



USAID
FROM THE AMERICAN PEOPLE

USAID/DELIVER PROJECT MID-TERM EVALUATION

MARCH 2010

This publication was produced for review by the United States Agency for International Development. It was prepared by Don Lauro and Dian Woodle through the Global Health Technical Assistance Project.

USAID/DELIVER PROJECT MID-TERM EVALUATION

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This document (Report No. 10-01-245) is available in printed or online versions. Online documents can be located in the GH Tech web site library at www.ghtechproject.com/resources.aspx. Documents are also made available through the Development Experience Clearing House (www.dec.org). Additional information can be obtained from:

The Global Health Technical Assistance Project

1250 Eye St., NW, Suite 1100

Washington, DC 20005

Tel: (202) 521-1900

Fax: (202) 521-1901

info@ghtechproject.com

This document was submitted by The QED Group, LLC, with CAMRIS International and Social & Scientific Systems, Inc., to the United States Agency for International Development under USAID Contract No. GHS-I-00-05-00005-00.

HANNIBAL'S ARMY

Hannibal was widely heralded as a brilliant general and a military genius. His left-end sweep across the Mediterranean and over the Alps caught the Romans unprepared. But who was the genius that wrangled the elephants and transported the feed, blankets, arms, and countless other provisions so Hannibal's army could rout the unsuspecting Romans?

Supply chain professionals order the product, build it, move it, ship it, distribute it, and drive the coordination processes with marketing, sales, engineering, manufacturing, finance, and information technology. In short, their predecessors are who made Hannibal look good—and supply chain professionals today do the same for many other people.

ACRONYMS

ARV	Antiretroviral drugs
CAR	Countries at Risk Group
CCP	Contraceptive commodity procurement
CDC	U.S. Centers for Disease Control and Prevention
COTR	Contracting Officer's Technical Representative
CPT	Contraceptive procurement table
CS	Commodity security
CSL	Commodities Security and Logistics Division, USAID
CSR	Corporate social responsibility
DTTU	Delivery team topping-up
ESAMI	East and Southern Africa Management Institute
F&A	Finance and administration
FP	Family planning
FPLM	Family planning logistics management
Fuel PHD	Fuel Logistic – Pharmaceutical Healthcare Distributors (Fuel PHD)
GH	USAID Bureau for Global Health
GHI	Global Health Initiative
HPI	Health Policy Initiative
HPN	Health, Population and Nutrition
HS 20/20	Health Systems 20/20 project
IAPHL	International Association of Professional Health Logisticians
IPC	U.N. Inter-agency Pharmaceutical Coordination group
IQC	Indefinite quantity contract
JSI	John Snow, Inc.
LAC	Latin American and Caribbean Bureau, USAID
LMIS	Logistics management information system
LMS	Leadership, Management and Sustainability Project
LMU	Logistics Management Unit, Zambia
MIS	Management information system
MOH	Ministry of Health
MSH	Management Sciences for Health
NBM	New business model (USAID)
NGO	Nongovernmental organization
OAA	Office of Acquisition and Assistance

OJT	On-the-job training
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PfSCM	Partnership for Supply Chain Management
PMI	President's Malaria Initiative
PPMR	Procurement Planning and Monitoring Report
PRISMA	<i>Proyectos en Informatica, Salud, Medicina y Agricultura</i> (Projects in Computer Science, Health, Medicine, and Agriculture)
PSP	Private Sector Project
QASP	Quality Assurance Surveillance Plan
RH	Reproductive health
RHI	Reproductive Health Interchange
RHSC	Reproductive Health Supplies Coalition
SCMS	Supply Chain Management System
SOW	Scope of work
SPS	Strengthening Pharmaceutical Systems
SWAp	Sector-wide approach
TB	Tuberculosis
TEC	Total estimated cost
TO	Task order
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
USAID/W	United States Agency for International Development Washington Headquarters
USG	United States Government
WHO	World Health Organization

CONTENTS

HANNIBAL'S ARMY	i
ACRONYMS	iii
EXECUTIVE SUMMARY	vii
Introduction and Overview	vii
Major Evaluation Findings	vii
Challenges	ix
Conclusions and Recommendations	xi
I. INTRODUCTION	1
II. BACKGROUND	3
III. SCOPE OF WORK SUMMARY	5
IV. EVALUATION METHODOLOGY	7
Document Review	7
Interviews	7
Site Visits	8
Observations and Case Studies	8
Synthesis	8
Analysis	9
Report Outline	9
V. TECHNICAL RESULTS AND CLIENT SATISFACTION	11
Synthesis of Responses	11
Cross-Cutting Themes, Issues, and Challenges	15
Technical Results and Client Satisfaction: Findings	19
VI. IMPLEMENTATION AND MANAGEMENT	27
Synthesis of Responses to SOW Questions	27
Cross-Cutting Themes, Issues, and Challenges	33
Implementation and Management: Findings	34
VII. EVALUATION CONCLUSIONS AND RECOMMENDATIONS	39

ANNEXES

ANNEX A. TECHNICAL RESULTS AND CLIENT SATISFACTION: QUESTIONS AND ANSWERS	43
Central Storage and Supply Level.....	43
Service Provision Points.....	43
Lead from Family Planning.....	44
Health Sector Reform.....	50
Changes in Development Funding.....	52
Human Resource Constraints.....	53
System Sustainability.....	53
Family Planning.....	54
ANNEX B. IMPLEMENTATION AND MANAGEMENT: QUESTIONS AND ANSWERS	59
Background.....	59
Support for Contracting.....	63
CSL/JSI Interface.....	64
Responsiveness.....	65
Leveraging.....	66
USAID Domain.....	68
Procurement Technical Assistance.....	68
Cross-Fertilization—Core Teams.....	68
Workplan Development.....	69
Cross-Country Fertilization.....	69
Central Review and Advice on Country Workplans.....	70
Facilitation of Best Practices.....	70

EXECUTIVE SUMMARY

INTRODUCTION AND OVERVIEW

To conduct a mid-term evaluation of the 2006–2011 USAID/DELIVER Project¹ in developing countries, GH Tech engaged two experienced consultants, Don Lauro and Dian Woodle. With guidance from USAID and support from GH Tech, the team began the evaluation in early October 2009, traveled to the field in November and December, and completed a draft report in mid-February 2010. Though the evaluation team’s findings on technical results, client satisfaction, implementation, and management of DELIVER are generally very positive, this report also points out several shortcomings.

The strategic objective of DELIVER, as specified in the contracts governing this project, is to make essential health supplies more widely available and strengthen the supply systems through which they are provided. The component objectives are to improve (1) in-country supply systems; (2) advocacy and collaboration with global and regional partners for commodity security; and (3) USAID provision of commodities to programs. To accomplish these objectives DELIVER also supports global and regional advocacy for contraceptives, commodities, and logistics. To fulfill their charge, the team collected information and data using three approaches: document review, interviews, and country visits. During visits to Tanzania and Zambia the team observed the work of DELIVER along the supply chain from central warehouses to distant clinics and observed its staff making presentations and hosting sessions on logistics and commodity management. After three months of document review and data collection, the team synthesized what they had learned, extracted findings, and drew conclusions.

In the project’s first three years, USAID/Washington provided \$17.4 million in core support to DELIVER. These funds have been complemented by field support buy-ins from 21 country and two regional missions for both long- and short-term technical support and related activities, such as logistics training and commodity projections, to ensure that products are available and supply chains strengthened. The team’s major findings are presented in terms of project objectives. The report then discusses past and present challenges for the project that the team identified before drawing conclusions and making recommendations.

MAJOR EVALUATION FINDINGS

The evaluation team concludes generally that John Snow, Inc. (JSI), which implements DELIVER, has indeed delivered on the terms of its two contracts with USAID. Furthermore, for the most part core support for DELIVER Task Order 1 (TO1) has thus far produced good or at least promising returns on investment.

For the first component objective—improved and strengthened in-country supply systems

- Particularly in the 18 countries where the project has a presence, DELIVER has contributed considerably to making commodities, notably contraceptives, readily available through reinforced in-country supply chains, especially at last-mile service delivery points. Six other countries receive technical assistance and four receive funding from regional missions rather than USAID/Washington.
- In all 28 countries where DELIVER currently works, progress is demonstrable; however, more skills transfer and capacity development is needed, particularly at

¹ Referred to hereafter as DELIVER.

higher levels in presence countries, to ensure continued commodity flows and further extension of supply chains.

For the second objective, improved advocacy and collaboration with global and regional partners for commodity security,

- DELIVER has contributed to expanding and extending global and regional leadership for contraceptive commodity security.
- The project uniquely and regularly provides commodity security updates and publishes technical papers to build knowledge of and support for commodity and supply chain management as essential to health and family planning (FP) programs.
- In the process, commodity logistics—not only for contraceptives but also for a wide range of other health products—has advanced as a main consideration for investment by host countries as well as donors.

Within the project’s objectives, the evaluation team recorded the following notable achievements:

Leading from Family Planning

The 2006 project design emphasized “leading from family planning” and DELIVER, with support from the USAID Commodities Security and Logistics Division (CSL), has implemented this guidance throughout. Drawing on extensive experience with contraceptive supply logistics, DELIVER is able to serve a variety of supply chains at different stages of development. Where its responsibilities extend to malaria and HIV/AIDS treatments, DELIVER has been able to apply an adaptation of its FP tool kit that allows it to both forecast needs and measure current consumption. In some situations, other programs have been of benefit to DELIVER. For example, dramatically improved distribution of HIV/AIDS supplies, as in Zambia, builds public sector confidence, perhaps even commitment, to strengthen supply chains through which other commodities, such as contraceptives and essential drugs, may move.

Such leading from other commodities to FP may also apply to other innovations. For example, in Tanzania USAID works with cell phones, and uploading information to DataDyne for end-use surveys sparked new interest in using cell phone technology in the distribution of health care commodities. Similarly, the different range of variables used in making malaria supply forecasts may inspire new approaches to projecting rapidly changing consumer FP preferences, a need surfaced by informants in Tanzania. DELIVER’s headquarters in Rosslyn (Arlington), Virginia, has also benefited from procedures to expedite contracts through the USAID Office of Acquisition and Assistance (OAA). Globally, too, DELIVER is building on its core expertise to attract interest and investment in building up logistics systems from other organizations and donors, such as the World Health Organization (WHO) and the Bill and Melinda Gates Foundation.

Strengthened Supply Systems

For its first objective, DELIVER’s mandate is to strengthen developing country systems that move commodities from one end of the supply chain (procurement) to the other (last-mile service delivery points). In 21 countries where DELIVER has provided long-term assistance, the growing solidity of supply systems is well-documented. Supply chains have been extended and expanded (in some cases as integrated systems); stock-outs have declined at all points; and regular reporting, particularly on end-use consumption, has consistently improved. Wherever DELIVER operates, data-based decision-making to improve procurement and strengthen logistics notably advances. Even where USAID missions have opted for bilateral over field support buy-ins to DELIVER, as in Malawi and Uganda, consolidation of management rather than DELIVER’s performance was the main triggering factor.

Knowledge-Building and Global Leadership

Exercising leadership globally is a high priority for USAID/W. This project capitalizes on more than 20 years of its investments in contraceptive logistic systems. Solid USAID/W encouragement supports going beyond JSI's now-standard practices for contraceptive supply management to propel DELIVER to actively collaborate with international global health leaders within the UN Population Fund (UNFPA), UNICEF, and WHO. DELIVER has also solidified the importance of commodities not only among a range of such international organizations but also among private foundations, both those concerned with FP and those contributing to developing country health care more generally. Among these, the Gates, Hewlett Packard, and United Nations foundations have been the most visible supporters of commodity supply as integral to service improvement.

Regional Programs and Advocacy

Building on years of effort, Latin America is the region where DELIVER has had the most success. Not only are many countries with which DELIVER has worked moving toward graduation from donor support for contraceptives and greater sustainability for their own commodity distribution systems, but DELIVER has also engaged countries to learn from each other. In addition, DELIVER's outsourcing of logistics training to regional institutions has gained traction in Latin America with PRISMA (*Proyectos en Informatica Salud Medicina y Agricultura*) and is underway in Africa with the East and Southern Africa Management Institute (ESAMI).

CHALLENGES

DELIVER and USAID have also faced, and in some instances continue to face, a number of challenges.

Project Start-Up

There were three major challenges that confronted the project at start-up: commodity procurement outsourcing; developing a management information system (MIS); and implementing USAID's new business model (NBM). While the first two lay outside the scope of the evaluation, efforts to implement the NBM are directly pertinent to the evaluation and the continuation of the project. Though articulation as well as acceptance of the NBM could have been better managed, both USAID/W and DELIVER consider initial difficulties to have been largely resolved. However, the other two start-up difficulties continue to affect relations between USAID and contractor staffs and may make it harder to maximize the potential and performance of DELIVER.

A Vastly Expanded Product Range

In this iteration DELIVER was designed to accommodate a commodity range much broader than contraceptives alone. In addition, soon after project award JSI was asked to submit what became successful proposals for exponential expansion for avian influenza and malaria supplies. While some synergies have emerged between contraceptive and malaria logistics, influenza is not as complementary to project work. By all reports, however, DELIVER has responded well to these expanded responsibilities, though not without high initial stress and some dilution of expertise as related to FP commodities. In the long term, this vastly expanded commodity range may well lead to substantial gains at both country and global levels.

Complex Management Structure

DELIVER is governed by two different types of contract. The management structure to support simultaneous implementation of both is complex, if not cumbersome. Organization is further complicated by the different needs of major clients within USAID/W, 28 USAID missions, and

two regional bureaus. DELIVER also supports staff and offices in 18 countries and arranges for short-term assistance to another 10 countries. Moreover, communication across disparate parts of its own management structure has built-in challenges and anomalies. To a considerable extent, JSI's organizational culture, notably the transparency and openness with which DELIVER is run, compensates for and overcomes these difficulties. Nevertheless, after three years of project work, reporting lines and administrative responsibilities could both be simplified. The same is likely also true of USAID.

Changing Client Preferences

USAID/W, through CSL project management, has been consistent about how it wants DELIVER to operate. That is less true of USAID missions. Often high- and mid-level staff rotations and the resultant variations in mission perspectives and preferences can cause sudden shifts in support for supply chain strengthening and the central USAID/DELIVER project. The effects range from disruptive to disastrous. Without significant core funding for country-level implementation, missions are much more likely to exert control by shifting buy-in funds to bilateral programs. This is particularly true when similar programs, like the Supply Chain Management System (SCMS) or Strengthening Pharmaceutical Systems (SPS), are operating within the same country. Shifts to bilateral projects have occurred even where on most objective measures DELIVER's performance has been positive.

Core Support for Innovation

Both USAID/W and DELIVER/Rosslyn have promoted some potentially useful innovations: segmentation within integrated supply chains; simulations to model and optimize supply chains; cell phone collection of consumption data, etc. To a large, however, these innovations have been centrally driven. As one informant put it, DELIVER innovations are often marketed to country programs as "solutions in search of problems." While USAID encourages DELIVER to identify promising commercial, academic, and military approaches, more progress could have been made had the talent and creativity of field staff been tapped more fully. Aligning technical staff at central level with workplan activities may also work against project potential for creativity and innovation.

Furthermore, USAID/W seeks to drive innovation with core funding, but USAID missions prefer proven products rather than untried innovations, which causes some disjuncture between core and field support – funded activities. Shelf funds of some \$600,000 a year, which support innovative supply system interventions in Nigeria and Ethiopia, seem to offer a useful, flexible approach to build on. Given the potential to generate internally innovative solutions to country-level problems, a challenge for DELIVER is better, fuller involvement of creative in-country staff. At present, country-based staff does not seem to be sufficiently involved in formulating the core workplans that feed and seed innovation within DELIVER. Some central support for unallocated staff time as well as information-sharing meetings, such as an annual brainstorming between field and central personnel, could help harvest innovations occurring within both developed and developing countries.

Lasting Impact: Sustainability

DELIVER was designed more to strengthen than sustain supply systems. Both contracts are clear about orienting DELIVER more toward product availability than system sustainability:

- —Overall Objective: Increased Availability of Essential Health Commodities in Public and Private Sector" (TO1 Contract, 2006, p. 10).
- —The purpose of this new contract is to design, develop, strengthen and, upon request, operate safe, reliable, and sustainable supply systems" (IQC Contract, 2006, p. 5).

Yet for USAID, sustainability has become more than a passing reference. Recent pronouncements from the President's Global Health Initiative (GHI) place sustainability front and center for future USAID programming. The evaluation team therefore concludes that DELIVER can and should do more to move the systems it works with toward sustainability. A near-term recommendation on sustainability is framed in the section below. (The evaluation team's take on logistics and supply chain sustainability longer-term is incorporated into a separate Future Directions memo for USAID.)

CONCLUSIONS AND RECOMMENDATIONS

In 89 interviews with over 120 key informants, DELIVER received accolades for and few criticisms of its work to make commodities more available and supply chains stronger. This was true both in-country and internationally. Improvements suggested by partners are more along the lines of DELIVER doing more than it doing differently. Particularly since the sustainability of supply systems will be requiring more attention from both USAID and DELIVER, the evaluation team concludes that DELIVER could not only do more but also do better in the areas of sustainability, human capacity building, and converting innovations identified into results.

Because of project design as much as actual performance, some changes could be considered in the remaining years of the project. For one, USAID/W should consider establishing a task force to project pathways for sustaining supply chain development. Using core funds, this task force, projected as a one-year effort, could bring together staff from across DELIVER and perhaps other projects. Funds should be included to cover travel to study prospects for sustainability in some countries, involvement of field as well as mission staff, and development of tools to assess a country's readiness to move toward sustainable supply systems.

As a prelude to such concerted work on sustainability, the team also recommends a USAID-DELIVER retreat at this point in the project. This retreat would aim to both establish common ground to facilitate continued high performance during the remaining years of the project and provide a basis on which to consider together how systems might be sustained into the future. It could also be an opportunity to resolve lingering project start-up difficulties. Central and field staff from CSL and others in USAID interested in sustainability should be invited. The team recommends that this retreat be well planned and carefully facilitated, perhaps adapting a large meeting methodology such as Future Search. A related recommendation is to re-establish annual meetings between central and in-country staff tasked to derive innovative solutions to field-based problems.

I. INTRODUCTION

The scope of work (SOW) for this evaluation of the five-year USAID/DELIVER Project² provides clear direction for this midterm review. DELIVER is the most recent in a long history of USAID investments in contraceptive commodities, and the SOW displays deep understanding of its possible strengths and weaknesses. While this evaluation is firmly focused on the current state of the present project, the SOW also asks the evaluation team to offer recommendations (in a separate memo) for future USAID investments in supply system strengthening and commodity security. The team's findings and conclusions are thus linked to the past but look toward the future.

The members of the team selected to undertake this evaluation are two experts in family planning (FP)/reproductive health (RH) and commodity logistics, Don Lauro and Dian Woodle. Their responsibilities are outlined in the SOW reproduced as Appendix 5 published in the USAID/DELIVER Project Evaluation Appendices.

The team began its work on October 9, 2009, and completed the draft report on February 12, 2010. As directed, they reviewed documents during the first two weeks. In the following week, they drafted interview questions and refined their methodology for key informant interviews and site visits. In late October interviewing began; it continued through December, including during country visits November 7–December 12, 2009. The team then began synthesizing the information acquired from the document review, interviews, and site visits and compiled comprehensive responses to the 26 questions framed in the SOW. The team drafted this report in January, reviewed preliminary findings and conclusions with USAID in early February, made some revisions, and submitted the draft report to GHTEch on February 12, 2010, for transmission to USAID. In April 2010, the team presented the findings, conclusions, and recommendations from the evaluation to USAID/W and JSI/DELIVER.

² Referred to hereafter as DELIVER.

II. BACKGROUND

The SOW specifies that the evaluation concentrate on task order one (TO1), objectives one and two. Objective three (procurement) is the subject of a previous evaluation. Among the many seminal documents provided to it, the evaluation team reviewed the governing contracts with particular care. The 2006 DELIVER Project emphasizes making a broad range of commodities widely available in developing countries. The stated overall objective of the Task Order 1 (TO1) contract is to prioritize “increased availability of essential health supplies.” Contraceptives, essential drugs, HIV/AIDS commodities, and medicines to treat infectious diseases are among the products that may be distributed within (objective one) and procured for (objective three) selected developing countries.

The TO1 contract further specifies that objective one is directed to developing countries “which will fund (through field support) the majority of technical assistance activities in this contract” (objective 1.2.1). Making such-needed products available and strengthening the supply chains through which they are distributed are core to DELIVER’s in-country achievements. The broader indefinite quantity contract (IQC) specifies the field support mechanism through which most funding, up to a ceiling of \$2.75 billion, is to be provided to DELIVER to support its work.

The centrally funded second objective of the TO1 contract is to “improve advocacy and collaboration with global and regional partners for commodity security” (objective 1.2.2). The intention is to use core funding to build knowledge and leadership on commodity security at the global and regional levels. This objective builds on recognition that for more than 20 years USAID and implementing partners have been global leaders in contraceptive and commodity logistics.

Successive projects in support of contraceptive or commodity system strengthening dating back to 1986 were all awarded to JSI. The present USAID/DELIVER PROJECT (2006–11) follows four such previous projects: Family Planning Logistics Management I (1986–90); FPLM II (1990–95); FPLM III (1995–2000); and the DELIVER Project (2000–07). Successful implementation of these awards gave JSI preponderant capability, with which it initiated in 2006 the DELIVER TO1 and IQC contracts.

Accomplishing the wide-ranging objectives of the TO1 contract and fulfilling the purposes outlined in the IQC contract required that the previous DELIVER project be considerably reorganized. Besides reordering some priorities to accommodate the new project’s broader mandate, the successful JSI proposal also required recruiting staff with new skill sets and working with several new subcontractors.

