages of specific medicines can result if they guess wrong.

To bring more rigor and certainty to quantification of future needs, SCMS participates in a WHO/UNAIDS working group and annual meeting that develops ARV forecasts from three main sources: UNAIDS' annual survey of demand, and forecasts from CHAI and SCMS. The working group shares these consolidated global forecasts of demand with the major manufacturers of ARVs and active pharmaceutical ingredients to help them plan production and ensure that adequate manufacturing capacity is in place as programs scale up. SCMS also provides procurement data to the WHO global price reporting mechanism, and ARV registration status information for the WHO regulatory database.

Building a public-private partnership to address children's treatment needs

Children with HIV/AIDS have needs and challenges that are different than those facing adults. SCMS has contributed to the Public-Private Partnership for Pediatric ART, an initiative of the former First Lady to address these special needs of children with HIV/AIDS. In addition to SCMS this global partnership includes CHAI, the Elizabeth Glaser Pediatric AIDS Foundation, PEPFAR, UNAIDS, UNICEF, WHO and pharmaceutical companies. Responding to changing recommendations in the assessment and treatment of very young infants exposed to HIV, SCMS has prepared a special commodity list of products required for early infant diagnosis. For the guidance of implementers this list is posted on the SCMS e-catalog. SCMS also developed a standardized procedure to generate a forecast and prepared a selective forecast of pediatric ARV demand for 2007 and 2008 in 11 of the PEPFAR focus countries plus Zimbabwe.

Harmonizing and standardizing laboratory commodities: extending the global reach

Laboratory procurement is particularly complex, because of the large number of products needed. Harmonization and standardization of laboratory commodities can improve procurement processes, inventory management, distribution systems and equipment maintenance. In late January 2008, 130 experts and policy makers from 31 countries, including Cambodia, Haiti, Vietnam and 28 sub-Saharan African countries, gathered in Maputo, Mozambique to find solutions to challenges that limit the scale-up of laboratory services for tuberculosis (TB), malaria and HIV diagnosis and care. Participants agreed to develop national strategic laboratory plans and policies, including standardization and harmonization of laboratory test supplies and equipment. The CDC and WHO Regional Office for Africa led the initiative. SCMS served as the technical secretariat for the meeting and is now promoting the recommendations for standardization, which were published in the summer of 2008.

At the Mexico City conference we heard impressive reports of progress. Four million people are now on treatment, compared with about two million in 2006, with one million more patients starting treatment each year.

Obviously, no one organization could have achieved so much in such a short time. Together, we have much more to do in the years to come. So while we celebrate the accomplishments of the last three years, we also look to the future.

The Way Forward

In the next phase of the project we must build upon our successes, achieve more with less in some areas and create sustainable structures, systems and human capacity for our national clients and implementing partners.

The whole PEPFAR program is moving into a new phase—beyond emergency scale-up to a more sustained and sustainable model of maintaining millions of people in care and treatment and continuing to prevent infection. SCMS must evolve to support this new focus.

In the global supply chain we expect to be called upon to supply major quantities of ARVs, diagnostics kits, other essential drugs and other laboratory equipment. The challenge will be to continue to drive down the costs even as new medicines, diagnostic equipment and care-and-prevention technologies become available—often at higher costs, at least initially.

We already know that in 2009 and 2010 our clients will ask SCMS to supply new categories of products. Much of our anticipated growth in procurement is expected to come from commodities such as blood safety, male circumcision, early infant diagnosis and treatment, waste disposal, TB and therapeutic foods. Any of these commodities could require new solutions, which we will introduce while continuing to maintain and improve the operation of global supply chains that support those living with and affected by HIV/AIDS.

HIV/AIDS can reduce food intake and nutrient absorption. Malnutrition can then cause patients to be more susceptible to opportunistic infections and reduce the effectiveness of ART. Part of a new initiative, food-by-prescription (FBP) programs are underway in several countries, including Ethiopia, Kenya, Haiti, Tanzania and Uganda. Building on our effective systems for delivering HIV/AIDS commodities, SCMS is expanding services to procure, store and distribute specialized food products.

For food-by-prescription programs, SCMS has identified appropriate products and is collaborating with such international agencies as the World Food Program and UNICEF to identify suppliers and prequalify them. In coordination with USAID missions and the USAID Food and Nutrition Technical Assistance (FANTA-2) project, SCMS is compiling forecasts and demand plans for FBP products. We are writing a guidance document for field offices and partners covering best practices in procurement, shipping, warehousing and distribution.

As SCMS evolves we will continue to focus on the principle that the supply chain begins and ends in country. We will decentralize more activities to our field offices, working alongside our national clients and implementing partners to build sustainable local capacity. We will continue to provide innovative technical solutions through long- and short-term technical assistance to enable our clients to realize the maximum reward from their investments in new systems, infrastructure and human capacity. The key challenge will be to ensure that in-country supply chains have the scope, agility and capacity to meet the challenge of ever-expanding demand from local and international programs serving those living with and affected by HIV/AIDS.

SCMS will continue to provide support that enables our clients to manage the full supply cycle from forecasting, ordering, receipt, storage, distribution, usage, monitoring and evaluation and around the cycle back to forecasting. In particular, we expect to focus on innovative solutions to logistics management systems, using appropriate new technologies such as wireless communication for data capture and reporting, and sophisticated warehouse management and distribution systems. With agreement from client organizations, we will help them improve their quality assurance systems. We also expect that a growing proportion of our purchases will be managed in country, requiring new systems and training, along with validation of qualified suppliers.

Internationally, it is difficult to anticipate what new players may enter the arena, but as funding needs continue to grow, new organizations will likely emerge, and existing donors such as the European Union or Japan, major donors who are relatively quiet in the HIV/AIDS arena, may become more prominent. We will work with new stakeholders and continue to work with existing partners, building on the strong relationships established in the first three years of the project. We see the Coordinated Procurement Planning Initiative as a particularly relevant



mechanism for bringing like-minded organizations together. The Global Fund's proposed Voluntary Pooled Procurement service will also present a new dynamic in the international supply arena.

There is growing evidence of the need for global-level information on the HIV/AIDS commodity market, supply trends, demand patterns, new product development and pricing. SCMS is an active contributor to the global databases and a regular contributor to meetings, workshops and technical groups. The challenge in the coming years will be to institutionalize sustainable mechanisms and owners for these global public services, thus reducing the burden on any one donor, including the USG. UNITAID is already beginning to show interest in funding a global database on market intelligence. We will continue to work with the US Centers for Disease Control and Prevention (CDC), Global Fund, Office of the Global AIDS Coordinator (OGAC), UNICEF, UNITAID, WHO and private foundations such as the Bill and Melinda Gates Foundation and Clinton Foundation to develop innovative but enduring structures to meet these needs. Together, we will strive to enhance collaboration, cooperation and information sharing at a global level to benefit HIV/AIDS programs and the patients they serve.

••• Under a reauthorized PEPFAR, SCMS will now work with our partners to move from an emergency response to focus even more on sustainability.



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



PEPFAR
Implementing Partner

Supply Chain Management System

1616 Fort Myer Drive, 12th Floor

Arlington, VA 22209-3100 USA

Telephone: +1.571.227.8600

Fax: +1.571.227.8601