The launch of DELIVER was encumbered by two factors: an overlap of six months with the previous DELIVER Project, and its concurrent expansion under the DELIVER umbrella to cover two additional task orders, TO2 for avian flu and TO3 for malaria. The transfer to DELIVER of contraceptive procurement (TO1, objective three) from USAID’s Commodities Security and Logistics (CSL) Division was a challenge for both parties. Finally, in addition to the expanded oversight and management responsibilities DELIVER incurred with the contracts and task orders, CSL engaged DELIVER in a multifaceted implementation process that has become known as the new business model (NBM).

The TO1 contract specifies that to strengthen in-country supply systems DELIVER “focuses on product distribution... [and] improving the in-country environment (policies, resources, commitment, etc.) within which the supply system exists” (objective 1.2.1, p. 10). Sustaining the supply systems is referenced in both DELIVER contracts:

- —The contractor should have a credible plan for phasing out activities, including institutionalizing the skills necessary for sustainability” (TO1 contract, p.11).
- —The purpose of this new contract is to design, develop, strengthen and, upon request, operate safe, reliable, and sustainable supply systems that provide a range of affordable, quality essential health commodities” (IQC, 2006, p.9).

The evaluation team observed the following differences between the two contracts:

- The overall objective in the TO1 contract is to —increase availability” of commodities, with —system strengthening” a subcomponent of —improve and strengthen in-country supply systems.”
- In contrast, the IQC positions —increase the availability of ...supplies” and —strengthen ...supply systems” as both high-order purposes.
- Both contracts place priority on strengthening systems and mention their sustainability but are fairly general about what DELIVER should do about sustainability. The IQC, however, contains considerable conditional language, such as —should,” —may,” and —upon request.”
- In comparison, the TO1 contract provides somewhat more prescriptive direction in the form of suggested tasks associated with subcomponents in the contract.
- Neither contract specifically mentions skills transfer to or capacity development within governments, health ministries, or public sector counterparts.

Despite receiving relatively little attention within the governing contracts, prospects for and progress toward sustaining supply systems that DELIVER supports became a critical dimension, as well as something of a dilemma, in this evaluation. On the one hand, DELIVER and USAID project leaders, as well as most other informants, are acutely sensitive to the need for building logistics systems and supply structures that are inherently sustainable. On the other hand, JSI is not contractually obligated (except for producing a credible phase-out plan) to make progress toward sustaining the systems it is building and supporting. Consequently, DELIVER has made little effort to identify and track indicators as markers toward sustainability.

Perhaps as prerequisites to sustainability, the DELIVER TO1 contract (pp.10–11) specifies a number of contractor efforts that —must ... may ...[or] should” be undertaken to strengthen supply systems and transfer skills. This section on system strengthening likely underlies much of CSL’s development and application of the NBM to guide the work of DELIVER. The disjuncture during project start-up between the contractual requirements for making commodities available and for strengthening systems is important to assessing how DELIVER is performing and being managed at midcourse.

III. SCOPE OF WORK SUMMARY

—The purpose of the evaluation is to evaluate TO1 progress and trends, in order to inform future technical and management directions” (p. 4). Thus, the SOW for the DELIVER evaluation is intentionally both broad and far-reaching.

The SOW is, however, limited almost exclusively to just one of the three task orders, TO1. In addition, in directing the evaluation team toward Strategic Objective One – Increased availability of essential health supplies in public and private services, the SOW specifies that only two of its three subsidiary objectives should guide this evaluation:

- Objective one — Improved and strengthened in-country supply systems
- Objective two — Improved advocacy and collaboration with global and regional partners for commodity security

Finally, the SOW specifies that the team concentrate this evaluation in the following three areas:

- Technical results and client satisfaction
- Implementation and management
- Future directions

Within these parameters the evaluation team organized its work as follows:

1. Extensive review of DELIVER TO1, IQC, and related documentation, much of which USAID/W and JSI/DELIVER compiled and provided at the outset of the evaluation.
2. In-depth interviews with key and other informants to ascertain participant and outsider perspectives on progress, performance, problems, and potential midway through the five-year contracts for DELIVER.
3. Country visits to —ground-truth” what was learned from project documents and interviews. To examine DELIVER implementation in the field, the team visited Tanzania and Zambia November 19–December 11, 2009. During these visits the team interviewed DELIVER in-country staff and other key informants; visited storage facilities, hospitals, health centers, and clinics; and observed such activities as meetings, trainings, and presentations. To broaden its perspective on DELIVER’s activities in the field, the team also interviewed mission, ministry, and other U.S. government (USG)–funded programs within Tanzania and Zambia.

The SOW directs the evaluation team to allocate their time as follows:

Technical Results and Client Satisfaction (40%):

- Progress toward achieving objectives 1 and 2, and related indicators in the task order’s Quality Assurance Surveillance Plan (QASP)
- The satisfaction of USAID missions and other clients and partners with the inputs and results achieved to date

Implementation and Management (40%):

- The extent to which the contractor has implemented the business model mandated by the Commodities Security and Logistics Division (CSL)
- How the contractor's organization, staffing, management, and interface with CSL have helped or hindered operations
- How the project has benefited from or been constrained by the addition of two separately managed task orders to the DELIVER IQC, and the sharing of specific functions among task orders

The remaining 20% is for evaluation team analysis and recommendations on future directions. The team was to

- Identify current and emerging trends in logistics and commodity security
- Provide recommendations that can be feasibly incorporated into management and implementation of the project and inform the design of a possible follow-on project
- Assess options for how the highest priority recommendations can be implemented

IV. EVALUATION METHODOLOGY

As directed, the evaluation team collected data from three distinct sources:

1. Documents either produced by or related to the DELIVER goal of strengthening the supply chain
2. Responses to questions the team asked of informants about various aspects of DELIVER's performance in terms of objectives one and two
3. Observations and discussions during site visits along the entire supply chain in the countries visited, Tanzania and Zambia

The team also informally discussed deliverables and difficulties with other knowledgeable individuals. When possible, the team participated in meetings, events, and other opportunities to observe JSI/DELIVER personnel in action.

With guidance from USAID/W early in the evaluation process, the team organized the ensuing work to identify where information was most likely to be found: in documents, through interviews, or from site visits. As the SOW encouraged, the team gave preference to conducting key informant interviews in person whenever possible. The team also sought opportunities for both structured and unstructured contact with DELIVER staff and activities.

DOCUMENT REVIEW

The evaluation team received an extensive set of documents as its work began. Most were produced by DELIVER (reports, articles, etc.), but USAID also shared documents relevant to the structure and performance of this project (contracts, assessments, etc.). Through independent searches and requests, the team also found a number of other documents about DELIVER and related supply chain issues. (For a list of all documents reviewed, see Appendix 1.)

INTERVIEWS

Key Questions

The SOW set out 26 questions to guide the evaluation. Before the evaluation, CSL provided a modified version of these questions to JSI/DELIVER for use in conducting a self-assessment (which was one of the documents provided to the team). As an initial SOW deliverable, the team wrote a workplan; rather than repeat verbatim the SOW questions, the team used this opportunity to formulate questions in terms more accessible to informants. Finally, with the SOW and workplan questions in hand, the team drafted an extensive list of open-ended questions to use in interviewing key informants (see Appendix 6).

Interview Protocol

For each key informant interview the team constructed a questionnaire tailored to the person interviewed. Drawing from the comprehensive list of key informant questions, the team put together a discrete set of usually seven to fifteen questions to guide open-ended interviews. As needed, questions from the generic list were modified or special questions created. The flow from one question to the next was determined by the internal logic. The questionnaires were usually structured to proceed from the personal to the organizational; later questions were often designed to elicit reflection on various aspects of the project, how the project or USAID could be structured differently, and possible challenges or constructs for logistics and supply chains in the future.

Key Informant Interviews CH

Using the questionnaires personalized for each informant, the team guided respondents through interviews that typically lasted 60 to 90 minutes. When the appointments were made, respondents were given an overview of the evaluation's purpose. At the outset of the interviews the team again informed respondents about the evaluation's purpose and objectives. The team then handed over a copy of the questionnaire, asking the informant to reflect and respond orally to the questions in sequence. The interviewers then led informants through the questionnaire one question at a time. Phone interviews or email questionnaires were used in a few cases. When face-to-face interviews were not feasible, the team did interviews by phone or e-mail, and on occasion they interviewed informants in small groups. In all, the team conducted 89 formal interviews, gathering information from about 120 individuals (see appendix 3 for the complete list). Besides conducting interviews in the Washington area and during the site visits, the team also interviewed with key informants from Bangladesh, Ethiopia, Ghana, Malawi, Nicaragua, Pakistan, Paraguay, Nigeria, Uganda, and Zimbabwe.

SITE VISITS

The team determined early on that the SOW conjuncture to “ground truth” by making country visits would also allow opportunity to visit various components along the supply chain, from central warehouses to end service points. The Tanzania and Zambia visits also provided opportunities to vastly expand the number of key informants interviewed. In addition, on the way to Tanzania the team stopped in Kampala, Uganda, to participate in the Family Planning Best Practices Conference, during which they were able to interview key informants from four other countries where DELIVER is present, observe presentations by DELIVER staff, and discuss the project informally with knowledgeable officials and experts.

OBSERVATIONS AND CASE STUDIES

During the evaluation the team was able to observe DELIVER staff in action with peers and partners during events in Rosslyn as well as during and after their presentations in Uganda. Multi-partner and internal meetings in Zambia provided additional occasions to observe and assess. The visits to Tanzania and Zambia also gave the evaluators a number of opportunities to observe and reflect upon project constructs, constraints, and challenges. The team also reached out to individuals and organizations not directly related to DELIVER but knowledgeable about logistics, supply chains, or related issues who could further inform the evaluation. The insights and impressions gathered provided a basis, together with information collected from document review, interviews, and site visits, for formulating brief illustrations or case studies to highlight particularly interesting evaluation findings.

SYNTHESIS

Immediately after completing the country visits the team began synthesizing the wealth of information collected. They also conducted additional interviews, particularly with key informants in Washington, as they were organizing the data collected from the documents, interview responses, and site visits.

To organize the data, physical and electronic files of documents reviewed as part of the evaluation were sorted by type and relevance and, where necessary, made searchable by conversion to an Adobe Acrobat format. Similarly, physical and electronic files were used to organize by country, date, name, and question the interview responses from various sources—USAID/W staff, JSI/DELIVER central and field staff and subcontractors, in-country USAID missions and ministries, USAID Global Health projects, USAID bilateral projects, other

organizations working on FP and HIV/AIDS, and external informants. These were made searchable through data groupings in an MS/Word facility. Control and cross-referencing were set up using Excel spreadsheets with capability for conversion to an Access database. To ensure completeness, SOW questions were linked to data sources.

Though notes from site visits and observations were not transcribed into electronic form, they provided a rich additional database. Using data from all three principal sources, the evaluation team answered each of the SOW questions. The summary answers to these key questions are provided in Annex A and Annex B. From these combined efforts there emerged several major cross-cutting themes.

ANALYSIS

Questions drawn from the SOW provided the organizing framework for analyzing the information the evaluation collected, collated, and synthesized. Some preliminary analysis that proceeded along with data collection served both to inform collection of additional data and identify areas for further inquiry. The team performed physical and electronic searches using key words and phrases to triangulate information across and within the various data sources. The analysis was summarized just before the evaluation report was written.

Though designed as a rigorous review of an ongoing project, the DELIVER evaluation was neither intended nor structured as a representative sampling of information on DELIVER and related activities. Neither the individuals interviewed nor the countries covered were randomly selected. Rather, USAID/W provided the team with representative lists of countries, organizations, and individuals to include in the evaluation. In consultation with USAID/W the team then added to the lists on the basis of relevance or convenience. This combination of purposive and convenience sampling ensured that the evaluation could within the specified time frame encompass the range of issues outlined in the SOW; while use of project-provided quantitative data was integral to the evaluation, the SOW focused on collection and analysis of qualitative data as the principal means to assessment.

REPORT OUTLINE

To guide the evaluation, the SOW set out 20 questions within two broad categories: Technical Results and Client Satisfaction, and Management and Implementation. Accordingly, this report is organized as follows:

Technical Results and Client Satisfaction

- a. Synthesis of responses to questions set out in the SOW and later elaborated on and added to by the team
- b. Cross-cutting themes, issues, and challenges
- c. Findings:
 - Technical results
 - Client satisfaction

Implementation and Management

- a. Synthesis of question responses
- b. Cross-cutting themes, issues, and challenges
- c. Findings
 - Implementation
 - Management

Evaluation Conclusions and Recommendations

V. TECHNICAL RESULTS AND CLIENT SATISFACTION

In this section, the evaluation addresses both the technical results DELIVER has achieved and how satisfied its principal clients are with project progress.

Among the technical areas specified in the SOW are increased availability of commodities, strengthened supply systems, improved commodity security, identifying and applying best practices, testing innovations, and collaborative partnerships to strengthen logistics and increase supplies. Results in these areas are delineated and examined not only within countries where DELIVER works but also at the regional and global levels.

Both USAID and DELIVER consider their ultimate clients to be the direct beneficiaries of this project, especially the last-mile consumers of commodities. However, for purposes of this evaluation DELIVER's principal clients are the USAID country missions, which provide field support to the project, and USAID/W, which provides core funds and central oversight. This evaluation also covers a range of other in-country and global partners: —in-country organizations, other USAID projects, academic institutions, professional associations, UN agencies, bilateral donors, private foundations, and global health partnerships (most especially the Reproductive Health Supplies Coalition)" (SOW, p. 4). To the extent the evaluation team was able to gather relevant information, the report is also informed by the perspectives of these partners.

This section first synthesizes the team's responses to nine SOW questions, then proceeds to cross-cutting themes, issues, and challenges that emerged from the information collected. It concludes with a presentation of the team's findings on technical results and client satisfaction. Conclusions and recommendations appear in a separate section at the end of the entire report.

SYNTHESIS OF RESPONSES

In the following, responses to the nine SOW questions related to technical results and client satisfaction are extracted, summarized, and reorganized into the following categories: supply increase and system strengthening; product availability and commodity security; best practices and field innovations; collaborating partners and partnerships; USAID mission perceptions; and USAID/W perspectives. (Responses for each of the SOW questions may be found in Annex A.)

Supply Increase and System Strengthening

According to almost all key informants, in the countries where it works DELIVER has made more products more readily available through better supply systems. Data routinely collected and collated on supply availability, as well as reporting in countries where the project has presence, provide solid evidence that DELIVER is performing well. Previously, supply systems within most project countries were remarkably inefficient. Almost all country-level key informants attested to marked improvements as a result of DELIVER. However, in helping countries to do better, DELIVER is not necessarily doing enough.

In the short term DELIVER has done well to increase supplies and strengthen systems wherever it operates. Widespread training; collection, analysis, and use of data; and technical support all contribute to its success. As DELIVER staff and other key informants well recognize, many other organizations also contribute, among them USAID itself; other bilateral donors from countries like Britain and Denmark; multilateral donors like UNFPA and the World Bank; host country governments, including ministries of health and finance and sometimes parastatals set up to run warehouses and distribution systems; reproductive and other health projects funded by USAID and others; and international and local nongovernmental organizations (NGOs) active in health services and advocacy. Many key informants also complimented DELIVER on its convening, even catalytic, role in bringing these various stakeholders together.

Sustaining supply system gains is a different issue, of a different order of magnitude. Here, accolades for DELIVER—“do not know what we would do without DELIVER”—become two-edged. On the one hand they indicate that DELIVER is useful and much valued; on the other, that improvements could well disappear if DELIVER support were to be withdrawn.

Product Availability and Commodity Security

Key informants give DELIVER credit for usefully marshalling data on commodities and convening stakeholders to consider needed actions. DELIVER does this both within countries and internationally. At the regional level, with funding from the USAID Latin American and Caribbean Bureau (LAC) DELIVER has facilitated collaboration among LAC countries on product availability, commodity security, and collaborative exchanges. DELIVER has proposed similar collaborative efforts for sub-Saharan Africa but did not receive regional funding.

Within countries, as DELIVER data show and key informants attest, DELIVER has been useful in forming and maintaining commodity security committees to ensure continued supplies and safeguard systems. Depending on the extent to which government counterparts exercise leadership, DELIVER actions range from leading such efforts to providing back-up support. Where DELIVER responsibilities have expanded beyond contraceptives, it has established such committees to serve stakeholders with interest in other supply lines, such as HIV/AIDS-related commodities.

Globally, DELIVER collates data from 14 countries in its Procurement Planning and Monitoring Report (PPMR) to similarly serve stakeholders concerned about countries at risk of contraceptive stock-outs and shortfalls. DELIVER amasses this information on behalf of the Countries at Risk Group (CAR) of the Reproductive Health Supplies Coalition (RHSC). Every month CAR brings together global partners, including USAID, UNFPA, the RHSC, and the World Bank, to review the PPMR compilation of routine data on contraceptive stock levels. CAR stakeholders are thus able to react to or avert stock-outs in the countries covered. Thanks to support from the RHSC and other organizations and from advocates within participating organizations, international donors have become more committed to and more efficient in timely provision of contraceptives.

Increased commitment to making products available leads to increased concern that systems to distribute products be well managed and maintained. DELIVER compiles data on supplies and information about supply chains to increase knowledge of and interest in commodity and logistics management. As it does with the PPMR, DELIVER makes country-level commodity needs visible to stakeholders with resources and positioned to take the necessary action. Through publications, presentations, and its website, DELIVER is also helping make influential international organizations and donors more generally aware of the importance of logistics and supply chain management.

DELIVER has created tools and built expertise to strengthen logistics systems. Its web site gives wide visibility to a substantial amount of useful information on commodities and logistics. However, comparing key informant reports on its use, it appears that the website is accessed much more internationally than within countries. For developing-country Ministry of Health (MOH) partners, this may be because they have limited access to the Internet; other in-country partners were simply not in the habit of using it to access information. Still others with good Internet access and excellent computer skills were unaware of the breadth of information available on the DELIVER website, although they were often familiar with —MyCommodities.”

International partners represented by U.S.-based individuals used the DELIVER website often and praised it highly. However, smaller organizations sometimes were unaware of it or had never tried it. One key informant noted, —Just because a good site is there does not mean that it’s being used and being used properly; there needs to be more support to help people better use this tool

and take it forward.” Other informants complained that the website is difficult for them to use, particularly if they do not have an exact document title.

Given the growing expertise and reputation of DELIVER, a number of donors and international organizations with broad health system interests have approached JSI to use or learn from what DELIVER and predecessor projects have developed. On occasion, this results in contracting for services from JSI Logistics Services, demonstrating an impact beyond USAID funding. To date, JSI Logistics Services has undertaken some 15 projects for private, multilateral, and bilateral donors.

Best Practices and Field Innovations

Besides supporting DELIVER as a global leader in contraceptive supply and logistics, USAID/W also expects it to lead in applying best practices and innovations to the supply chains it supports. DELIVER cites experiments in several countries, but several USAID/W key informants, including some within CSL, indicate that what is going on is neither adequate nor on the cutting edge.

How DELIVER has organized itself to collect and cull best practices and innovations that may apply to supply chain management and commodity logistics is synthesized in the Management and Implementation section below. Here a sample of what has been extracted and applied at country level is summarized:

- Cell phone applications: after several small-scale failures, field experiments are underway in Tanzania, Zambia, and other countries to use cell phones to rapidly collect and upload consumption data from the field.
- Supply chain segmentation: based on both commercial practice and academic theory, DELIVER is positioning supply chain segmentation as central to the discussion and practice of supply system integration.
- System modeling and optimization: using the commercial network modeling software Supply Chain Guru (LLamasoft), DELIVER is computerizing design and redesign for optimum efficiency of supply chain networks of warehouses, transport, procurement, and inventory.
- DTTU in Zimbabwe: borrowing from a beverage industry inventory control approach, DELIVER used delivery team topping-up (DTTU) in Zimbabwe, initially to deliver contraceptives within a fragile-state environment and, under the current contract, to deliver HIV/AIDS and tuberculosis (TB) commodities
- Distance learning: though it is not yet proven in terms of high-volume use, DELIVER has applied this academic practice to extend logistics training to practitioners unable to attend a course.
- Village Reach: DELIVER is collaborating with Village Reach to extract and analyze information from its operation in Mozambique that distributes vaccine to remote areas by linking with a commercial propane trucking business and collecting real-time inventory and distribution data via communications satellite.
- Web-based logistics MIS (LMIS) in Bangladesh: run entirely by local counterparts, this DELIVER adaptation of high-tech communication enables supply chain managers and decision makers to look at near-real-time data on district commodity stocks in remote locations.

Collaborating Partnerships

The evaluation team interviewed key informants of a number of actual or potential partner organizations in the U.S. and abroad. In Tanzania and Zambia, interviews were also conducted within a wide range of organizations collaborating with DELIVER as well as with some DELIVER subcontractors. Most interviews were conducted in person but a few by phone or email.

In Tanzania and Zambia, the interviews with 17 collaborating partners elicited universally positive perceptions. Most respondents gave glowing appraisals of DELIVER's work, particularly in terms of the project's technical expertise in logistics and supply chain management, responsiveness and willingness to share data, and ability to convene and collaborate with a wide range of organizations, from host country governments to donors. Some interviewees, particularly those from organizations whose work also entailed logistics, were more nuanced in applauding and appraising DELIVER. Giving praise to DELIVER for being proactive and responsive, some also found it to be headstrong, even —a *ticheeky*.”

USAID Mission Perceptions

The Evaluation Team interviewed key informants from eight USAID missions. In-person interviews were conducted with mission personnel in Uganda, Tanzania, and Zambia and by phone or email with staff in Ghana, Malawi, Nicaragua, Paraguay, and Zimbabwe. One person working in the West Africa Regional Office was also interviewed.

The questionnaires for these informants contained similar questions relating to DELIVER's in-country performance and technical capabilities. At least one question requested information about DELIVER's relationships with partner organizations, including USAID, and each contained questions to elicit information about DELIVER in that specific country.

With no exceptions, mission staff was positive about DELIVER's technical capabilities and performance. The positive reviews included staff in two countries, Uganda and Malawi, where missions had asked DELIVER to phase out its work in favor of bilateral projects; these decisions were driven by a desire to consolidate management units rather than by disapproval of DELIVER's performance. Often USAID missions expressed hopes that they could provide DELIVER with more resources so that it could take on even more responsibilities.

USAID/W Perspectives

Except for DELIVER staff, the evaluation team interviewed more staff of USAID/W than any other organization. Given the importance of this project and the future-oriented component of this evaluation, this concentration on USAID/W was appropriate and of high value.

Washington perspectives on DELIVER were more uneven than those from USAID staff in the field. While almost all those interviewed thought the project was doing a good job and performing very important work, a number criticized aspects of its performance. Understandably, those more knowledgeable than others about DELIVER are in a better position to note difficulties or project shortcomings. Thus CSL, which reports near-daily interaction with DELIVER, was also the most critical. Those further removed, in regional bureaus or overseeing other health projects, were uniformly positive. Interestingly, the small group of others who have regular contact by virtue of management responsibilities for TO2 and TO3 were considerably more positive than CSL. Like CSL, they were explicit about the severe start-up difficulties, but they saw the problems as now more uniformly in the past than CSL respondents did. By design, however, the team gathered less information on TO2 and TO3 than it did on TO1. Conversely, the team was able to probe for more in-depth perceptions and understandings from respondents in relation to TO1 than the other TOs.

CROSS-CUTTING THEMES, ISSUES, AND CHALLENGES

In relation to technical results and client satisfaction, several cross-cutting themes, issues, and challenges arise from the information collected. The three cross-cutting areas identified—health sector reform, skills transfer and capacity development, and sustainability—and their interrelation led the team to see sustainability as central to the findings and conclusions of this evaluation. Health sector reform, including integration of supply chains, as a project theme offers both opportunity and challenge for DELIVER, as does skills transfer and capacity development.

Sustainability arose as an important theme, issue, and challenge rolled into one. A number of key informants mentioned sustainability; indeed, one social marketing organization in Zambia told the team about its work toward “sustainability markers.” Sustainability also emerged from perspectives gained both within countries visited and in Washington. In particular, countries that benefited from large investments to combat HIV/AIDS asked how to sustain the advances. The language in DELIVER’s contracts seems to have foreshadowed fuller engagement with sustainability, as indicated by recent proclamations on PEPFAR and the Global Health Initiative (GHI).

Health Sector Reform

Twenty-five years ago, health sector reform brought to largely vertical health programs the twin concepts of integration and decentralization. Concerned about impact on their services, this upset many FP managers and some donors, notably the USAID Office of Population. With distribution of contraceptive supplies through its own channels relatively effective, it did not seem possible for FP supply chains to absorb essential drugs without corresponding declines in contraceptive supplies. And in those early years efforts to integrate and decentralize health systems did cause substantial disruption.

Decades later, integration and decentralization have taken hold in many developing countries. Integrated warehousing and transport of contraceptives and essential drugs are increasingly common. In a number of countries fiscal and other responsibilities for supply system operation have devolved from the central level to regions and districts. However, these developments did not solve basic supply system problems. Storage facilities remain overcrowded, management is still weak, and distribution and data challenges remain constant concerns. Most importantly, stock-outs and overstocks did not go away.

Integration

Reality on the ground has shown donors and host countries alike that differences among products and the populations for which they are intended challenge even the best efforts at integration. The question has been how to merge products into one system that works for all commodities and for everyone involved. Twenty-five years ago, given developing country constraints, there was no answer.

Integrating essential drugs into sturdier contraceptive commodity systems was especially troublesome. Compared to the relatively few types of contraceptives needed by FP programs, essential drugs comprise a very large number of products. Unlike contraceptives, these are seldom financed by donors, are chronically under-funded, and are often locally produced. Because they are curative rather than preventive, demand is always there. What makes integration of essential drugs with contraceptives seductive is the fact that both are targeted to the general population and thus supplied to the lowest levels of the distribution system, such as health stations in remote areas.

Today, DELIVER is making headway on integration with ever more sophisticated, computer-based information systems and new tools for data collection, inventory control, warehousing, and transport routing. Even while DELIVER has no official control over the government systems that

—deliver” contraceptives and essential drugs, its interventions are beginning to make it possible to get the right products in the right quantities at the right time to populations at the last mile. DELIVER also helps decision-makers in countries where it works to make good decisions about when and what to integrate.

Countries now supply antiretroviral drugs (ARVs), which did not even exist when integration was new, as well as contraceptives and essential drugs. Some are asking, “Why not integrate these, too?” DELIVER helps countries consider important differences between commodities. For example, ARVs are very high-value products usually targeted to higher level (and far fewer) medical facilities for a special cadre of patient; that suggests a need for more secure warehousing and transport and for different routing. In the end, there is often too little similarity to make it feasible, at least for the time being, to channel these special products with essential drugs and contraceptives. Because ARVs have a different funding model and a separate logistics system, most HIV/AIDS programmers also prefer to keep them separate.

DELIVER is also pursuing new concepts to enhance integration. In the private sector an integrated supply system operates from top to bottom: there is control and visibility from forecasting, financing, and procurement on down through warehousing and distribution. In the public sector, it is the opposite: integration focuses horizontally, uniting supply systems across various programs. DELIVER seeks to embrace both horizontal and vertical integration and apply supply chain segmentation, a new concept from the private sector and academia. This model re-groups and manages commodities according to such criteria as similar handling and transport requirements. For example, all refrigerated goods would form one segment. These relationships are represented by a graphic in Annex A (page __ below).

Decentralization

Budget transfers have often been used to move resources and decision-making to local authorities. Though attractive in theory, they have had decidedly mixed results. The link between central planning—where commodity forecasting and procurement necessarily reside—and district-level performance is often fragile (as the adage says, “The mountains are high and the emperor is far away”). In some cases, the data needed for accurate forecasting at the central level is either not reported or is so inaccurate as to be useless.

Health sector decentralization presents operational challenges for DELIVER. Many more people must be engaged, trained, informed, and involved than when decision-making authority rests at the center. In addition, access to district decision makers is limited by distance, and communications technology may also be lacking.

DELIVER is coping with decentralization, sometimes successfully, sometimes with only marginal results. For example, in Zambia, with a large staff and a budget swollen with HIV/AIDS money, DELIVER is ahead of the curve. Personnel are posted to provinces throughout the country and robust decentralized operations are underway. Although government policy mandates decentralization, however, the MOH has been slow to respond with staff postings and has no intention of devolving procurement responsibility to provincial officials. Meanwhile, DELIVER is using decentralization as an opportunity to work more effectively at the last mile. Pipelines are full and reporting is excellent. Decentralized trainings and meetings are in clear evidence, supportive supervision takes place regularly, and there is good collaboration with partner organizations that also operate in the provinces.

At the other end of the spectrum, DELIVER in Malawi, with limited staff and a much smaller budget, is coping with frustrating circumstances: a faltering government cost recovery scheme, fragile links between central planning and district officials, and too few resources to fill competing needs. With no DELIVER presence in the districts and a relatively small budget, there is limited follow-up to trainings. In this decentralization scheme, district officials often bypass the

government supply system and purchase contraceptives and other commodities locally from the private sector. Because local officials apparently feel disconnected from the central system and have little motivation to report on stocks or respond to inquiries, inventory and consumption data are sketchy. Whether such systemic issues can be addressed by a project focused on only one dimension of a program is a fair question.

SWAp Financing Mechanisms

Where governments have limited resources, donor funds go a long way to support the health sector. However, given the costs incurred by donors for treating HIV/AIDS and other endemic diseases, many are looking for ways to contain or reduce their commitments. In recent years new approaches have emerged that profess to give governments responsibility for their own decisions. The hope is that these new approaches will simplify the reporting and accounting that accompanies donor support.

Principal among the new financing mechanisms are basket funds, which have come into being as part of a broader sector-wide approach (SWAp). Most versions of these basket funds exclude donors from directing contributions to a specific use, such as purchase of contraceptives. With high-level procurement committees able to exercise priorities that are different from those of donors, funds needed for commodities can be diverted to needs sometimes far removed from public health.

Not only are funds for health commodities insecure in SWAp situations, but the funds that are committed come out in —dbs and drabs,” as one informant put it. The erratic and slow release of funds leads to delayed procurement, which is compounded by procedural difficulties deriving from World Bank oversight of SWAp financing.

DELIVER has little choice but to work around these insecurities and delays. It keeps a close eye on country budget allocations and procurement activity, broadcasting forecasts of contraceptive need and sounding an alarm when budgeting or procurement gets off-track. Because USAID does not contribute to SWAp basket funding, it has sometimes been able to offer emergency procurement when shortages loom.

To deal with process delays and budget cuts, some DELIVER country personnel estimate a two-year procurement cycle and apply “art” to forecasts that will be used for budget requests against the pool of SWAp funds. DELIVER country programs have also been known to organize publicity to motivate recalcitrant government functionaries on matters of contraceptive funding or procurement.

Privatization and Cost Recovery Schemes

In a bid to improve logistics systems, a number of African countries have semi-privatized central procurement and logistics. This can occur in a number of ways, such as contracting with outside organizations, as in Zambia, or working through parastatals, such as Tanzania’s Medical Supplies Department. In turn, to support their operations, central logistics units charge a handling fee for the supplies they deliver. Funds for those fees often come from government transfers from central funds (including basket funds) to district budgets. Though this is workable in theory, in practice districts may use the funds allocated for other purposes. In such circumstances impoverished districts end up owing the center large amounts for goods delivered on credit. Over a relatively short period of time, the central drugs mechanism can become undercapitalized and not to provide essential drugs and contraceptives to clients at the last mile.

DELIVER country programs have no operative recourse other than to assist in seeking additional funding or goods in kind. Policy level dialog, messaging, and pressure from USAID may be useful in such situations.

Effect on Family Planning

Over the past 25 years, in African countries where contraceptive prevalence was low to begin with FP did not advance rapidly. In those few instances where some progress had been made in the early 1990s, stagnation or even reversals of contraceptive use rates became an increasing concern. Integration and decentralization have not markedly helped FP in countries where it is most needed. USAID's previous support for logistics through a series of JSI projects dating back to 1986 was largely restricted to contraceptives, a commodity not in high demand in Africa, at least by governments. Broadening DELIVER to cover products more salient to Africa's perceived and immediate needs has opened the way for leading logistic system improvement away from FP, something DELIVER has done with some success. Zambia in particular may be viewed as a model.

DELIVER's Expanding Role

With this project DELIVER has fully entered into the fray related to —frayd” supply systems. While gaining momentum all the while, neither integration, nor decentralization, nor any other reform has produced supply systems that function more efficiently, especially within the lower-tier developing countries where DELIVER works. Even though DELIVER has taken on a much broader range of commodities than ever before, it remains centered on its roots within FP and contraceptive logistics, where it has done well to —led from family planning” even as it embraces integration, decentralization, and other health sector reforms.

DELIVER's expanding role in integrated and decentralized supply systems comes through in much of the information the evaluation team collected. By its own accounting and those of many others, DELIVER has moved to the forefront on both integration and decentralization. Working with often weak systems, DELIVER is developing, testing, and sometimes expanding integrated supply chains nationwide. Emphasis on field-level data to drive commodity distribution and procurement similarly places DELIVER well within decentralization. In the process DELIVER is gaining great experience and building expertise on improving integrated, decentralized supply systems. This stands DELIVER in good stead as it moves to transfer skills and develop capacities for host countries to sustain supply system improvements.

Skills Transfer and Capacity Development

The principal partner for DELIVER continues to be the host country government. The current project's role is to capacitate the local supply system, not operate the MOH system, although the IQC contract (page 9) appears to allow that. What DELIVER does do is strengthen essential subsystems, such as data collection or procurement, and transfer skills to those within the public sector responsible at various levels for supply system operation.

The levels at which skills are transferred and capacity developed emerged as another issue during this evaluation. There are many problems involved. For example, improving supply systems and reporting to the last mile may incur competing costs by further burdening lower-level personnel who also must provide services. Moreover, developing system capacities in-country can take years, even decades.

Human Resources

Within host country governments, there is one main hurdle: human resources. The quantity and quality of government personnel is a long-standing problem, fueled by poverty, corruption, low pay, and red tape. In other words, the countries where DELIVER works are beset by problems that are the norm for developing countries. Government propensity (and sometimes policy) for rotating personnel in and out of positions tends to negate much of DELIVER's training effort, making it necessary to —always be training beginners.” In addition, low morale, salaries, and capabilities sometimes coalesce to challenge capacity development.

Sustainability

Sustainability is on everyone’s mind. The extent to which supply chains supported today can continue as systems to serve the future has captured the attention of many informants in this evaluation. Increasingly, sustainability is also a central theme and challenge within such key USG funding streams as PEPFAR and GHI.

Though neither DELIVER contract emphasizes sustainability, the TO1 contract suggests developing country phase-out plans to —institutionalize the skills necessary for sustainability.” However, the overriding factor is time. Donors value quick gains, because project funding covers relatively short periods and they want something to show for their money. While a project period of three to five years is common, sustainability would not reveal itself until much later. This is not to say that the present model of DELIVER’s in-country work is not productive, just that expectations must be tempered and progress measured in small increments over a much longer period to allow for changes that must be made by and within host country governments. The DELIVER project in its present iteration adds lasting value by instilling a propensity for data-based decision making and demonstrating what can be accomplished with a well-organized logistics system. DELIVER also improves health programs and outcomes by capacitating local personnel to run efficient supply chains. With public health and health systems as high priorities for USAID, projects like DELIVER are groundbreaking efforts to strengthen systems that will sustain development in the long run.

Sustainability is discussed in more detail below:

TECHNICAL RESULTS AND CLIENT SATISFACTION: FINDINGS

This section covers the following points outlined in the SOW for technical results and client satisfaction:

- Progress towards achieving objectives 1 and 2, and related indicators in the task order’s QASP.
- The satisfaction of USAID missions and other clients and partners with the inputs and results achieved to date.

Technical Results: Findings

TO1 objectives one and two relate to in-country supply systems and regional/global advocacy. QASP indicators are specific measures that DELIVER tracks to assess progress at these different levels. In the following, the evaluation team presents several categories of findings, related where possible to specific QASP indicators.

Supply System Strengthening

There is synergy between supply availability and the strength of the systems through which supplies move. The more supplies move efficiently, the stronger the system. As one informant indicated, referring to zero ARV stock-outs in Zambia for the last year, confidence that supplies will be provided leads to better reporting, which leads in turn to better forecasting, and then to greater likelihood that procurements will be timely and sufficient to refill stocks.

Systemic Support: Clearly, systemic support is not as simple as just ensuring that supply chains are completely full. There are multiple layers and moving parts within a supply system: different places where connections can be missed, opportunities for commodities to be misplaced or disappear, seemingly minor missteps that lead to massive problems. The comprehensiveness of logistics management—the many different things needed to increase the availability of commodities and strengthen supply systems—underscore the need for systemic support through a project like DELIVER.

Holistic landscape: The evaluation team finds DELIVER's work with and understanding of supply systems encouraging. However, the project does not seem to have extended systems thinking to encompass the entire health system within which logistics operate. In its concentration on logistics, DELIVER risks seeing commodities as the entire forest. However, the obstacles impeding supply systems are often the same as those preventing the provision of good health care: insufficient human resources, inadequate budgets, and constantly increasing need and demand. Where logistics intersect services, especially at the clinic level, DELIVER needs to become more holistic, helping to find and support improvements for services as well as commodities. Without collaboration and combined effort, improvements risk being counterproductive one part of the system improves, another gets worse. CSL and DELIVER leadership can support more holistic approaches by identifying the most promising opportunities for collaboration on whole health systems and providing help if needed for country programs to move in those directions. The evaluation team learned of some promising opportunities in both Tanzania and Zambia.

A broader project mandate and multiple product responsibilities have moved DELIVER toward involvement with the whole system. Widespread interest in and implementation of integrated supply systems in DELIVER countries suggest movement in this direction. The evaluation team finds, however, that DELIVER has not yet been able to break away from positioning logistics as parallel rather than integral to the health care system. Continuing effort to evolve toward broader system thinking is needed. In Zambia, DELIVER's contributions to computerized client records and essential drug integration provide exciting opportunities. These would probably be more efficiently implemented if DELIVER had a lead rather than a supporting role in these efforts.

Collaborative systems strengthening: The evaluation team speculates that greater effort to work more forthrightly to strengthen the entire health delivery system could achieve more and longer-lasting results. Collaboration is crucial to such an effort, and DELIVER generally enjoys excellent relations with potential partners. Solid organizations, such as Pathfinder in Tanzania and Zambia Prevention Treatment and Care, express interest in doing more with DELIVER, especially within the region and in rural areas. DELIVER seems to perform very well. Staff is motivated and active; in-country programs are highly valued. But is DELIVER focusing on the right things, approaches that will make a difference? The answer is complicated by the ambivalence in the DELIVER contracts about increasing supply availability versus strengthening supply systems.

Parallel recording and reporting systems: Dispensaries, health centers, clinics, and hospitals provide services as well as commodities. Data on services are routinely collected and reported to higher levels. DELIVER currently devotes its efforts and energy almost exclusively to developing parallel recording and reporting systems rather than unifying them with often weak service delivery systems. This is likely to continue until data for services and supplies can both be collected at service delivery points. DELIVER is participating in groundbreaking work along these lines in Zambia, where it is collaborating with CDC on a Smart Card pilot project.

Capacity Building

Training: Given its commitment to the last mile, DELIVER emphasizes and devotes substantial resources to training health personnel in service delivery sites at the periphery as well as in larger health facilities. Since the project began, nearly 30,000 individuals have completed the training courses. The team finds the extensive use of training technically sound and currently necessary, but if broad systemic problems are not confronted, training for small parts of a system will remain a revolving door through which large numbers will continue to pass.

DELIVER mainly trains health personnel from the clinics and hospitals where commodities meet clients. Using adult learning principles and practices in workshop settings, training enables health

system personnel to acquire basic skills in handling supplies and completing commodity-use and re-order forms. However, frequent staff turnover and transfer at lower levels is a common feature of health systems in most resource-poor countries, so DELIVER finds itself, as one critic put it, perpetually —training beginners.” In addition, timely and accurate reports from service sites are hampered because the sites are chronically understaffed and overburdened. Making much-needed commodities available at the last mile, such as ARVs in Zambia, further taxes already overstrained systems.

DELIVER’s commitment to making supply systems work all the way to service delivery sites is admirable. However, training to build local capacity has proven insufficient. To compensate, DELIVER involves both its own staff and mid-level counterparts in supportive supervision and supplementary on-the-job-training.

Beyond the impediments cited, the evaluation team has more general concerns about training results. As USAID encouraged it to do, DELIVER has clearly prioritized and put extensive efforts into last-mile approaches. Before making such huge commitments to training, however, DELIVER could have benefited from some upstream systems thinking. Instead, the project stayed within its comfort zone and trained certainly hundreds and sometimes thousands of lower-level personnel. Given endemic human resource shortages in the countries where it works, this has not been a good, quick, or lasting fix for supply systems already overburdened at the last mile.

DELIVER tracks numbers of facilities submitting reports, a useful indicator of performance improvement and a proxy for results achieved, largely through training. However, it does little to systematically determine how well those trained are actually performing, or even how many are still in their positions. With limited time remaining in the project, this might be worth considering and rolling out within a country (perhaps Zambia where some evidence may already exist) to fully realize the benefit of having such information. The team would have preferred both CSL and DELIVER to have given more thought and effort to systems approaches, such as working with local budgets or instituting data collection systems that compile service and commodity data simultaneously.

Sustainable training approaches: DELIVER is pursuing an approach to sustainable training that would have regional institutions take over its mid-level logistics courses to increase the possibility of continuity after the project ends. At least in theory the high cost and low numbers trained by previous projects in U.S.-based courses make a good case for a regional approach. However, it is too soon to assess results. Informants instrumental in encouraging this regionalization of training direction expressed concern that the Latin American organization, PRISMA would have difficulty finding follow-on donor support, and that the African organization, the East and Southern Africa Management Institute (ESAMI), would not take to either the adult learning methods or needed marketing of the course.

Regardless of whether they provide training to mid-level personnel over the long term, regional institutions do not diminish the need to constantly train and re-train new lower-level personnel. Eventually, changes in government policies may lessen turnover and the burdens on health personnel. However, other options should be pursued country by country. Tanzania has been successful in building the capacity of zonal government centers to train on the new integrated logistics system.

Pre-service training is another promising sustainable avenue to prepare future health as well as logistics workers. Although DELIVER does not yet have much experience in this area and not enough time has elapsed for the concept to be proved, such efforts are underway in the Dominican Republic, Malawi, Paraguay, and Zambia. Particularly promising are the programs

underway at the Malawi College of Health Sciences (in collaboration with Management Systems for Health MSH) and at Zambia's national College of Pharmacy (with substantial support from the Centers for Disease Control and Prevention [CDC]). Getting training into established curricula is a long-term effort; sustained inputs will be needed to produce long-term results. Similarly, while the materials created for long-distance training are impressive, time and data are insufficient to assess the extent to which these are actually being used and with what results. It is also difficult to ascertain whether the materials have promise for training personnel who would not otherwise be able to access training or are more useful to those who have already been trained. The pros and cons of continuing to invest in such programs could be better assessed by academics, such as Professors Henry Mosley or Ben Lazar at Johns Hopkins University, who are experienced in using long-distance training modules to impart and reinforce practical skills and knowledge in health program management.

While not strictly a training approach, DELIVER's International Association of Professional Health Logisticians (IAPHL) is an online community of practice that grew out of logistics training in Africa. Trainers had positive experiences fostering exchanges among trainees but had no means for continuing interaction once training ended. Inspired by the WHO/Hopkins Implementing Best Practices Knowledge Gateway, DELIVER organized IAPHL as a place to share, ask questions, and get answers about logistics and supplies. The site is very active, and IAPHL membership continues to expand. DELIVER presented experiences with this on-line learning community at the November 2009 Kampala conference on Family Planning: Research and Best Practices. The World Bank has recently asked DELIVER to present IAPHL as part of a two-hour video conference on its Global Development Learning Network.

Skills transfer to Government counterparts: The evaluation team differentiates between training for health workers and lower-level logistics personnel and skills transfer to mid- and higher-level logistics managers. Midlevel MOH logistics personnel can be found in central, provincial, regional, and district administrative units. At their level, far fewer people are involved in logistics operations than in end-user service delivery. Thus DELIVER can be highly selective in determining who or which units have the capability and interest to learn new logistics skills and tools and how that learning will be imparted.

Good logistics system practices, forecasting and quantification methodology, and the entire suite of LMIS tools comprise much of the expertise DELIVER tries to transfer through training and coaching. Because DELIVER does not track skills transfer activity other than attendance at formal training sessions, there are no measures of its progress or success. While midlevel skills transfer involves some workshop-style training, DELIVER often uses informal personal mentoring, topical meetings, and day-to-day interaction with DELIVER field staff to build skills and transfer capacities to government counterparts. These methods may be viable approaches, but better results might be achieved by embedding staff with the regional MOH instead of creating a parallel structure, as happened in Zambia, where DELIVER recently opened regional offices to facilitate logistics at the last mile.

TRAINING AND MENTORING PROGRAM CASE STUDY

In Tanzania, SCMS has hired local personnel in each of nine zones to monitor care and treatment delivery points, making sure facilities and zonal stores have stock—to the point of harassing them if orders are not coming in—and also redirecting and redistributing stock across the nine zones as needed. One person from each zone makes up a core zonal team that regularly meets centrally. Because they have hands-on familiarity with facility and supply chain personnel in their zones, the team members bring people in from the National AIDS Control Program to do training. They use real data and practice, talk about it, etc. There is now a core group that is “coming along.”

SCMS in Tanzania also has a mentoring program where partners have regions and are asked to provide a contact. There is a mentoring tool kit, and the team is training partners to do the work. According to a senior manager, “This is the closest we can get to sustainability at the moment.”

At the top level, represented by only a few persons, DELIVER’s usual approaches to capacity building consist of messaging, targeted support, and personal relationships with senior management. On relatively rare occasions DELIVER staff members are seconded to support key staff within a ministry. It was not always clear to the evaluators how much and what skills such seconded staff transfer; however, their presence within a ministry has other important benefits.

Though the evaluation team found some exciting exceptions, DELIVER seems to have had only marginal success in transferring the skills associated with its unique expertise. There are viable reasons for this, mostly related to lack of absorptive capacity within the host country. At higher levels, time and *entrée* are a challenge. Nevertheless, the team believes that DELIVER could do more to transfer skills and build capacities,

particularly at the higher levels. The team understands that in LAC DELIVER has over several years invested in regional training and exchanges among members of country contraceptive security committees. These experiences might provide a basis for similar cross-country efforts in sub-Saharan Africa. However, within each country DELIVER must also systematically identify and attempt to fulfill opportunities for skills transfer at mid and high levels.

Where relations with ministry counterparts are well developed, DELIVER should be able to identify and foster within select, sometimes subordinate, ministry staff particular logistics skills and tools. Perhaps pairing ministry staff who demonstrate computer and quantification skills with young DELIVER staff also acquiring such skills could be a successful approach. In Tanzania, for example, a DELIVER staff member has been building a positive relationship with a supply officer recently assigned to the Division of Family Planning.

Examples of successful skills transfer: Amid the difficulties there are nevertheless some examples of solid skills transfer at mid and even higher levels. Most notable among the latter are the contraceptive security committees that DELIVER has formed and supported in presence countries. These committees function as a forum for educating stakeholders about contraceptive procurement needs as well as tools. With government counterparts often having key roles, the committees provide opportunities for skills transfer. However, the extent to which this occurs depends not only on DELIVER but also on government capacity and receptivity. With government participation in such committees varying from active partners to passive figurehead, intentionality about what skills may be transferred when is critical.

During country visits, the team also uncovered examples of successful skills transfer. For example, in Tanzania, training of lower-level personnel in the integrated logistics system has largely been transferred to the zonal training centers, MOH entities that operate as parastatals. DELIVER has transferred to some of these centers not only pedagogical skills but also some capacity for administration and management and is moving towards transferring skills for follow-

up supervision. This has occurred in spite of (or perhaps because of) DELIVER having few resources and staff in Tanzania. To have nationwide impact with only five full-time staff, not all of whom work on TO1, DELIVER has used capacity development to expand its reach.

In Zambia, DELIVER has quadrupled the resources as Tanzania and employs more than 100 staff. DELIVER/Zambia has also supported skills transfer and capacity development at the central level, with potential for long-term impact. The Logistics Management Unit (LMU) was initially organized and staffed by DELIVER as a needed data-based interface between central storage and distribution to service delivery sites. Now in its third year of operation, LMU, with its staff and attendant software management, is being handed over to the MOH as DELIVER personnel withdraw. The process seems to be proceeding smoothly, and DELIVER salary support is being phased out. Prospects for LMU continuance are high, particularly given its integral role in managing data to link supply storage with field distribution.

Skills transfer to local hires: Interestingly and importantly, DELIVER has done very well in transferring logistics and management skills to its own cadre of local hires. Most local staff members are likely to remain in country and could become permanent resources for logistics, or for development more generally. As valuable as what they are gaining in commodity and logistics skills are the lessons they are learning about how to organize to get things done. In the future, the most experienced and talented among them will likely continue supporting development, probably as leaders within local NGOs, international organizations, and civil society. Investing in local staff may well be among the best uses of DELIVER resources.

Host government desire for skills transfer: **Host governments with some capacity and interest in logistics want more skills transfer at the mid and upper levels.**

In some ways, DELIVER has been the victim of its own success. Always responsive, often highly competent, DELIVER is asked by MOHs and USAID missions for more than was agreed to, more than the project budget can support, and sometimes things that cannot be done—at least not yet. DELIVER’s mandate includes skills transfer to the MOH, and the team heard repeated requests for more of this, but the skills requested are often for management, planning, analysis, and even “word smithing.” Such skills may be more effectively imparted through an MBA program or even basic college training than through a commodity logistics project. At the opposite end of the spectrum, ministries sometimes find DELIVER a convenient adjunct that could do a great amount of the work for them without much effort on their part. Clearly, both host commitment and sufficient competency to gain new skills are necessary for effecting skills transfer.

Overall, the evaluation team found that although DELIVER does excellent work, it does not always or even often transfer skills to counterparts or local organizations. DELIVER not only needs to produce project results but also do more to transfer skills and build the capacities of the organizations with which it works most closely.

Innovation and Best Practices

Within countries and at the central level, a number of innovations and best practices have been identified and some field-tested. One of them is the DTTU inventory control approach in Zimbabwe, which has proven so effective that DELIVER is adapting it for other commodities (e.g., HIV rapid test kits, nevirapine for prevention of mother to child transmission of HIV, and some essential drugs). Supply chain segmentation, which the home office identified as an important advance that increases supply chain efficiency by organizing for product and customer commonalities, is another recently identified innovation.

Exploration and identification: Despite such efforts to capture new ideas, technologies, and best practices for widespread application, DELIVER's core team has not sufficiently explored contributions that other sectors could make. For example, the military—an organization dependent on its logistical effectiveness—has not been tapped. Similarly, expertise within major consumer-oriented or technology-driven corporations remains largely unexplored. Struggles with cell phone applications to collect data from field sites, for example, could be more readily solved by getting direct advice and assistance from companies invested in selling such technologies. Corporate social responsibility (CSR) programs within almost all major business enterprises provide avenues for public-good programs like DELIVER. However, the evaluation team found little effort and not much interest within DELIVER to become more knowledgeable about what CSR programs could offer. Many CSR units could well be attracted to and provide technical resources for the opportunities a project like DELIVER could make available. Participating in the annual Business for Social Responsibility Conference would help DELIVER become knowledgeable about CSR quickly.

Another missed opportunity is the Ashoka Foundation, a global association of the world's leading social entrepreneurs. Among Ashoka's network of social entrepreneurs there may well be other enterprising efforts similar to Village Reach to extend logistic supply lines.

Adaptation and Field Application: DELIVER is already adapting, field-testing, and disseminating innovations and best practices. For example, the Bangladesh office has established a web-based LMIS; in Nigeria, with help from MIT-Zaragoza's International Logistics Program, a theoretical framework for supply chain segmentation has been developed and tested, with more refinement to come. In Zambia and Paraguay, the project used global positioning system and geographic information system tools to geo-reference health facilities visited during routine Logistics Indicators Assessment Tool LIAT activities, enabling logistics managers to quickly interpret localized trends in supply levels, identify areas of concentrated stock-outs or overstocks, and investigate what caused these.

Client Satisfaction: Findings

As the interviews made clear, DELIVER's expertise and skills in supply chain and logistics management are highly valued. Informants overwhelmingly affirm that DELIVER has an excellent reputation at both international and country levels. This has had positive results for USAID and JSI in terms of interest and investment attracted to DELIVER itself and to JSI Logistics Services. Findings in relation to various DELIVER clients follow.

USAID

USAID missions expressed high levels of satisfaction with DELIVER, in terms of both its expertise and its performance. However, within USAID/W reviews on its performance were decidedly more mixed. Proximity is not the only operating variable: USAID missions are at least as close to DELIVER's in-country work as CSL is to DELIVER/Roslyn. To some extent, difficulties experienced during project start-up continue to influence relations between USAID/W and DELIVER. However, at a deeper level there may have been stark differences between JSI and USAID about what the one was proposing and the other expecting. It may well be that DELIVER's orientation toward replicating and expanding what it had done to achieve acclaimed success in a long series of successful logistics projects contrasted with CSL expectations. Not only had DELIVER's mandate and potential vastly expanded with the IQC but new staff had also joined CSL. Disjuncture during the launch of DELIVER may therefore have been because one side considered the project a renewal, though an expanded one, and the other considered it as a new departure requiring new and different approaches. .

International Partners

The current project, with its broader range of commodities, has called for collaboration with a broader array of international organizations. For example, in November 2009, DELIVER presented its approach to commodity security and supply chain management to members of the UN's Inter-agency Pharmaceutical Coordination (IPC) group. After the group discussed common challenges and approaches, Dr. Hans Hogerzeil, director of the WHO Essential Medicines Programme, praised DELIVER's evidence-based approaches and expressed interest in working with it to develop a scientific framework of good public-sector logistics practice. In October 2008 DELIVER collaborated with the Council of Supply Chain Management Professionals at its Global Conference, co-leading with MIT-Zaragoza a track dedicated to international public health and humanitarian supply chains.

DELIVER is also a respected contributing partner of the RHSC, an organization that has expanded considerably since it was established almost 10 years ago.

Expanded presence and stature: Technical consultations and partnering with organizations like the WHO and the World Bank provide growing evidence that DELIVER has expanded its presence and stature. From its articles and web site content as well, the evaluation team finds DELIVER moving toward a level of international collaboration that draws more on expertise within supply chain management and logistics than on FP. This in turn helps foster interest among development organizations in logistics and supply chains as areas for primary development investment.

VI. IMPLEMENTATION AND MANAGEMENT

In this section the evaluation team addresses two principal questions: Has JSI implemented DELIVER well? Has the project been well-managed? Implementation concerns the actions and activities fielded to achieve goals and objectives; management is the organizational structure, administrative direction, and support provided for implementation.

While implementation is a JSI responsibility under both contracts, CSL is the substructure within USAID/W to which project oversight has been delegated. The USAID Office of Population and Reproductive Health within the Bureau for Global Health has delegated management for both DELIVER contracts to the contracting officer's technical representative (COTR) within CSL. The COTR also has some responsibility for coordinating with other task orders and with USAID missions providing field support funding to DELIVER.

The SOW clearly specifies that this evaluation cover both JSI and CSL responsibilities for DELIVER. To this end, the team looked at management as exercised through different levels within the central office of DELIVER as well as within some of the countries where DELIVER operates. At the request of the COTR, the evaluators also looked at how CSL is managing DELIVER. To the extent that the COTR has delegated managerial oversight to other CSL staff, their responsibilities are also assessed. However, neither the SOW nor this evaluation addresses the work of OAA, a separate USAID entity responsible for contract administration.

SYNTHESIS OF RESPONSES TO SOW QUESTIONS

Over years of commitment to contraceptive logistics, JSI coined the mantra —“a product, no program.” As a corollary, JSI has since developed a litany of six —“rights””: the right products, of the right quality, in the right quantity, at the right place, at the right time, at the right cost. To synthesize and organize responses to the 11 SOW implementation and management questions, the evaluators adapted the JSI litany as follows: To manage and implement this project has DELIVER had the right staff? working with the right partners? in the right places? at the right time? for the right cost? with the right focus?

Right Staff

CSL and JSI staff members who manage and support DELIVER are seen as highly qualified and very engaged. They are well regarded all the way from the DC and Rosslyn-based staff responsible for oversight and management through the centrally-based staff who provide technical and administrative support to country program leadership and local staff who implement and manage project activities at ground level. Nevertheless, a few interviewees within USAID/W raised concerns about the types and backgrounds of people JSI has recruited and employs both centrally and in the field.

One CSL perspective is that from the beginning this version of DELIVER should have marked a new departure for JSI that would be reflected in staff recruitments. There were expectations that JSI would bring on staff with relevant private and commercial experiences to meet the expanded challenges. Some USAID/W personnel therefore expressed their belief that JSI had only —“recycled and reassigned” previous staff. Information collected from informants within DELIVER provides a basis for assessing the extent to which this view reflects reality. The operational ethos of JSI that emerged during these interviews is a further touchstone to assess how realistic such expectations were.

In their responses to SOW questions, USAID and DELIVER agree that predecessor projects served as an experiential training ground to develop within JSI a solid core of specialists in contraceptive logistics. Indeed, USAID expected to capitalize on this capacity both by extending

DELIVER to a broader range of products and by mobilizing global and regional interest in commodities and logistics.

JSI was well-known to USAID/W and CSL when the DELIVER contracts were awarded. Typically, JSI recruits generalists, then gives the most promising of them opportunity to grow in expertise. It is not surprising, therefore, that many current DELIVER staff members have risen from the ranks. In fact, many in the larger SCMS project similarly grew up as logistics professionals within the earlier Family Planning Logistics Management (FPLM) and DELIVER projects. As logistics as a field of learning and practice becomes increasingly professionalized, this may change.

At the same time, many who joined DELIVER, some during the previous DELIVER project, brought with them solid private sector experiences. This positioned JSI well to address the new DELIVER project with private sector expertise, often in high-level positions. For example, the TO1 director worked in manufacturing finance, private retail, transport, and commercial economics. Similarly, the field technical director has pharmaceutical manufacturing and industry background. A number of other central staff also came from private and commercial backgrounds, and some have private supply chain experience. Impressive numbers of local staff, with whom the team met in Tanzania and Zambia, also have private, often pharmaceutical, backgrounds. However, those with apparently relevant logistics backgrounds still faced steep learning curves in adapting to the developing country, public-sector settings where DELIVER operates. Lack of ownership and control over assets, systems, and personnel is only one contrast with private sector operations.

Some at USAID/W also expressed concern that not enough has been done to recruit local staff for DELIVER field positions. This was seen to be particularly the case at the highest levels of in-country management. Interestingly, personnel of missions within eight countries who were interviewed did not express the same view. Mission staff reported respect and appreciation for DELIVER's country leadership, including those in three countries where country director positions continue to be held by U.S. staff of DELIVER.

For its part, JSI presents an impressive picture in the high percentages of nationals hired for in-country programs.³ The evaluation team observed this first-hand during country visits and learned more from interviewees in other DELIVER countries. Country director positions in Ethiopia, Mozambique, Tanzania, Zambia, and Zimbabwe are held by U.S. expatriates, but host country nationals hold those positions in Bangladesh, Dominican Republic, El Salvador, Ghana, Madagascar, Nepal, Nicaragua, and Pakistan. In the remaining five presence countries, third-country nationals from within the region hold these positions.

Informants within DELIVER, at both central and country levels, were very positive about staff recruitment and development. As with JSI generally, DELIVER is committed to building the capacities of line staff, especially nationals working within their own countries, to assume greater responsibility. Moreover, some conservatism on JSI's part in hiring nationals to run country programs may sometimes be warranted: outsiders offer distinct advantages for avoiding the appearances and likelihood of corruption prevalent within procurement and logistics operations in developing countries. Finally, USAID/W does not credit DELIVER for regional staff who have risen within JSI to high-level positions centrally as well as in country. This is the case for example with the current representatives in Malawi, Nigeria, Paraguay, Rwanda, Uganda, and the LAC region. Nationals of other countries, either resident aliens or naturalized US citizens, fill mid-level positions within the central DELIVER TO1/IQC structure as well. Because all leaders

³ See *Self-Assessment*, 2009, p. 77.

of country teams in Rosslyn are from the regions, at least in theory they are positioned to affect change from a field-driven perspective.

Some at USAID/W also expressed concern about DELIVER's use of subcontractors. This along with other partnerships is considered next.

Right Partners

The DELIVER proposal and contracts specified that several subcontractors have critical roles in implementing this project. However, as interviewees within DELIVER and USAID/W report, subcontracting has had mixed results. Some subcontractors, such as The Manoff Group in communications, have effectively taken on the roles intended. Others, such as Abt Associates, were engaged only in specific tasks, in Abt's case to develop and test a logistics system costing tool. Although DELIVER has worked with some subcontractors with good results, the project admits that efforts to engage others to fill critical needs have fallen short.

Notable central-level omissions that subcontractors were designated to fill relate to health economics and warehouse logistics. The latter is only now being addressed by a recruit that Fuel Logistic—Pharmaceutical Healthcare Distributors (Fuel PHD) is seconding to DELIVER. Abt Associates was to have provided health economist expertise, and two Abt staff members were initially seconded to DELIVER part-time. Subsequently, professional considerations on the part of these individuals altered the arrangement, leaving a hole within DELIVER that was only partially filled by work orders under the contract for specific activities.

For global and regional advocacy, DELIVER is reported to have worked well with a number of partners that provided avenues for knowledge building and expanded interest in commodities and logistics. Internationally, these partners notably include the RHSC, which represents multi- and bilateral donors and other interested organizations. DELIVER has also successfully engaged with international organizations whose interest in commodities and supply chains as part of health system development is growing, among them WHO, the World Bank, and UNICEF. UNFPA, which has made a long-term investment in contraceptive procurement, continues to collaborate with DELIVER, particularly in-country.

In addition, JSI, with support from other donors as well as some direct support from DELIVER, has successfully nurtured and is now handing over to UNFPA/Copenhagen the Reproductive Health Interchange (RHI), which tracks shipments of major donors and makes the information available on the web. As part of its support JSI has seconded a former DELIVER staff member to Copenhagen to help operate and expand the RHI.

At the regional level, with strong encouragement and central-level USAID support, DELIVER has engaged two organizations, PRISMA and ESAMI, to take over DELIVER's logistics management training course. This substantial investment, about \$350,000 a year, is having mixed results. At this point it is not clear that the activities and expertise of PRISMA and ESAMI can be sustained without direct DELIVER support. While withdrawal of donor support generally in Latin America may lead to lack of funding for the PRISMA courses, ESAMI, with its broader academic interests and deep bureaucracy, may not take to the adult learning practices and marketing needed to maintain the courses.

MSH's Leadership, Management and Sustainability Project (LMS), which CSL brokered to partner with DELIVER to provide managerial support for both ESAMI and PRISMA, shares these concerns about sustainability. The need for sustainable logistics training will clearly continue in Africa and may require finding more responsive institutions to invest in. The evaluation team was pleased to learn that in 2010 the Bioforce Institute of Development is providing a one-week basic logistics course for francophone Africa in partnership with DELIVER and joint funding from USAID and the WHO.

In-country partnerships offer another important avenue for DELIVER success. USAID missions are foremost among all DELIVER's in-country partners. Within all eight countries where the team interviewed mission staff, they reported excellent working relationships with DELIVER and great appreciation for its work. Though the team recognizes that responses to evaluators reviewing DELIVER from a central project perspective may not be totally candid, the consistency of these reports from mission staff at various levels give some credence to the opinions. Even where missions have shifted to bilateral project support, such as Uganda and Malawi, DELIVER's performance was said to have not been the determining issue.

Other USAID-supported projects for health care improvement are partners of great interest to DELIVER. As was particularly well documented in interviews within the countries visited, all such projects give DELIVER very high marks. One told the team, —It would be a nightmare if we didn't have DELIVER to arrange [logistics] for us,” and another said, —Working with JSI has been excellent.” Other in-country development organizations and programs similarly attest to close collaboration with and place high value on DELIVER's operations. Often mentioned were the quality of the data DELIVER makes available and the project's respectful and useful convening and coordination of partner organizations, including donors.

Using local private sector and NGO partners is another avenue of interest for DELIVER. The NBM encourages projects to use local partners in their activities. While DELIVER listed fairly large numbers of such partnership arrangements in its *Self Assessment*,⁴ the results have not been as impressive as was hoped. DELIVER cites the relatively weak capacities of such organizations and can point to numerous contracted activities that did not produce needed results. This has set the project back. In Tanzania, for example, the local firm contracted to write software to capture data in the Integrated Logistics System produced only a promising template, not the needed program.

The most important local partner for DELIVER and most other USAID health care projects is the host country government. Furthermore, USAID's continuing commitment to the public sector as the primary means to serve those in greatest need means that in all countries the partner that counts most is and should be the MOH, alone or in collaboration with the Ministry of Finance and occasionally the Ministry of Education. DELIVER extends these local partnerships to other government entities, sometimes parastatals, responsible for building and maintaining commodity supply chains or providing training. Informants from host governments were highly complimentary of DELIVER, often asking it to do more, particularly in skills transfer.

With public partnerships DELIVER is also experiencing mixed results. On the one hand, not enough has been done to transfer needed skills; on the other, many governments with which DELIVER works are not ready to absorb and use the skills DELIVER could transfer. This is a major dilemma for a project charged to strengthen systems but aware that many countries will be unable to sustain the systems it is strengthening.

Right Place

Both USAID/W and DELIVER affirm the last mile as the place-based priority. Getting commodities to service delivery points where patients receive the products has been important since this project began. But DELIVER has a dual mandate: to increase the availability of commodities and strengthen the supply chains through which they are provided. Ideally, both could be done, but that is not particularly realistic for sub-Saharan Africa. Thus, choices are made. In some countries, the last-mile orientation can drive DELIVER to emphasize getting products out over improving the systems through which they move.

⁴ see *Self-Assessment*, Table 3, pp. 12–13.

While getting commodities to service delivery points is an acknowledged priority, two important —“first mile” issues have received only minimal attention: financing and procurement. If the money is not there and supplies are not being procured, what hope is there for getting commodities to the last mile? In its present iteration the project has as little scope for resolving financing problems as it has for reforming the civil service. Thus DELIVER works around these issues and tries to address financing via advocacy as part of commodity security.

Procurement is an altogether different issue. While there is scope for procurement technical assistance—assistance to host country procurement efforts—within current TO1 workplans, the area seems to have been marginalized. The reasons, though unclear, may have to do in part with new government attitudes toward all things financial: —“It is none of your business.” More than once the evaluation team was given the explanation that this is presumably an offshoot of budget support within the SWAp basket funding framework and theoretical transfer to government ownership. It is important for a project like DELIVER to be useful in emergency response situations where products are simply not available. Zimbabwe, whose strong history of FP has been complicated in recent years by economic collapse, is a good example of DELIVER shifting from systems building to commodity provision. The DTTU system ensures availability of commodities at sites throughout the country. There, DELIVER is credited with having averted large-scale stock-outs that would have undermined years of FP program effort. On a smaller scale, as Liberia emerges from years of civil strife, DELIVER is making some products available even though the country is largely without an operational health care system.

Though neither DELIVER nor CSL is passive about where DELIVER works, both short-term assistance and long-term presence are field, not central, decisions. It is encouraging that relations have been developed with and funding received from the USAID West Africa Regional Office. It is important to explore the future of contraceptive and commodity logistics strengthening in parts of Africa, such as francophone West Africa, where the needs are great. Another useful regional investment comes from the LAC Bureau. Building on several successful programs in contraceptive logistics in the region, a relatively small investment (\$400,000 a year) goes a long way in helping DELIVER to capitalize on previous investments by promoting sustainability.

As with place, timing is not completely under DELIVER’s control. Nevertheless, there are considerations about when investments by DELIVER may be best timed.

Right Time

Resources are not always available at the right time or readily prioritized to distribute commodities and strengthen supply chains. Clearly, DELIVER plays a useful role in providing some emergency supplies, as in Liberia and Zimbabwe, but long term DELIVER aims to strengthen the systems through which supplies are provided. This more daunting task depends heavily on timing and the readiness of countries to move from donor dependency to sustainability.

PEPFAR and President’s Malaria Initiative (PMI) created opportunities to expand and fill commodity supply lines in a number of developing countries. Their funding has made HIV/AIDS and malaria commodities (some of the latter under TO3) available where and when they are desperately needed. Given this impetus, the time was right for the DELIVER mandate to expand. Perhaps limited to contraceptive commodities for too long, DELIVER can now apply its logistics expertise more broadly in the health sector. While it does overlap with other supply projects, DELIVER has a broader mandate than just ensuring that products get to where they are intended.

In a world becoming increasingly connected, supply chains are moving toward integration. SWAp funding signals that some donors as well as many countries hope to move away from donor dependency. Fewer donors are providing products or direct technical assistance because of their contributions to basket funding. Whether this will translate into increased

host country contributions to sustain their supply systems with minimal or no donor assistance remains to be seen.

Is the time right for sustainability? Clearly not all countries where DELIVER is working are ready, but some may be. After cost is considered in the next section, the question of sustainability is taken up again in the section on the right focus for DELIVER activities.

Right Cost

Right cost pertains not only to funds that DELIVER manages but also to what it costs to run the systems that DELIVER supports. To get a better handle on what logistics actually cost, DELIVER has developed a tool to estimate the full costs of a given logistic system. Created and tested in Zambia by Abt Associates, this tool is now being tested in other countries. Good estimates of what operating a logistics system actually costs yield a variety of useful information. Countries with reliable cost information can be more realistic in making decisions about their supply systems, including present financing needs and how present costs compare with projected costs for better systems. Comparisons between countries will also inform DELIVER and the field about efficiencies and possible savings in logistics management.

According to country-level interviews, DELIVER plays a pivotal role by estimating future commodity costs. Using tools like contraceptive procurement tables (CPTs), DELIVER forecasts a country's commodity needs. Seven-year cost projections for ARVs in Zambia are providing, for example, a solid basis for discussing long-term needs and treatment regimens.

With broad participation by in-country partner organizations, DELIVER produces updated CPTs and similar forecasts annually. These form the basis for calculating future procurement costs, itself an exercise that engages all partners, from those providing to those funding services. Thus, though trying to maintain some neutrality, as one country representative put it, DELIVER is well-positioned to support advocacy for commodity funding from donors and governments.

From interviews the evaluators also ascertained that within DELIVER funds seem to be well managed and tracked. No concerns about this were expressed by USAID, either centrally or in the field. DELIVER finance and administrative (F&A) staff interviewed seem highly organized and well integrated into the routine operations of DELIVER. Not only do F&A team members meet regularly with DELIVER technical teams to review activity expenditures, they also are part of country backstop teams to provide input on field support expenditures and projections. Whether USAID is also getting —good value for money” at central as well as country levels may be inferred, though not quantifiable, from the generally positive responses of USAID informants generally.

Right Focus

USAID conceived the NBM as a list of just six components useful for DELIVER to do. Neither new nor a model, this approach faltered by not fully gaining commitment from DELIVER, which was particularly resistant to tracking progress on certain components. It seems to the evaluation team's that the NBM was an incomplete effort by USAID to shift the direction of DELIVER toward sustainability. However, because this was never clearly stated, nor indeed specified within the DELIVER contract, JSI ended up embracing the model with reticence, confusion, and mixed results. Though DELIVER reports regularly update progress in terms of the NBM components, this tends toward qualitative assessment rather than purposive tracking.

The governing contracts obligate DELIVER to both strengthen the supply chains through which commodities are provided and transfer some of the skills needed to maintain them. However, as some informants articulated, there is a catch-22: without supply lines full of needed product, there is little incentive to make the systems function, let alone strengthen or sustain them.

Though the governing contracts obligate DELIVER to strengthen supply chains, they do not require DELIVER to invest to ensure that the systems it strengthens will be sustained. While sustainability could feasibly have been included as part of (and has become central to) DELIVER's work in Latin America, it would have been premature to give it priority in a project focused largely on sub-Saharan Africa.

This raises the question for Africa on sustainability: If not now, or in the near future, when? The answer is a qualified "soon" for some countries, like Ethiopia and Rwanda, and "not for a long time" for many others. Even in Zambia, a country that has made dramatic advances in getting ARVs to people living with AIDS, this remains a dilemma. In Zambia, where some efforts are underway to strengthen supply systems generally, the time for considering sustainable systems may be approaching, but the horizon is still long-term. Not only would the costs for commodities alone be considerable, but the requisite transfer of skills where human resource capacity is beset by many challenges would be formidable.

CROSS-CUTTING THEMES, ISSUES, AND CHALLENGES

One theme that ran just below the surface in responses to some questions, particularly those of central staff of JSI and USAID, was distance between recipient and donor. Some donor-recipient division is inevitable, even acceptable, particularly if it does not undermine performance. However, given JSI's solid performance on within predecessor projects and close collaborative relations with USAID throughout a long history, this finding of disjuncture between the two staffs was somewhat surprising.

Both USAID and DELIVER recounted start-up difficulties that persisted through at least the first year of the project. These were stated to have occurred with the shift of procurement from USAID/CSL to DELIVER under the TO1 contract; the MIS developed in-house to track commodity systems and indicators for this project; and the imposition of the NBM as a guide to implementing the project.

Many of those interviewed stated that the early difficulties had for the most part been resolved, or at least relegated to acceptable levels of minor discord. However, some were forthright about continuing tensions; for others, that opinion emerged in response to particular questions. Rather than being resolved, hard feelings and accompanying disconnects seem to have simply gone underground.

Also interesting but separate: a division between central offices and field operations emerged. This was neither surprising nor unanticipated: some home versus field tension is part of the territory. Within JSI, such occurrences were seen as completely normal and manageable. More surprising was the remove of USAID missions from USAID/W. While CSL maintained that its principal role is to serve missions, beyond DELIVER's in-country work missions did not express much interest in or awareness of what USAID/W hoped to accomplish with this project. Fuller engagement through visits and high-level meetings between CSL and mission staff will be important, particularly if certain countries emerge as focal points for sustainability.

On several occasions, USAID missions have opted for bilateral projects even in countries where DELIVER is given high marks for performance. This may be symptomatic of the complexity within which USAID foreign assistance for health improvement now operates. Spearheaded by HIV/AIDS programs, there now exists a broad array of centrally funded as well as non-USG entities involved in health. PEPFAR has filled pipelines with emergency relief supplies for HIV/AIDS patients; though these are much needed, recently concerns have arisen about sustaining gains and the costs over the long term. With PEPFAR has also come new management within USAID field offices, as well as activity by a number of private foundations. In addition, in some countries the CDC and the Peace Corps, independent USG agencies, have expanded to

combat HIV/AIDS. Basket funding, multilateral and bilateral support through SWAps have added other divisions and tensions.

There is increasing pressure on USAID to position sustainability within successor projects. A close reading of the DELIVER contracts shows foresight in relation on sustainability. Only three years after they were awarded, as the long-term cost implications of PEPFAR and PMI mounted up, the new administration began redefining development assistance for health. The president's GHI gives priority to integration and sustainability. The challenge for USAID will be to promote sustainable systems without pushing or imposing sustainability on countries where it is unattainable, at least within the next five or ten years.

IMPLEMENTATION AND MANAGEMENT: FINDINGS

This section is organized around three main points that the SOW asks the evaluation team to cover:

- The extent to which the project has implemented the business model mandated by the CSL
- How the project's organization, staffing, management, and interface with CSL have helped or hindered its operations
- How TO1 has benefited from or been constrained by the addition of two separately managed task orders under the DELIVER IQC, and the sharing of specific functions by the task orders.

Implementation: Findings

Leading from FP and its converse, leading from other commodities to FP, are good practices that DELIVER has used well. With DELIVER drawing on such a long, strong history with contraceptives, FP is part of this project's DNA. By securing contraceptives within integrated supply chains, DELIVER is ensuring their continued availability. It would be useful to have DELIVER comprehensively document this aspect of the project.

Innovation

DELIVER leadership for FP, both in the field and globally, has mostly met USAID expectations. However, in efforts to find and field innovations to improve and strengthen supply systems, DELIVER has fallen short. The evaluators concur with USAID/W that DELIVER has not been innovative enough. For its part, DELIVER points to a number of documented innovations that it has identified and implemented. While acknowledging that it could have done more, DELIVER also cites field as well as counterpart constraints and acknowledges that it cannot yet show the impact of the innovations it has fielded. With considerable core funding to support innovation, more could have happened. However, some informants offered warnings about top-down innovation: "innovation for the sake of innovation" is not prized; "solutions in search of problems" is not the way to go; and "when ideas come from the USAID side, they are more likely to get funded."

The presumption of both USAID/W and DELIVER/Rosslyn is that the most useful innovations will come from knowing more about what the private sector is doing and can provide. However, recruiting staff with commercial experience has not and may not lead to that result. Central and country-level staff members with private experience have had learning curves just as steep as generalist recruits. Innovations evolve so quickly that new alliances and liaisons with the private sector may be more important than background, although similar background experience sometimes does facilitate bridging across public and private sectors.

There may also be internal reasons why DELIVER has not been more innovative. A few respondents perceived DELIVER as somewhat self-satisfied and inward-looking; that may have worked against reaching outside for innovation. Furthermore, after the start-up difficulties DELIVER seemed to become more reactive in relations with USAID/W, being “very responsive” or even “overly responsive,” as some DELIVER key informants characterized relations. This may have inadvertently contributed to DELIVER being less creative and taking fewer risks. This in turn could have led USAID/W to push its own innovations into workplans, resulting in activities even further detached from what DELIVER field offices perceive as needed.

The evaluation team saw some evidence of such disconnects in Tanzania. ESAMI, the organization designated to take on a major logistics training role in Africa, is based in northern Tanzania. Yet until recently, and then only as observers, the Tanzania field office had given ESAMI no role in the extensive in-country training DELIVER has been supporting. Though timing was a factor, had Tanzania been initially involved in how to institutionalize training in Africa, proximity would likely have led to earlier use of ESAMI. Similarly, there was little local take-up of early centrally funded experiments with using cell phones in Tanzania to gather consumption data from remote sites. Though DELIVER cites lack of MOH interest, the state of the technology could also bear some responsibility for the false start. Currently, a working group of several organizations based in Tanzania, including DELIVER, is generating interest and forward movement by exchanging experiences on cell phone applications in the field. Timing and experience could also have been factors: successful use of cell phones to collect malaria data in Tanzania has renewed local interest in such applications, and the technology has also advanced.

The evaluation team, as well as some in-country informants, found at least one centrally driven innovation to be of merit. Supply chain segmentation, which DELIVER is adapting from conceptual work by MIT-Zaragoza, an academic institution committed to private sector solutions in logistics, has breakthrough potential. Well-described in a DELIVER article, segmentation provides both a multidimensional rationale and a practical roadmap for integrating supply systems. This could prove useful as interest and actions to integrate supply chains gain momentum. However, perhaps again due to disconnects between the field and the center on innovation, field-level integration efforts in both Tanzania and Zambia have not yet served as sites within which to operationalize segmentation.

Apart from brief forays into academia, which yielded the potential breakthrough of supply chain segmentation, DELIVER has yet to widely engage outside perspectives for innovation. Possibilities not yet explored are the logistics expertise of the military, which could be readily accessed at the War College; the widespread CSR movement, accessible through organizations like Business for Social Responsibility; or social entrepreneurs worldwide, as envisioned and networked by the Ashoka Foundation in Washington, DC.

Furthermore, sometimes the best innovations come from within, not without. Fuller involvement of creative staff now based in the field will turn up not only problems that need solutions, but also how some potential solutions could work. It is disheartening that field programs are only peripherally involved in drafting the core workplans that feed and seed innovation.

While some disconnects have occurred between innovations generated in Washington and implementation in the field, innovations started in one country sometimes gain traction in another. The DTTU developed in the Philippines and adopted in Zimbabwe has potential for application in Nigeria. Web-based LMIS developed in India and adopted in Bangladesh might be applicable to many other countries. It is important to keep in mind that low-tech innovations that work are more useful than high-tech ones that do not. For example, a newsletter on logistics created in Zambia has been adopted and is being produced in Ethiopia.

The evaluation team found such field-driven transfers of great interest. The monthly reports, for example, provide a useful way for field staff to gain quick, concise updates on activities in other countries. However, the most remarkable and useful transfers occur through direct personal contact. Rather than relying on this to happen occasionally when staff cross from one country to another, DELIVER could be more systematic in promoting cross-country fertilization. Project leaders could initiate this by prioritizing and providing opportunities for cross-learning, such as well-planned and facilitated meetings of select field and central staff.

Performance in the Field

With few exceptions DELIVER receives high praise for performance in the field. Though not all missions opt to continue managing support for logistics through this centrally funded project, DELIVER has considerably strengthened distribution and supply of commodities within the countries where it works. Where DELIVER has fallen short is in failing to transfer and track the skills needed to ultimately sustain supply systems. It can readily report absolute numbers of people trained in each country where it works. It cannot, however, report on how trained personnel subsequently perform, or even whether they continue in place.

It is clear to DELIVER that training alone is falling short. Not only does frequent turnover lead to repeated requests for training, but to supplement workshops DELIVER has had to give increased attention to on-the-job training and supportive supervision. These are useful adjustments, but the model of specialized training to support one component of a health system as it operates at the periphery needs to be reexamined. The time and effort to get to the last mile should be predicated on serving, in collaboration with other programs, a variety of last-mile needs. The team understands that DELIVER/Zambia is talking with service delivery support organizations about such combined approaches. However, such collaborations should occur everywhere that USAID supports improving health care all the way to the grassroots.

Training personnel to perform within a given system is only one part of the development that is needed. Though DELIVER in-country staff gain a wide variety of logistics management tools and skills, little is done to impart such tools and skills to MOH counterparts at various levels. The little that is done, such as seconding staff to the public sector or transferring logistics software (both of which occurred in Zambia), is not well measured or monitored.

Unless selected for pilot testing, core-funded activities are not highly visible at the country level. However, publications and web site appearances give visibility to these innovations, especially within the international community. In general, international organizations give high ratings to the data and knowledge DELIVER contributes. This in turn facilitates advocacy for increased attention and funding for commodities and supply systems.

Regionally, DELIVER has been successful in helping several Latin American countries move toward contraceptive commodity security and supply system sustainability. In Africa there has been little effort or progress at the regional level. The fledgling effort with ESAMI in logistics training is the only example of regional development. Connections made during regional trainings and communications within IAPHL are useful starts. DELIVER might also consider direct exchanges among those responsible for managing supply systems through meetings and site visits, as occurred at one point between Ethiopia and Nepal.

Management: Findings

Staffing

DELIVER continues to build on one of JSI's core strengths—a flat management structure that encourages staff growth from within the organization. This is a far different model than USAID's, which relies on recruiting experts from outside who are then incorporated within a hierarchical management structure to oversee and support project investments. From interviews it seems that some within USAID/W see DELIVER as mirroring USAID weaknesses, such as unclear or overlapping lines of responsibility. However, the team found that DELIVER operates with a great deal of transparency and synergy among its components, particularly at the central level, even though some in USAID/W perceive that structures within DELIVER inhibit communication among its various parts. The risk is that in trying to comply with what it thought USAID wanted, DELIVER may have unconsciously begun mirroring some structural features of USAID itself. For example, while DELIVER team leaders seem to function with considerable autonomy and transparency, they do not seem empowered to influence top management thinking or direction.

Relationships

Despite these and other differences in organizational culture, DELIVER and CSL have a good working relationship. Annual workplans guide core funded activities, technical and administrative information is easily exchanged during regular and ad hoc meetings, and comprehensive reports routinely track project accomplishments.

However, some differences and difficulties between the two have been reported and observed. First occurring during the start-up year, to some extent these have continued. These subsurface difficulties undermine performance and management. The team therefore suggests that managerial attention be given to surfacing underlying tensions as well as usefully building a future for sustainable supply systems.

It is not clear that at the start of DELIVER the change management needed to implement both DELIVER contracts was clearly envisioned or well implemented by either side. CSL brought on several highly competent technical staff as added support for this project, but, given a difficult start-up, this potential asset became a double-edged sword: Technical competence does not equate with managerial capacity, and the lines between providing technical support and managerial oversight were not always clear. Different interpretations among staff new to CSL about what DELIVER should be doing further complicated start-up.

New Business Model

The NBM that USAID/W was initiating during project start-up was an interesting but flawed model that attempted to move DELIVER toward longer-term results. “Model” was simply a misnomer, since this list of six emphases for the project is neither explanatory nor well-explained. Although many NBM specifics are compatible with JSI's operational philosophy, others are not particularly germane to the project. The partnership between DELIVER and CSL would have been stronger if the approach to implementing the project had been jointly developed and agreed upon. The governing contracts could have served as useful points of departure. However, though DELIVER ultimately accepted NBM, it was not fully embraced, probably more because of how it was introduced and explained than because of its actual content. A growing sense that DELIVER was intended to be different from previous projects may also have led to seeking safe harbor in the contractual language.

While the evaluators could not fully comprehend what transpired as DELIVER started, all parties agree that the start was not harmonious. There may well be disagreement as to whether and to what extent this was deleterious to subsequent relations and performances, but both DELIVER and USAID agree that one component of the NBM, working with subcontractors, did not proceed as well as expected.

Subcontractors

All subcontractors interviewed spoke highly of DELIVER, making it difficult to uncover what appeared to be shortfalls in their being usefully incorporated into the project. Of the primary subcontractors, only Manoff has fulfilled the role intended at the time the project was bid. Delays and shortcomings in gaining the expected levels of support from such subcontractors as Fuel PHD and Abt Associates have been detrimental. While there may be two sides to the story, the evaluation team believes that DELIVER should have done more to make these relationships work. Seconding subcontractor staff was a good way to proceed, but when that did not work or was long delayed, DELIVER should have explored other possibilities.

Though seconding in any form needs continuing attention, reverse secondment might have worked. When the Abt staff members seconded to DELIVER did not work out, DELIVER could have opted to embed one of its own staff within Abt to gain the access it needed to health economics expertise. This approach could also have been used with Fuel PHD. Particularly given its base in South Africa, knowing Fuel PHD better could have opened up other possibilities. In particular, Fuel PHD may well have been a better choice for handling a course on logistics management than ESAMI. The evaluation team did not have access to information on what transpired in the competitive bid for regional training institutions.

VII. EVALUATION CONCLUSIONS AND RECOMMENDATIONS

In general, the DELIVER TO1 IQC has been well-implemented, carefully managed, and productive. Within a number of countries where the project operates it has already significantly increased the availability of commodities and built up the systems through which supplies are distributed. Informants outside DELIVER are nearly unanimous in attesting to its strengths and usefulness, both within countries and internationally, and DELIVER and USAID personnel interviewed are for the most part similarly positive. However, like most projects, especially ones equally complex and ambitious, DELIVER has some shortcomings and weaknesses.

The SOW for this evaluation clearly focuses on implementation. However, key interviews suggest that USAID and DELIVER harbored different perceptions of how the project was to be implemented, particularly at the outset. This led the evaluators to consider possible deficiencies in project design as well as execution.

In similar language, the TO1 and IQC contracts specify two major goals for DELIVER: increasing the availability of essential health commodities, and strengthening the systems through which they are distributed. After due consideration, the evaluation team concludes that difficulties in implementing this project, especially but not exclusively at start-up, have arisen over which goal should receive more emphasis. While the two goals are not mutually exclusive, different country conditions, and perhaps even different individual experiences, may lead to one being given priority over the other.

The team fully recognizes that DELIVER TO1, together with the IQC mechanism, was designed to have far greater breadth than previous iterations of this project. Especially with the add-on of TO2 for influenza and TO3 for malaria, DELIVER is considerably more complex than previous CSL logistics projects. Because the project is so ambitious, getting off to a good start was highly desirable. Unfortunately, as key informants within both USAID/W and DELIVER readily admit, the project's first year was anything but smooth.

In contracts, details matter. However, it was not the contractual language that sowed disagreement or seeded different interpretations. Rather, it was the other way around: JSI and CSL were predisposed to see the project in different ways, JSI looking to previously successful projects and how these had been achieved, CSL looking forward from a more complex present toward future need. Had this divergence been foreseen, the evaluation team believes that a more considered change management process would have been put in place to help manage the project from the start.

The initial project difficulties were compounded by other disagreements, notably over procurement, MIS, and what USAID has termed TO1 implementation of the IQC business model. While many of its components appear in the contracts, the NBM was not fully formulated until after contract award, which created some difficulty. (The evaluation team neither asked for nor received input on their perspectives about the business model from COTRs for TO2 and TO3.) For the MIS, no indicators of progress were specified in the contracts, leaving these to be developed during project start-up. For procurement, which like MIS is outside of the evaluation SOW, the team came to know only that there were major disagreements, not specifically what they were.

JSI and CSL both went into DELIVER with high, but very different, expectations for it. Both came out of the start-up year frustrated that things did not turn out as expected. Though what was actually contained in the contracts became the basis for what the contractor could be obligated to do, this did not become a contractual dispute. It is a testament to the commitment that both sides adhere to —no product, no program,” that after months of disharmony and some disagreements,

they found enough common ground to keep the project moving forward. By that time TO2 and TO3 had been added, further driving momentum.

Several in-country informants, in both DELIVER field offices and USAID missions, have pointed out that increasing supplies and strengthening systems are sometimes operationally incompatible. This tension remains. Where to place the emphasis along a continuum is something each country negotiates. At times, as happened in 2008 in Ghana, differences about where DELIVER should be on the continuum surfaces as disagreement between the mission and country programs. The project was designed with such a continuum clearly in mind, the IQC contract in particular noting that implementation will vary according to country needs.

The breadth of DELIVER's design is matched by the depth of its in-country implementation. Already launched by 2006 when the DELIVER order was awarded, PEPFAR and PMI greatly expanded commodity procurement and distribution efforts in a large number of countries, many of which overlapped with DELIVER. With some understanding of how these various projects are operating at the country level, the evaluation team concludes that CSL was more visionary than over-reaching in designing DELIVER. Furthermore, though sometimes with great difficulty and under considerable stress, JSI has risen to the potential of DELIVER. The project's management structure is sound and it is producing positive results in the 18 presence countries, in another 10 countries receiving technical assistance, and to some extent also at the global and regional levels.

Nevertheless, DELIVER could be doing more to strengthen the systems within which it works, particularly in terms of skills transfer to host country counterparts. At a minimum, the skills that are being transferred should be tracked; more expansively, more effort should be given to overcoming obstacles within host governments to transferring skills. In most countries where DELIVER works, the public sector has real human resource constraints, and public sector personnel often work within a culture considerably different from that of the American organizations assisting them. Nevertheless, there is opportunity and potential. In some settings, staff seconded in proximity to powerful public positions provides a useful beginning. In others, however, a situation deemed hopeless becomes self-fulfilling when little or no effort is made to transfer capabilities at higher decision-making levels.

Ensuring the sustainability of systems is far more challenging than transferring skills. Nevertheless, DELIVER can do more here as well, even though not contractually obligated to do so. In particular, even as DELIVER continues to make commodities more widely available, it can begin to map future pathways to sustain the systems through which they are distributed. As the TO1 contract states, —The contractor should have a credible plan for phasing out activities, institutionalizing the skills necessary for sustainability” (2006, p.11). The evaluation team recommends that DELIVER adopt a broader and longer-term perspective that incorporates more than simply producing a credible country-level plan. With its deep understanding of what makes logistics systems work and not work in developing countries, DELIVER is well-positioned to identify modalities, measures, and means to move the entire field of logistics management toward sustainability. During the remaining two years of DELIVER, JSI and USAID should work together on a long-term roadmap for how what is being implemented today can be sustained years from now.

One cautionary note: Investments in sustainability should be directed to countries where there are realistic prospects for success. The readiness of countries to move toward sustainability clearly varies and must be fully recognized. One size, one approach, or one objective will clearly not serve to sustain all the systems that DELIVER supports. In Africa, perhaps only Rwanda and Ethiopia are yet positioned to develop sustainable logistics systems, and even there this would entail many years and extensive investment.

Sustainability, whether of health logistics systems or service provision, is the heart of development. Responses to emergencies, such as PEPFAR and PMI, particularly as encompassed within the recently articulated GHI, are belatedly shifting toward this longer-term vision. Early attention within DELIVER and the NBM to strengthening systems and transferring skills presages sustainability. Putting sustainable systems front and center within investments for commodities and logistics will not only align them with GHI but also capitalize on what DELIVER has seeded.

More to the point, DELIVER and its USAID counterparts are well positioned to shape the future for sustainability. Their task now is to fully mine the successes and challenges faced every day in the countries where DELIVER is operating. By furthering an understanding now of what will need to be done, DELIVER will shape the future for building sustainability into and out from logistic system strengthening. To shift from the present priority of making systems work to making systems last, the team recommends forming a task force on sustainability. Funds from the core budget could be made available for time and expertise to work this through.

To jumpstart task force work, the evaluation team has identified some major areas of interest to explore:

- *Capacity development*: assessment tools for determining critical areas within the public sector where procurement, logistics, and supply chain management skills are needed, and current capacities
- *Skills transfer*: monitoring the extent to which skills critical for successful supply chain management and operation are actually transferred and used by government counterparts, particularly at central and regional levels
- *Integration*: a global appraisal of how integration is proceeding and cost economies are being achieved
- *Automation*: the potential for technology to fix deficiencies and advance systems beyond what is holding them back
- *Sustainability timing analysis*: readiness for public sector ownership as well as management of procurement and logistics systems
- *Outsourcing*: where the private sector appears to be a viable option for operating components of the supply chain, what skills may be needed for public sector management and oversight and how they might be developed
- *Human resources*: a major weakness in most developing country health systems, HR needs should be acknowledged, analyzed, and addressed.

Given the problems with project start-up and the lingering aftermath, the evaluation team further recommends that the task force be preceded by a CSL-DELIVER retreat to review what happened and why. This retreat should look at how the NBM was introduced, the extent to which it has been operationalized, and the degree of its usefulness as a starting point for discussing sustainability. To be an effective departure point for joint exploration of sustainability, this retreat should be carefully planned and facilitated. It might be useful to consider using a managed-meeting technique, such as Future Search, to establish common ground before moving forward. Future Search is an innovative facilitation approach to move relatively large groups toward a common basis for collaboration.

This retreat can be a prelude to forming the sustainability task force itself. The evaluation team suggests involving select staff from DELIVER and USAID/W as members of the task force. To take full advantage of the expertise available, effort must be made to include on the task force

both DELIVER field staff and mission staff. Given the growing importance being given to sustainability, a dedicated effort to examine sustainable pathways seems both timely and worthwhile. USAID may even want to consider wider involvement in this effort to delineate the future of sustainability. Sustainability is garnering immediate attention, but it will take a long-term vision as well as patience and persistence to put practical, useful approaches in place.

ANNEX A. TECHNICAL RESULTS AND CLIENT SATISFACTION: QUESTIONS AND ANSWERS

FINAL EDITS (MAY 7, 2010)

- a) What has been the overall impact of the task order's assistance on commodity availability? To what extent can changes in commodity availability in country programs be attributed to the task order's activities?*

Key informants widely attest to the fact that more commodities are available since DELIVER TO1 began. To a large extent, they key informants attribute this to what DELIVER has done with data for decision making and to strengthen in-country supply chain management. Although many donors have helped improve the situation by providing funding for commodities, it is often the data that DELIVER collects, analyzes, and shares that drive procurement both within and across the countries where it works.

The Procurement Planning and Monitoring Report (PPMR) that DELIVER manages on behalf of the Countries at Risk group (CAR) for the Reproductive Health Supplies Coalition (RHSC) disseminates product stock information to donors and others who are interested. The PPMR compiles data on contraceptive stocks in various countries monthly where possible and quarterly at a minimum. The data are reviewed by the CAR group, which includes USAID, UNFPA, the RHSC, and the World Bank, in order to predict and avert stock-outs. Monthly data clearly mitigate the extent and duration of periods without product in the countries that are tracked.

CENTRAL STORAGE AND SUPPLY LEVEL

Analysis of trends within the monthly PPMRs gives a picture of countries and performances over time. Since October 2007, half of the 14 countries with data had four or fewer stock-outs of a contraceptive product over the last two years, and six of these had no stock-outs in the most recent quarter. Only one of the 14 countries, the Dominican Republic, continues to experience what appear to be chronic stock-outs at the center. Overall, PPMR data show a general pattern of improvement in most countries, the result of both a Hawthorne-like effect from having the data available and mitigation actions that DELIVER and others take as a result.

Stock-outs, although reduced, still do occur at the central level for various reasons. Sometimes they are due to production delays, but more often they have to do with financing and procurement problems. In some cases the problem stems from inadequate data for accurate forecasting or a sudden change in demand. Overall, though, PPMR data reveal a general pattern of fewer stock-outs since October 2007.

Within countries, DELIVER forecasts needs and tracks what is available at the central level and, where feasible, service delivery points. DELIVER also incorporates goods on order and in transit for a comprehensive, time-bound view of commodity status; this can then be used for planning and, where necessary, emergency action.

SERVICE PROVISION POINTS

In some countries, improvement in commodity availability at service provision points has been dramatic. Informants reported that supply systems in both Paraguay and Zambia have been transformed since DELIVER started operating there. One knowledgeable USAID/W official said, "Paraguay went from 50% stock-outs for contraceptives to 2% in the five years that DELIVER has worked there."

Product availability data generated from service delivery sites in 10 DELIVER presence countries show similarly positive results. In late 2009 DELIVER summarized these data: "Eight of 10

countries had less than 10% of facilities experiencing stock-outs last year for orals contraceptives; 7 of 10 countries had less than 10% of facilities experiencing stock-outs in condoms.” (Self-Assessment Report, p. 2, 2009)

Trend lines show that most countries experienced lower percentages of facility stock-outs, with a small subset of countries having occasional peaks, particularly earlier on.

Over the two and a half years for which data are available, the countries with consistently the lowest percentages of facility contraceptive stock-outs are El Salvador, Nepal, Paraguay, Rwanda, and Zimbabwe. Except for the near- countrywide condom stock-out through 2008, Bangladesh has also consistently had few facility stock-outs. Though contraceptive stock-outs have recently increased in the Dominican Republic and Nicaragua, both have also had few facility stock-outs over time. Both Malawi and Nigeria show facility stock-outs declining during the period.

For antiretroviral drugs (ARVs) in Zambia, the reported gain is similarly impressive: from disarray in 2005 in a supply system attempting to reach tens of thousands to no stock-outs in 2009, even as DELIVER rapidly scaled up to serve nearly 250,000 clients with HIV/AIDS. Echoing many others, key informants in Zambia, one key informant reported that it has been like —night and day” since DELIVER came on-board.

In Tanzania, where contraceptive stock-outs threatened in 2008 and 2009, key informants credit DELIVER with providing early warnings that prompted stakeholders to step in with emergency procurements.

LEAD FROM FAMILY PLANNING

By virtue of its long history of systems development for vertical family planning (FP) programs, DELIVER normally —leads from family planning.” However, at times DELIVER uses its involvement with other commodities as a lead-in *to* family planning. This was clearly the case in Zambia, where DELIVER has been focused on HIV/AIDS work. After a string of successes with the HIV/AIDS supply-chain, DELIVER TO1 received additional funding late in 2008 to include contraceptives in its portfolio of commodity security activities.

Clearly such positive trends and informant reports may only partially be attributed to DELIVER and activities it supports to forecast procurement needs and strengthen supply chains. As DELIVER itself and its many partners attest, making the right contraceptive products and other commodities available, at the right time, in the right place, and for the right person is a collaborative effort involving donors, cooperating agencies, and host country governments as well as DELIVER itself. When such partnerships are effective, DELIVER often plays a central coordinating role, for which it is well-recognized. Over time, DELIVER also supports responsible host country government agencies to take ownership to ensure commodity security for contraceptives and other products.

The availability of contraceptive commodities in particular remains a DELIVER focus within its country programs. Even though this iteration of DELIVER considerably broadened the range of commodities the project provides and supports, notably under TO2 and TO3, it continues to put priority on making accessible the means for practicing modern FP.

In most DELIVER countries, USAID mission field support also led from FP. Though TO1 is able to accept buy-ins beyond FP, such as essential drugs, DELIVER is known as the project through which contraceptives can be made available. This is clearly true in countries where DELIVER operates separately from SCMS or is not directly involved in supporting HIV/AIDS commodities and supply chains. In Nigeria and Tanzania, donors and government alike count on DELIVER for information about contraceptive needs, procurement, and distribution. In Zambia, where

DELIVER started by strengthening and harmonizing the supply chain through which ARVs were provided, its involvement in contraceptive security came later.

However, not all countries where DELIVER is working have shown consistent or steady improvement in making FP supplies available. For example, in Tanzania significant stock-outs have occurred recently for a number of contraceptives (notably, and detrimentally, injectables and implants just when these methods were gaining in the method mix). DELIVER forecast these impending shortfalls and then alerted stakeholders and funders, two of which stepped in with emergency procurements to avert disaster. DELIVER's persistence in documenting and presenting data on this situation was instrumental in mobilizing resources.

The situation in Tanzania is symptomatic of the serious need in many countries for DELIVER to function not only to strengthen supply systems but also to act as a watchdog on contraceptive supplies. Particularly in Africa, the project faces great challenges in institutionalizing skills and ownership for ensuring steady supplies of these important commodities. Not only does the multiplicity of host country institutions with responsibilities along the supply chain from first to last mile come into play, but so also does the presence or absence of political will to make FP a priority. With encouraging exceptions in Ethiopia and Rwanda, in much of Africa FP is more aligned with the health benefits provided and not the development assistance it can also convey.

b) How effectively has the task order

- ***...reached into the private (commercial) sector, academics, the military, and other nontraditional sources to (a) identify best practices, (b) assess their potential for application to developing country public health supply chains, and (c) as appropriate, pilot or test approaches/tools/practices from these sources in the field?***

DELIVER's main thrust for identifying best practices comes from a core team in Rosslyn that assumed this responsibility at the behest of USAID/W. Once best practices are identified and culled for their applicability to developing countries, the core team must find a DELIVER country program willing to act as host for testing it. Most countries are quite selective; they tend to accept only those ideas with immediate potential for use in their own programs. One country director told the team that although his budget would not have to pay for a proposed pilot, the time of his staff would be drawn off, and he would need to use up some of his limited —*face* time" with officials and counterparts to smooth the way for the pilot team.

One of DELIVER's most successful best practice discoveries from the private sector is the DTTU (delivery team topping-up) inventory control approach used in the beverage industry. Although no longer new, it continues to evolve, as well as to be studied and costed for future applications. Originally field-tested in the Philippines, DTTU was later adapted to deliver contraceptives within Zimbabwe's fragile-state environment. There it has proven so effective that other commodities are being added: HIV rapid test kits, nevirapine for prevention of mother-to-child HIV transmission, and some TB commodities. DTTU may soon be adapted for use in other countries, such as Nigeria.

Supply chain segmentation and network modeling for supply chain optimization are newer examples of DELIVER's reach into academia and the commercial sector for best practices. Network modeling is a sophisticated, computerized approach to designing or redesigning for optimum efficiency an entire supply chain network consisting of warehouses, transport, procurement, and inventory.

DELIVER piloted a commercial network modeling software, Supply Chain Guru (LLamasoft), in Guatemala with an initial goal of determining whether the redesign of public health supply chains would have an impact on product availability, and if so, in what ways. As it turned out, the more important result was to determine whether a network modeling (optimization) software

application would be useful or practical in a developing country. Malawi has recently hosted limited field work on network modeling and has plans for implementing transport network optimization in the future. Over the last year the World Bank became interested in DELIVER's developing world application of this tool and has successfully used Supply Chain Guru for network design projects in Kenya, Ethiopia, and Lesotho.

Supply chain segmentation, also a private sector development, caught the attention of DELIVER's technical teams with its high potential for use in moving systems toward integration. Supply chain segmentation involves reviewing and analyzing product and customer characteristics to identify commonalities, and then organizing the supply chain into segments to best respond to customer needs or product requirements. For example, products requiring a cold chain would be stored and distributed together even if they were used for different programs. Once the chain is segmented, adding new products becomes relatively simple. This responds perfectly to TO1's request that DELIVER "include innovative approaches that more easily allow the addition of new products to existing supply systems."

Supply chain segmentation has not been operationalized at scale in any DELIVER country, although an experiment is planned for Nigeria. DELIVER will introduce this promising adaptation cautiously over the remaining months of TO1. Lessons learned from an earlier introduction of contraceptive security as a "new way of thinking" have persuaded DELIVER to ensure that its own staff members are well informed and completely on board before moving into a more public introduction.

Several other new technologies from the private sector are on DELIVER's radar as a result of cross-fertilization with its subcontractor, Fuel Logistic—Pharmaceutical Healthcare Distributors (Fuel PHD). These include an entry-level palletizing program, load-planning software, and vehicle-routing software. DELIVER is also using new geographic information system (GIS) technology to link data to specific locations. Several applications in Latin America demonstrate how geo-referenced maps can be used to identify areas of underserved population, networks of health facilities, and even stock status at different locations. Analysis can then correlate the population areas with distribution points and stock available to serve that population. Data prepared in this way may then be used to visualize and support logical adjustments for better operation of the supply chain.

The Village Reach activity in Mozambique is another promising adaptation of a commercial practice. Village Reach is a small, Seattle-based nongovernmental organization (NGO) that has established a type of DTTU for vaccine distribution in remote areas of Mozambique. The unique element of this scheme is its financing through a linked for-profit liquid propane gas distribution business. Other elements that have resonance for DELIVER are real-time inventory and distribution data sent via communications satellite.

Experimentation with cell phone technology—a private sector innovation—to rapidly collect and upload field data is ongoing in a number of countries, including Tanzania and Zambia. Although the technology had been tried before with limited success, DELIVER believes technology and connectivity have advanced sufficiently to make further efforts worthwhile.

Finally, in Zambia DELIVER is collaborating actively with several organizations and donors on a pilot scheme to integrate logistics data with a new electronic patient record system, another private sector technology. Simultaneously but separately it is field-testing an integrated logistics/essential drugs distribution system. Together these innovations are pushing the system toward full field integration of commodity and client service reports, which would both reduce data collection burdens at the clinic level and provide access to much-desired consumption data.

The team noted several areas that it appears DELIVER has not explored:

- Social entrepreneurs such as those in Ashoka, a global nonprofit association of the world's leading social entrepreneurs—men and women with system- changing solutions for the world's most urgent social problems.
- Corporate social responsibility (CSR) programs that offer both technology and philanthropy. In addition to technological innovation, they might be a source of support for —gradating” DELIVER programs like IAPHL.
- The military, which is built on the strength of its logistics. Not only may military supply chain findings be of interest and applicable in developing countries, but experienced logisticians with military background may also be helpful as either central or field staff. One way to explore this generally in the U.S. would be to connect with the War College in Washington, DC.

The team also noted an apparent underuse of subcontractors as a window into private sector practices. Neither Abt nor Fuel PHD was well-used in this way.

- ***...strengthened and institutionalized local capacities for supply chain management and commodity security (forecasting, procurement, logistics management information system, inventory management, monitoring and evaluation, planning, coordination, etc.)?***

In the field, DELIVER appears to approach system and capacity strengthening incrementally. Initially, it demonstrates the importance and benefits of forecasting and monitoring product flow—often doing much of the work itself. Over time *and to the extent that host countries demonstrate capacity*, DELIVER then tries to transfer needed skills and practices to local counterparts and institutions. However, this long process produces blurry and often unattributable results when viewed in terms of a relatively short project time-line.

The preponderance of DELIVER's efforts to develop local capacity continues to be through training and interaction with the public systems it seeks to improve. DELIVER's current approach to building local capacity is dominated by workshop- style training concentrated at the lower levels of the system, though some capacity development is being done at the mid levels and a small amount at high levels. This split is commensurate with the number of people who require training, not the importance or impact of the role each person plays. At the lower levels large numbers need instruction on how to fill out reporting and re-ordering forms. Their needs are met by large-scale training programs, supplemented by on-the-job training (OJT) and supportive supervision. These lower-level trainings account for most of the numbers reported in the QASP.

At the mid-level, where there are far fewer people, logistics management personnel receive a type of mentoring occasionally provided by embedded personnel but more frequently by workshops, topical meetings, and day-to-day interaction with DELIVER field staff. Some at mid-level receive the benefit of DELIVER's Supply Chain Management Course. At the top level, represented by only a few focal persons, the most frequent approaches to capacity building are messaging, targeted support, and personal relationships with senior DELIVER management.

DELIVER does not track the transfer of the specific skills and tools needed to manage modern logistics systems. Some country reports talk about how many people have received training in forecasting and how many now have, for example, Pipeline or Supply Chain Manager software on their computers. However, the team has not seen an accounting of how many people are actually using these tools either in a specific country or tallied across countries.

DELIVER consistently displays skill, determination, and ingenuity in the work it is asked to do and has been successful in improving commodity availability. However, few of its efforts at

strengthening and institutionalizing local capacities for supply chain management and commodity security have been particularly effective in Africa for two reasons:

1. It is next to impossible to transfer skills, let alone develop systems owned by government, when the appropriate personnel are not in place. Ministries are generally understaffed, good leadership is sparse, and functionality of personnel from the bottom up is insufficient to ensure commodity security. The root cause of these problems is lack of budget, low pay, and staffing re-assignment policies that do not take advantage of accumulated knowledge. This is a civil service reality. DELIVER has been told it is not its job to reform the civil service, but such problems deeply affect logistics operations. As a result, even such bread-and-butter components of the project's methodology as calculating contraceptive procurement tables (CPTs) and routinely collecting the data that drive the system have not often or regularly been transferred to host country institutions.
2. DELIVER has been asked to focus more on last-mile issues while two important —first-mile” issues, financing and procurement, have received only minimal attention. If the money is not there and commodities are not being procured, what hope is there for getting them to the last mile? Unless, of course, they are donated commodities, and even those may encounter problems along the way.

DELIVER has as little scope for resolving financing problems as it has for reforming the civil service. Thus, the project has to work around these issues and try to address financing via advocacy as part of commodity security. As part of this effort, it has written a very good paper, *Ensuring Reproductive Health Commodity Security Within a Sector Wide Approach*. There may be some movement on this issue via the USAID-financed Health Policy Initiatives Project, which appears to have gained entrée to ministries of finance, where SWAp funds are often managed.

Procurement is an altogether different issue. While within the current task order workplans there is scope for providing procurement technical assistance to host countries and ministries, that activity seems to have been marginalized in Africa. The reasons, though unclear, may have to do in part with new government attitudes toward all things financial: “It is none of your business.” Presumably this is an offshoot of budget support and theoretical transfer to government ownership within the SWAp basket funding framework; the evaluation team heard this explanation more than once. It was also clear that some government /ministry procurement units were having difficulty meeting World Bank requirements for a “no-objection” determination, a prerequisite for high-threshold purchases. The net result is a two-year procurement process and great uncertainty about commodity availability.

The team did learn of a DELIVER effort to get government procurement off to a good start in one of its newest countries, Pakistan. A DELIVER subcontractor is currently generating a tailored procurement manual and will undertake training for the government of Pakistan on behalf of the project. DELIVER global partners DFID, Danida, and the World Bank have expressed interest in addressing country procurement systems and may be moving toward this in some way, although not necessarily in Pakistan.

Nevertheless, the team would like to see a less hands-on —workaround” solution by DELIVER in Africa. For example, one problem with World Bank procurement oversight in the SWAp environment is a pervasive lack of understanding among decision makers and stakeholders about how the World Bank system works. During an earlier iteration of the DELIVER project, several simple handbooks were produced to address this problem in Bangladesh. A generic version of these would be one way to begin addressing the situation.

- *...raised awareness of commodity security, supported strategic planning and coordination, and helped to mobilize resources for commodity security at the country*

level? How effectively has the task order kept USAID Missions, USAID/W, and other stakeholders informed of the commodity security situation in countries?

DELIVER is generally recognized for keeping major partners informed about the commodity situation in each country, often playing a central coordinating role among donors, cooperating agencies, and host country governments. Regular commodity security meetings are a mainstay of DELIVER's presence; in each country it has consistently, and with some success, helped raise awareness about and mobilized resources to achieve commodity security. This is accomplished by sharing annual CPTs, making routine data on commodities available and distributing them, and forecasting need for commodities. Under the auspices of the Ministry of Health (MOH), DELIVER often chairs discussions about potential resource gaps. Partners in both Tanzania and Zambia told the team that DELIVER works with them individually on forecasts for their own programs, for which they are extremely grateful. —I don't know what we would do without DELIVER" was a common comment on DELIVER's presence in a country.

The data collected by DELIVER are often compelling and always useful in advocating for resources. Sometimes this routine collection and surfacing of data serves as an early warning system to alert committed donors of imminent stock shortages. In Tanzania, for example, data and presentations by DELIVER brought in new resources from USAID and UNFPA for emergency procurements to alleviate contraceptive stock-outs. Its contributions to the PPMR also help bring international resources to countries.

Coordination among multiple stakeholders is a challenging task. The unique role of DELIVER and its focus on logistics is, for the most part, nonthreatening to and noncompetitive with other development organizations. Nevertheless, it takes both art and energy to get disparate groups working together on a common agenda. This often occurs within commodity security committees, but DELIVER uses other means as well.

For DELIVER, eliciting the cooperation and participation of the MOH decision-makers who ultimately control the system is often a matter of making messages understood. In Zambia and Tanzania the team heard veiled criticism in terms of "fast world vs. slow world." Even the best and brightest of development partners were taken to task for pushing too hard, moving too fast, and seemingly pursuing their own agendas. An attitude perceived as know-it-all or disrespect of established protocol can be deal killers. The oft-quoted private-sector approach—do it first, apologize later—does not work well in this setting.

The approach the DELIVER country director in Zambia took, however, was highly successful in educating and engaging high-level decision-makers:

Although he had, over a period of time, established trust and respect, allowing him access to decision makers in the MOH, the country director was having trouble making messages heard and understood because these same decision-makers often did not show up for meetings or left after attending for only a short while. DELIVER was finding it difficult to elicit necessary cooperation and participation in supply chain issues affecting commodity security, in part because the decision makers lacked information that was provided in the meetings. To solve this problem, the local JSI/DELIVER/SCMS office organized an out-of-town retreat, inviting top level decision-makers not only from the MOH but from all the partnering organizations in Lusaka. At the retreat, DELIVER and partner organizations made a series of finely honed presentations. This resulted in important people in the ministry, by their own admission, —making some important realizations." As a side benefit, the meeting served to galvanize and unify the community of donors participating: now having heard the same messages, they were able to work more in concert with one another.

Upon reflection, the evaluation team extracted several lessons from the Zambia story that might serve as a model for other field programs in dealing with ministries:

- Understand that problems at the top level of a logistics system are more difficult to deal with than at lower levels because they cannot be addressed by writing a curriculum and conducting training.
- Understand the organization and target the right people.
- Build relationships over time in order to gain access to decision makers.
- Recognize that educating decision-makers is critically important.
- When the concurrence of the MOH is needed, go to the person who needs the least educating.
- *...responded to country-level contextual factors that are beyond its immediate influence, such as health sector reforms, changes in development funding, and human resource constraints?*

Pervasive corruption and limited capacity often frustrate efforts to strengthen logistics supply systems sustainably. Unlike SCMS, DELIVER does not itself have sufficient resources to bypass public health distribution channels. However, it can and often does apply its own data-centered approach, including software, to the official public system through which commodities flow. In Zambia, considerable skills transfer and capacity development occurred by establishing the Logistics Management Unit and then successfully handing it over to the MOH. Without such efforts to transfer capacity, collecting and managing data does little to develop systems in the long term. But it does help get product to people who need it.

HEALTH SECTOR REFORM

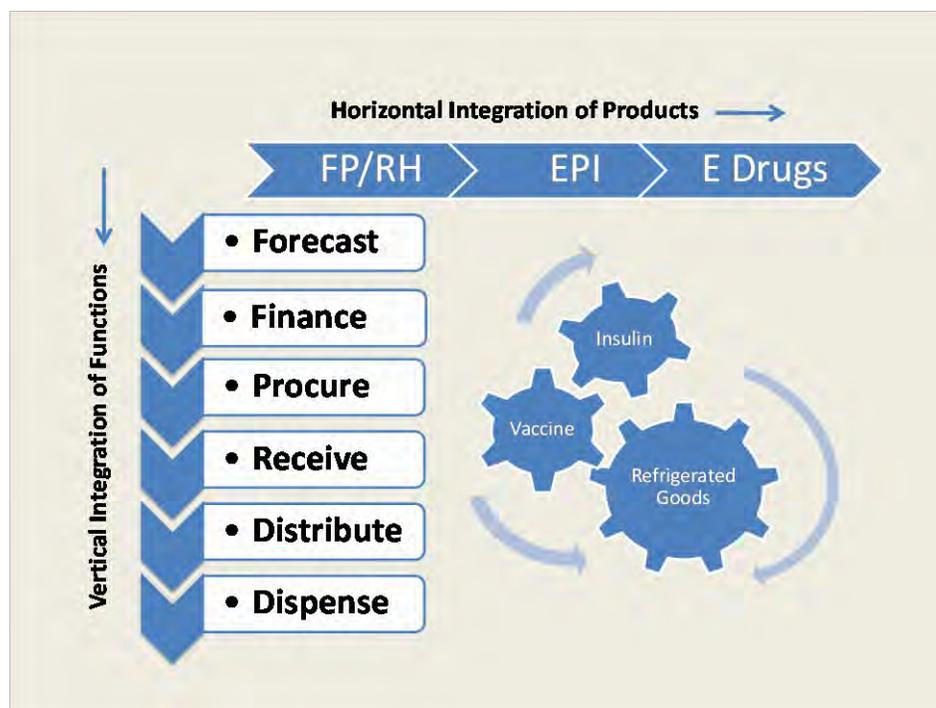
Health sector reform has been under way for many years in many countries. Until recently when new approaches to donor financing appeared, health sector reform concentrated largely on integration, decentralization, and privatization. The first two are analyzed here in terms of the public sector supply chains DELIVER supports.

Integration

Integration, like decentralization, needs time to become operational within a health system. With regard to supply systems, integration has several meanings and nuances. The common public sector definition refers to integrating horizontally across all vertical program commodities—ideally, one supply chain for all. In the private sector, an integrated supply chain is an entirely different thing, involving control and visibility vertically from the top (forecasting and financing) to the bottom (distribution and provision to end-user). DELIVER embraces both horizontal and vertical integration and is pursuing supply chain segmentation (see above) as a means for sequencing new products into supply chains with a wide range of products.

Figure A.1 illustrates how the two types of integration (horizontal and vertical) relate to one another and to supply chain segmentation.

Figure A.1. How Integration Relates to Segmentation



On the cusp of operationalizing supply chain segmentation, DELIVER must confront a growing perception that all products can and should be added to existing supply chains, including those originally set up for contraceptives. A victim of its own success in leading from family planning, DELIVER now needs to educate both peers and clients. Integration of ARVs into an essential drugs and contraceptive supply chain is not as simple as it appears because there are basic differences to consider: ARVs are targeted to relatively high-level facilities. Most FP products and essential drugs go to the lowest-level facilities. Low-level facilities outnumber high-level facilities by far. For example, in Zambia there are 119 ARV sites but 1,600 essential drug sites. Among other things, if they were integrated, the transport network would need significant adjustment, and the delivery costs would likely go up rather than down.

Advising and educating decision-makers about integration can be delicate. For example, Malawi is moving to integrate ARVs into the essential drugs and contraceptives supply system. At the same time, the Malawi mission will close out DELIVER in 2010 in favor of a bilateral project. As one informant said, there may be a need to adjust the high expectations of missions for an integrated system; to do what the Ministry wants, DELIVER would need more people on the ground.” However, such challenges offer DELIVER unprecedented opportunity for engaging in system change. Again in Malawi, DELIVER applied modeling to assess ways to optimize the transport network.

Decentralization

Years after decentralization was first promoted as part of health sector reform, a number of governments have now devolved health budgets and decision-making responsibility to regions and districts. In some countries decentralization of fiduciary responsibility has reached down to individual hospitals and clinics. Typically, budgetary responsibility in the form of centrally held accounts is transferred, often in monthly or quarterly allocations, from the Ministry of Finance to the MOH and then on down to the lowest levels.

With budget and spending responsibilities delegated to local institutions, challenges for commodities often arise. For example, contraceptives and other preventive health supplies may be left out in favor of curative drugs. Although locally controlled budgets are used to pull needed commodities from a centralized drug facility, regular reporting on commodities consumed does not always follow, making accurate forecasting impossible.

CHANGES IN DEVELOPMENT FUNDING

In Tanzania and a number of other countries, supply system strengthening is further complicated by the shift that is occurring toward integrated logistics systems, decentralization, and sector-wide approach (SWAp) financing mechanisms. The rapidly changing dynamics of donor funding, recipient responses, and donor-government interactions are discussed next.

SWAp Basket Funding

Of the four basic mechanisms used in SWAp funding, only one is officially labeled a “basket fund.” However, in common usage, all four are referred to as basket funding. For the sake of simplicity, the team will use the term to refer to any one of these:

- *A simple basket fund*, in which donors pool their contributions for a common purpose, such as health
- *Earmarked or targeted budget support*, in which donors contribute to a country’s annual budget and receive a guarantee that funds will be made available for a stated purpose, such as contraceptives
- *Sector budget support*, in which donors contribute to a specific line ministry, such as the MOH
- *General budget support*, in which donors contribute to a country’s budget but have no say in how the money will be used.

Both general and sector budget support are widely used, and each has both proponents and detractors. Some see basket funding in general as a good thing for development in that they give governments ownership and responsibility. However, they also give governments the option to bypass contraceptive or reproductive health funding in favor of other priorities. Some donors hold a largely unspoken position: “Let them fail—it will be a good lesson.” From all indications, USAID does not support this position, particularly in the case of contraceptive security.

The following quote illustrates the level of frustration the team found with regard to SWAp financing:

2005 was dreadful—most donor money went into the SWAp basket and they didn’t realize the money wouldn’t be immediately available. The government decides how and when to use it and it comes out in dribbles, then to the ministry before the tender can be initiated. CPTs show what is needed, but it still takes two years to get here.

USAID does not usually contribute to basket funds—a position that allows it to step in with emergency financing when stock-outs are threatened, as they were in Tanzania. However, as some informants reported, it also may prevent USAID from having a seat at the table when important policy decisions are made. As one informant said, “USAID doesn’t get enough purchase with the ministry because they don’t put money into the basket.” A ministry official stated that USAID’s opt-out on basket funding cast them as “nba team player.” Many did not realize that, in many countries, USAID is part of the SWAp, but it provides project rather than basket support.

Ensuring that adequate funds emerge from the new mechanisms is a problem in terms of a steady flow of contraceptive supplies. Countries that start with simple or ring-fenced SWAp baskets often produce acceptable or even good health financing results in the beginning, but when they —graduate” to less restrictive financing schemes, in particular, general budget support, contraceptive funding often suffers. When the team asked about the impact of SWAp basket funding, several informants said, —Things went well at first, but in the past few years it has become a problem.” At certain times, donors may actually remove their support from the basket if the government is not meeting agreed targets. However, these targets are set at the outset of the SWAp arrangement, and the related indicators are much more general than the amount of money used for contraceptive procurement.

In contrast to the underfunding of contraceptives and other health products, SWAp- related procurement delays begin to work themselves out within a few years. In Tanzania, for example, compliance with procurement requirements seems to have improved. In Zambia as well the government seems to have learned how to work with this mechanism. In both cases, however, donors still must plan for a two-year procurement cycle. DELIVER, as the team observed in Tanzania, does well at taking into account not only projected contraceptive use patterns but also uncertainty as to when basket funds may be released. Regardless of pressure from Washington for scientific accuracy, some countries quietly incorporate “art” into their forecasts to counteract persistent delays or underfunding, since their projections are what the MOH uses to ask for money

HUMAN RESOURCE CONSTRAINTS

The developing countries where DELIVER works often have similar problems, among them poverty, corruption, and bureaucratic inefficiency. As a result, working conditions for government employees are often far from ideal: low pay for work that is often not done well due to poor morale, inadequate training, lack of equipment, or supplies, or any one of a number of other reasons. A number of factors affecting counterparts and their work environment coalesce to undermine the skills transfer and capacity development efforts of well-intentioned projects.

In addition to the public sector human resource constraints in most countries where DELIVER works, government personnel often operate within a culture considerably different from that of the NGOs assisting them. The resultant mismatch of expectations can lead to work being done in parallel but within separate and different structures.

DELIVER confronts all these realities of working in a developing country, which are compounded by the relatively low status that ministries and others often accord to personnel working on logistics. DELIVER, like many other development projects, focuses skills development more toward the lower levels because not only are the per diems associated with training more greatly needed and appreciated there but lower-level staff is starved for opportunities to learn and prove that they have value.

Such obstacles to capacity development within counterpart organizations have implications not only for strengthening the supply chains in the near term but also for making systems sustainable in the long term.

SYSTEM SUSTAINABILITY

In Ethiopia SCMS, with more substantial resources though a narrower mandate, has gained a strong position in working with the government toward system sustainability. This could occur in Tanzania as well, despite DELIVER’s central role in nurturing an integrated logistics system. With substantially more resources, over time SCMS could eclipse DELIVER in countries where their work overlaps but they do not share staff and management. The situation in Latin America

appears otherwise; perhaps of necessity, public institutions are prominently moving toward procurement and supply system sustainability.

FAMILY PLANNING

Having been usurped by the more urgent demands of HIV/AIDS, informants characterized FP as struggling for survival in many of DELIVER's presence countries. Indeed, one stated that USAID was providing less FP funding than in the past because it was spending its money on HIV/AIDS. Both basket funding and decentralization often work against funding for contraceptives. Some key informants mentioned a lack of clear champions for FP, as well as a lack of political will to make it a priority. The evaluation team agrees but sees encouraging exceptions in Ethiopia and Rwanda. Particularly with HIV/AIDS in the foreground, FP is being repositioned for its health benefits rather than for development or rights-based reasons.

- *...helped to raise awareness of commodity security, support advocacy efforts, and develop other kinds of collaborations with partners with global or regional reach? How effective have these collaborations been? To what extent has the task order helped to strengthen program planning and implementation by these partners for commodity security? To what extent has the task order been proactive in these efforts? Should it be more proactive? How?*

Globally and regionally, DELIVER is a positive force for raising interest in and concerns about commodity security. This is most evident within its traditional FP niche and its collaboration with such organizations as the RHSC and its CAR working group. What annual forecasts do at the country level, routine compilation of multicountry data on contraceptive availability does at the international level. In the PPMR, DELIVER compiles and shares data on 14 countries with the CAR working group.

The RHSC is a global partnership of public, private, and non-governmental organizations dedicated to ensuring that all people in low- and middle-income countries can access and use affordable, high-quality supplies to ensure their better reproductive health. RHSC currently has 80 members, with an executive committee made up of major bi- and multilateral donors. It is heavily European, and it may represent the first time these parties have come together and worked on things as a group.

JSI and CSL are active in the RHSC; senior managers attend meetings and are members of the Systems Strengthening Working Group. The Reproductive Health Interchange (RHI), which also falls under the coalition umbrella, tracks shipments of major donors and makes the information available on a website that JSI manages. Access RH is another web-based tool, this one supported by the German Development Bank. Using Access RH, UNFPA buys commodities in bulk and makes them available through e-procurement to public entities. The next iteration of Access RH, due in 2010, will enable countries to buy on credit while waiting for assured donor funds to arrive. DELIVER has seconded one of its logistics experts to UNFPA in Copenhagen to work on these commodity security tools and transition the RHI to UNFPA.

The broader range of commodities within the current DELIVER project is facilitating collaboration with a broader array of international organizations. For example, in November 2009 DELIVER hosted a meeting with members of the Inter-agency Pharmaceutical Coordination (IPC) group of the UN, including representatives of WHO, UNICEF, and UNFPA. During the meeting DELIVER presented its approach to commodity security and provided updates on its technical work for supply chain management, including new tools and approaches. The group then discussed common challenges and approaches. A WHO representative pointed out that DELIVER is considered very advanced in technical and scientific evidence-based approaches—in fact DELIVER is so good, he said, that WHO could recommend it and would like to work with JSI/DELIVER on a scientific framework of good public sector logistics practice.

Meetings like that, as well as requests for technical consultations and partnering from organizations like the WHO and the World Bank, are moving DELIVER to a higher level of international collaboration, one that draws more on expertise in supply chain management and logistics than in FP. This in turn helps foster the growing interest among development organizations in logistics and supply chains as important areas for primary development investment. DELIVER's presence also helps make FP an integral part of integrated supply chains.

At the regional level, though initially with some reluctance, DELIVER has developed collaborative and subcontractual relations with two training institutes, PRISMA in Latin America and ESAMI in Africa. This investment imparts logistics training capacity to regional organizations that may be able to sustain the programs long after USAID ends its central support for logistics training. However, the investment to date has been considerable (about \$350,000 a year for each institution), and in neither organization is sustainability yet assured.

Both regional institutions face unique challenges. While PRISMA has promise for making supply chain training an integral part of its normal operations, the public sector in the LAC region is not likely to have the resources to support these efforts in coming years. For ESAMI, whether logistics training based on adult learning techniques will become a sufficiently large component of the business model remains questionable. With considerable encouragement from USAID/W, development of both institutions was furthered by collaboration between DELIVER and the LMS project of MSH. This alliance facilitated transfer of management as well as skills in adult learning practices to both regional organizations.

The evaluation team speculates that other institutions in Africa might be better suited for the training task. For example, Fuel PHD in South Africa, particularly since it is a DELIVER subcontractor and already provides highly regarded courses on warehouse management, might well have interest in offering a logistics course. The Center for African Family Studies, a Nairobi-based organization with a long history of FP and RH training, could also have been a candidate to provide a course on basic logistics. The evaluation team understands that while both submitted proposals in response to the regional training RFP, neither was adjudged responsive or within the competitive range. The bid process often results in selection of highly qualified organizations, as seems to have occurred with PRISMA for LAC. However, sometimes the most qualified organizations, particularly in regions where capacities are limited, are not good at writing proposals, or they are deterred by the formality and amount of effort required. A different approach to procurement might have resulted in a different outcome. It is also noted that at the time of this competition CAFS was experiencing particularly weak leadership. Alternatively, Fuel PHD, as a subcontractor, could have been approached directly to conduct logistics training on a pilot basis to determine if it would be a good fit for collaborating on regional training within DELIVER

In Tanzania, DELIVER contracted with government zonal training centers, which are semi-autonomous organizations that were originally organized for continuing health education. Contracting with a public entity was, according to one informant, —**bold step,**” with USAID/Tanzania willing to move this through OAA. Ultimately, the zonal training centers helped roll out the integrated logistics system while also building their own capacities for contracting and financial management.

c) Overall, at the country level, has TO1 been responsive to the field's technical needs? Has the task order had the appropriate skills mix to respond to these needs? How effective have been the task order's relationships with key stakeholders and other partners, such as host country governments, the private sector, multilateral agencies, bilateral donors, and other USAID projects? In what areas can TO1 improve its response to field needs?

DELIVER's home office in Rosslyn has been very responsive to requests from the field, not only in addressing problems long distance but in quickly fielding technical personnel for hands-on assistance. However, core teams in Rosslyn expend a substantial effort and energy on Washington-driven initiatives that may or may not address actual technical needs in the field.

DELIVER/Rosslyn staff clearly has the skills mix to assist with and build capacities for quantification and supply chain management within countries where DELIVER works. Staff at both central and country levels who join DELIVER without specific logistics skills quickly has opportunities to acquire these.

Some key informants criticize DELIVER's propensity for growing its own logisticians. However, a job candidate with education or experience in logistics, health, *and* international development is a rare find. The difficulty in finding line staff already educated in public sector logistics and supply chain management makes building from within a sensible approach. Many recent recruits come with pharmaceutical and private sector backgrounds, to which DELIVER adds specialized public sector logistics and supply chain management skills. Perhaps in the future, this will change. The team was encouraged to find a young female warehouse supervisor in Zambia with an undergraduate degree in materials management.

The evaluation team does see a hole within the skills mix available to field offices—that of procurement technical assistance. In almost every country reviewed, especially those using SWAp financing mechanisms, procurement processes are less than optimal, resulting in long delays. The current DELIVER IQC and subsequent workplans more or less acknowledge this deficiency in that they propose using subcontractors for it. In reality, access to subcontractor time has been limited due to competing commitments and misalignment of schedules.

Relationships with key stakeholders, including government counterparts, are often very positive and productive. However, the fact that capacity development occurs more within DELIVER than within ministries creates tensions. A number of informants for this evaluation, notably some high-level host country officials, articulated such concerns:

Transfer of skills to a depleted ministry has not been done well and that is where JSI assistance is a bit short. There is need to recognize that the ministry has an expectation of skills to be transferred for management, analyses, etc., and DELIVER is the one who can do that.

Undoubtedly, some skills are transferred to government counterparts. However, DELIVER neither tracks nor reports the extent to which this happens; nor does it give as much attention to high-level capacity development among counterparts as it does for its own staff. On the one hand, skills transfer to host country officials could reap major rewards. On the other, it is questionable whether there is budget and time for it in the current project. In addition, entrée to appropriate MOH decision-makers for the necessary involvement may be lacking in some countries. Relationships with host country officials and stakeholders, while difficult to develop and even more difficult to measure, are critical to the success or failure of individual country programs.

DELIVER's good relationships and close collaboration with in-country stakeholders have led to synergy across projects. The team was pleased to learn about collaboration between DELIVER and the Zambia Prevention, Care and Treatment Partnership, a PEPFAR-funded USAID project focused on HIV/AIDS. One organization is for clinical issues, another for logistics issues, and personnel from each visit the same sites, where they are assumed to have answers to questions about both areas of concern. In order to assure that the right answers are offered, cross-training between the two organizations was arranged.

d) What do USAID units outside of CSL and Missions (such as other GH offices and regional bureaus), other USAID projects, and external partners (such as UN agencies, bilateral donors, private foundations, etc.) perceive as the task order's technical strengths? To what extent are the technical inputs provided to these entities by the task order relevant and technically sound?

Informants consistently attested to the technical strength of DELIVER in public sector supply chain design and management as well as its scientific use of data for decision-making. DELIVER is also known for its critical mass of high-quality people—perhaps the largest body of expertise on public sector supply chain management in the world. Quantification and forecasting, particularly for contraceptive commodities, is its recognized specialty. With commodities expanded to include HIV/AIDS, malaria, and essential drugs, DELIVER is also perceived to have broadened its quantification and forecasting acumen. As one concrete example, informants affirm that DELIVER has significantly contributed, through long and short-term technical assistance, to the forecasting expertise that SCMS demonstrates for HIV/AIDS.

DELIVER's expertise affords it a unique opportunity to coordinate and collaborate with other projects and organizations. Though DELIVER is not strictly neutral, particularly in advocating for contraceptive commodities and supplies, the quantitative basis of its work gives it the stature of objectivity. In addition, strengthening the supply chains through which products are distributed gives DELIVER a critical role in making services available. From this specialized position, DELIVER is widely seen as having a central coordinating role among many projects and organizations committed to improving health service provision within particular settings.

e) How well does the DELIVER website serve as “information central” for public health logistics and commodity security?

The evaluation team was impressed with the extensive amount of useful information contained in the DELIVER website. However, it seems to be better accessed at international levels than within countries where DELIVER works. With connectivity becoming less of an issue in developing countries, particularly in major cities, this may well change. Perhaps more in-country attention should be given to ensuring that counterparts understand the content of the website and how to access it. Continuing efforts are also needed to improve the friendliness of website access. One informant complained that it is necessary to know the exact name of a document in order to locate it for viewing. The team had a similar experience and found that even after locating the document, it took very long to download. Since this happened with a relatively fast computer and Internet connection, one wonders how much more frustrating it might be in developing countries.⁵

⁵ For data on website use, see the DELIVER *Self-Assessment*, pp. 95.

ANNEX B. IMPLEMENTATION AND MANAGEMENT: QUESTIONS AND ANSWERS

1. Is the current mix of task order activities—long-term technical assistance, short-term technical assistance, training, organizational development, monitoring and evaluation, research, communications—adequate to achieve the task order objectives? Are there other types of assistance that should be undertaken?

DELIVER’s mix of task order activities suits the project’s strategic objective: —to increase the availability of essential health supplies in public and private services.”

BACKGROUND

DELIVER has evolved from earlier project iterations: Family Planning Logistics Management I (1986–90); FPLM II (1990–95); FPLM III (1995–2000); and Deliver I (2000–07). These projects supported contraceptive commodity logistics largely by providing long- and short-term technical assistance.

With more resources and a broader range of commodities to cover, the current DELIVER project is now able to employ a wider range of approaches and expand its long-term technical assistance to more countries. With long-term positions in 14 countries, DELIVER has coordination roles with donors, host governments, and implementing partner projects. In such presence countries, short-term technical assistance has largely shifted to specialized work, including skills development for local DELIVER staff. Within the current DELIVER project, monitoring and evaluation has become central to supply chain management, with a variety of tools used to get better and more timely data on commodity status. Many countries have research projects in place to test particular innovations, from collecting data using cell phones to integrated logistics information systems. Some countries have given more attention to communications; in Zambia and Ethiopia newsletters are used to disseminate information about local logistics and supply chains. In Bangladesh, DELIVER has been helping local counterparts to roll out a web-based LMIS.

Organizational development seems the one area where more could be done, or at least more of what is being done should be communicated and counted. However, neither this project nor the contracts under which it operates give highest priority to developing the institutions upon which supply chain sustainability will depend in the long term. Apart from large numbers trained in filling out forms and handling supplies, it is difficult to ascertain how much DELIVER has done to transfer relevant skills to government and other counterparts.

Beyond in-service training, the evaluation team understands and appreciates that DELIVER has made considerable effort to transfer skills and build local capacities. Tailored to meet needs within specific countries, such DELIVER investments include provision of international courses for selected in-country counterparts; development and application of OJT approaches in some settings; establishment of logistics management units in some countries, like Zambia; and creation of system manuals and guides. However, DELIVER has neither specific indicators to track such inputs nor a framework within which to monitor progress and assess the results of such investments. Building on what it has done to date, DELIVER recognizes that formulating an overarching framework to guide capacity-building would be a useful next step.

Along with transferring some skills to in-country counterparts, DELIVER has done very well in developing the capacities of its own staff members, the local hires who form an increasingly important part of in-country operations. These cadres, trained in and inculcated with DELIVER’s high-performance approach, are not likely to one day work in government. However, in years to

come they will take with them, probably into other NGOs, the skills and management approaches learned from DELIVER.

In the two countries visited, the team learned of efforts to transfer needed skills to host country institutions responsible for procurement and logistics. Where resources are more plentiful, as in Zambia, seconding staff to counterpart organizations has been used effectively. Where resources are fewer, less is done. Nevertheless, in Tanzania DELIVER has transferred training capacity, with some success, to quasi-governmental zonal training centers.

More emphasis on skills transfer to host country institutions with procurement and supply chain responsibilities would be important in subsequent iterations of this project. While not all countries where DELIVER works are ready to sustain the systems that capacity transfer presages, some countries are moving in that direction. Ethiopia's embrace of supply chain re-engineering and Rwanda's rapid progress in FP evidence this readiness. However, at present, DELIVER is not oriented to, let alone monitoring and measuring, progress toward capacity development within host country institutions. The only relevant indicator is the number of people trained throughout the supply system. DELIVER itself recognizes that training is a poor proxy for capacity development. With major human resource capacity challenges in all countries where DELIVER works, including frequent public health system staff turnover, there is need for considerable retraining as well as continuing supportive supervision and OJR.

Until recently, donor investment and interest drove most countries to have vertical systems for FP and other health products. With strengthened supply chains and increased commodity flows in a number of countries, supply chain integration has gained momentum. The broader range of commodities that DELIVER deals with has also spurred interest in and efforts at integration. This has occurred both at the central level (e.g., DELIVER's work on supply chain segmentation) and in-country (e.g., the integrated logistics system being rolled out in Tanzania and the essential drugs pilot currently underway in Zambia). With the latest iteration of PEPFAR pushing more toward sustainability of HIV/AIDS supplies and the systems through which they are distributed, interest in integration is likely to expand. Supply chain integration as a pathway to sustainability could then be mainstreamed into activities that DELIVER undertakes.

2. How well has the task order implemented the IQC's business model?

While capacity development may admirably underlie some components of the NBM, this USAID-promoted effort has produced as much consternation as concerted effort to move DELIVER toward long-term development. The team could not determine the extent to which this derived from resistance to taking on things not contractually clear or from poor management of a change that USAID wanted to introduce.

In general, the IQC business model is compatible with DELIVER's general direction and approach. On contractual grounds DELIVER seemed to resist efforts to track business model indicators. By this time in the project, however, DELIVER has largely embraced the model and made some progress on its implementation. However, the only indicator that DELIVER quantifies is the number of local hires. It does routinely report more qualitatively on progress being made within the six components of the business model in its annual reports.

Before addressing how well DELIVER has performed on the NBM components, some background on what comprises the model and how it came about may be useful. What has been termed, apparently by JSI, the "new" business model consists of six elements: partnerships with local organizations, technical innovation, data-based decision making, adaptation of private sector practices, local hires, and use of subcontractor capacities. It should be noted that what these components comprise is neither new nor a model. Rather, the NBM is a list of components USAID has provided as guidance to JSI on how to implement the 2006 DELIVER IQC and TO1 contracts.

The elements of the model themselves are useful and largely compatible with JSI practices and philosophy. However, the NBM seemed not well articulated: why these components? And what do they add up to? Lacking such clarity, JSI balked not so much on implementing the model as on tracking progress on each component. Lost in the process was the opportunity for USAID and DELIVER to develop a comprehensive vision of what the sum of these parts would actually mean.

Findings synthesized from informant responses for each of the six elements of the NBM are as follows:

- **Partnerships with local organizations:** There is some confusion about the local organizations such partnerships should be directed to. There is a broad range of organizations with which DELIVER could work: government, NGO, parastatal, private sector, collaborating agency, donor, etc. However, partnership does not necessarily denote a need for skills transfer.

Within countries, DELIVER demonstrates close working relationships with service delivery if not policy promotion projects and organizations. Work on the ground by DELIVER and others is correspondingly strengthened.

As long as USAID remains committed to the public sector, more weight should be placed on developing government capacities for managing supply chains. Public sector partners in some settings could clearly benefit from capacity development. DELIVER and in-country informants attest to the strength of partnerships that DELIVER has with the MOH and other entities, public or parastatal, responsible for supply and logistics. However, capacity development as part of such partnerships is often deficient, obstructed in part by differences in human resource capacity and organizational culture.

Thinking more in terms of partnerships with private entities and NGOs, USAID decries the fact that local organizations are not more fully used to carry out some of the work that DELIVER does itself. DELIVER points in turn to a trail of failed efforts where local capacities were not up to the task. The tension between getting the job done versus developing capacity to keep it being done once DELIVER departs is an important dynamic that plays out in this component.

This does not rule out outsourcing, when governments are open to that possibility and local capacities exist or can be developed to serve that need. Outsourcing can be a viable approach to achieving sustainability. However, to do that DELIVER would have to shift its emphasis to help ministries manage local organizations to perform under out-source contracts.

- **Technical innovation:** USAID/W key informants said directly that DELIVER has not been innovative enough. DELIVER respondents list a number of promising innovations it has considered, several of which continue as experiments in the field. In the field itself, both USAID missions and DELIVER are wary of trying —innovations for the sake of innovating.” They want instead solid approaches with high promise for producing results. While some interesting innovations are occurring within DELIVER, these are often, as one informant stated, top-down —solutions looking for a (field-based) problem” to solve.
- **Data-based decision making:** Almost all respondents gave high marks to DELIVER for implementing this part of the business model. This is DELIVER’s core achievement: deriving data from the field and then using it to drive decisions about procurement and logistics. Separate issues are the extent to which data actually represent consumption of product at the last mile, and DELIVER’s flexibility in recognizing that forecasting based on consumption history does not work well in all situations for all product lines.

- **Adaptation of private sector practices:** On this dimension, DELIVER may not be taking enough credit for the considerable adaptations from private sector practices that have been made as JSI's work on contraceptive logistics has evolved.

DELIVER makes an effort to find best practices from sources beyond JSI. Brown-bag presentations by outside experts are one way this is currently done. The evaluation team also witnessed impressive idea exchanges with international organizations during the November 2009 IPC meeting. Also, an annual meeting at Zaragoza, Spain, seems to be a useful venue for tapping into private sector thinking on supply chain innovation and management.

However, there are other potentially useful avenues that DELIVER has not explored. For example, corporate social responsibility programs could provide useful, even direct hands-on, assistance in identifying and supporting logistics and supply chain innovations of relevance to DELIVER. Similarly, even though the War College with military-based expertise is nearby, DELIVER has not reached out to this potentially useful source of best practices. Nor has it sufficiently tapped into subcontractors, such as Abt Associates and Fuel PHD, to fully draw on their experiences or relevant best practices.

Bar codes in warehouses and all along the supply chain may one day be a suitable adaptation of commercial practices. Even in Mansa, a small Zambian town far from the capital city, scanners are used at the local supermarket. However, such breakthroughs are not possible without considerable buy-in all along the supply chain and installation of supporting infrastructure. The Zambian supermarket is part of a southern Africa chain that adopted this technology as a good business practice. For public sector supply systems, donors who procure products are not well enough coordinated to systematically commit to bar coding. Intervention and interaction with the donor community at this level would seem beyond DELIVER's current capacity and mandate but might be possible in the future.

- **Local hires:** DELIVER presents impressive evidence of the progress it has made in hiring local staff for in-country work. However, the data mask a reality that is at the heart of USAID/W concerns that DELIVER has not done more in this dimension. Among chiefs of party, few are actually from the countries where they work. Expatriates, many of whom have been within the JSI family for many years, still have considerable high-level presence within DELIVER countries. (In almost all cases these people are very highly regarded by missions, other collaborating international organizations, and MOH partners.) It also seems somewhat disingenuous to not give DELIVER credit for the new generation of country directors emerging from the Latin America and Africa regions and assuming responsibilities in some countries, notably Malawi. Though distant from the field, USAID/W must also be mindful that procurement and logistics are more fraught with potential for corruption than other lines of work in which USAID is engaged. In such circumstances outsiders may well hold decided advantages over insiders.
- **Use of subcontractor capacities:** By its own admission, DELIVER's performance here has been uneven. The team believes that while these deficiencies are detrimental to the present project, they may yield lessons for the future. For example, the health economist expertise that Abt Associates or the warehousing management experience that Fuel PHD could bring are losses to the project. DELIVER must do more to ensure that such core capacities are part of its implementation. While it may be too late to repair relations with Abt Associates for this purpose, Fuel PHD remains a resource as yet untapped. Given its potential usefulness in Africa particularly, the team suggests that DELIVER negotiate to second one of its staff to Fuel PHD in South Africa. Without intimate knowledge of how it works and what it has to offer, JSI is unable to tap into its potential. Reverse seconding

to Abt Associates in Bethesda could also be a means to have more direct input from health economists.

The team believes that financial constraints on core and administrative budgets worked against the best use of subcontractors. In many cases, the project could afford subcontractor personnel only part-time. This did not work out because (1) for short-term technical assistance situations, it was not possible to define precise schedules and SOWs far enough in advance to assure that the right people would be available; (2) contractor personnel who are not participating daily in a project tend to miss important information, direction, and nuance; and (3) priorities for these people remain with their home organization.

3. *What technical, managerial, and contractual support has the task order received from USAID/W? Has this been adequate? To what extent has the CSL management structure for TO1—adopted in 2007—been beneficial or constraining to the task order’s work? Are there ways to make the CSL-JSI interface more efficient and effective?*

In gearing up for TO1, CSL added three new positions plus an administrative assistant to help support the widely expanded project. Two of the positions were targeted for technical support: a supply chain specialist from the private sector, and a reproductive physiologist with development experience. The third position, added to support the policy and advocacy demands of objective 2, was filled by a specialist in FP and maternal and child health with training in policy, advocacy, and health systems management. CSL also altered the responsibilities of the Contraceptive Commodity Procurement (CCP) unit and greatly expanded the role of the contractor’s office technical representative (COTR) from caretaker to hands-on manager.

Undefined and unclear managerial authority within the new positions confused the work of DELIVER TO1 in the beginning, though more clear-cut lines of authority within CSL have since enabled DELIVER’s work to proceed more efficiently. The new CSL employees are assigned to liaise with specified core teams within the DELIVER TO1 structure. They also backstop specific countries, again aligned with the DELIVER country and TO1 backstop teams.

The focal point for DELIVER TO1 and CSL relations is the COTR. This redefined managerial arrangement has solved some problems. The expanded role of the COTR, particularly around technical collaboration, has definitely benefited TO1 work. However, this is due to the skill and interest of the COTR himself, not the CSL management structure per se. Reportedly, this structure may also inhibit valid and valuable input that would draw on other impressive expertise within CSL.

As USAID’s point person for overseeing DELIVER, the COTR also has some responsibility for coordination with other task orders and with USAID missions providing field support funding to DELIVER. Within the larger HPN management, the COTR for TO1 has other mandates that can constrain the task order’s work. The HPN structure requires buy-in on TO1 activities from at least two levels higher than the COTR position. Thus, how well the COTR presents and “sells” ideas—especially innovative ideas—has a great impact on TO1 work.

SUPPORT FOR CONTRACTING

Support for contracting remains problematic throughout USAID and affects both internal and external operations. Understaffed with frequent turnovers describes the Office of Acquisition and Assistance (OAA) as much as the developing country logistics systems that DELIVER is trying to improve. Nevertheless, JSI claims, and CSL affirms, that since 2006 it has become easier to move procurements and waivers through the contracts system. A recent meeting with DELIVER

and CSL initiated by OAA indicates openness and a willingness to improve. However, OAA's underlying human resource problems may prove difficult to solve. (CSL management related to CCP was specifically excluded from the evaluation SOW).

CSL/JSI INTERFACE

Informants from both CSL and JSI recognize the high levels of technical competence on both sides of the Potomac. This has provided a basis for cordial and collegial relations between DELIVER and CSL. There have, however, been rough patches, primarily during project start-up. In particular, difficulties and differences occurred within procurement and MIS (both areas outside this SOW). These early struggles still color current perceptions on how the other side is performing.

Change management does not seem to have received sufficient attention at the start of this project. And the changed world within which DELIVER operates, including how products are procured and distributed within presence countries, does not seem to have sufficiently affected how Rosslyn and Washington continue to operate. An integrated world requires fully forged and carefully nurtured alliances.

Both USAID and DELIVER acknowledge the start-up problems, particularly with procurement and MIS development. DELIVER staff in particular note that they could have done things differently and better. On the part of USAID/W, there was little acknowledgement that the change process it introduced could have been better managed. In the aftermath of project start-up, however, relations are now generally described on both sides as collegial and cordial.

While there is mutual respect between DELIVER and CSL, it nevertheless appeared that lingering mistrust and misunderstanding inhibit the project from achieving maximum performance. The evaluation team does not consider this a problem in need of a structural fix, but further clarification and communication will well serve both donor and client. A facilitated retreat, such as CSL recently had for its own staff, may well help further understanding and clarify the roles and responsibilities of CSL and DELIVER.

Relations between donors and recipients, whether contractual or otherwise, are often fraught with challenges. The shift to a broader project and the corresponding changes in personnel seems to have exacerbated differences between DELIVER and CSL. Though largely smoothed over with time, some tensions and distortions remain. As a result, CSL may exert too much control and influence in directing some aspects of this project, while DELIVER has shifted from being initially resistant to being overly compliant. In consequence, project performance may be less than it could have been.

DELIVER nonetheless performs to a very high standard, for which both USAID and JSI should share credit. However, commodity logistics, supply chain management, and procurement are rapidly changing. SWAps, basket funding, and integrated, decentralized approaches make DELIVER's mandate more complex and challenging than before. DELIVER headquarters, supported by CSL, will need to be more nimble and responsive to what is happening in the field, not overly structured and locked into increasingly predetermined, centrally-driven activities.

The President's Global Health Initiative (GHI), including the large amount of support for PEPFAR, provides promise and opportunity. Although curative medicine often trumps preventive care, GHI is poised to build preventive programs, such as FP, malaria eradication, and HIV/AIDS prevention, into broader health systems. To make GHI operational will require adjustments to align USAID management and oversight with these new priorities. Supply chains already carry both preventive and curative products. DELIVER and its successor projects will be an important component of GHI.

Innovation to drive system change needs cooperation among those promoting health system development and improvement. This should not only occur in the field but also be modeled in Washington. To an extent CSL's perception that there is insufficient synergy among teams within DELIVER/Rosslyn reflects divisions and divides even more evident within USAID/W. The walls, or cubicles, that divide program responsibilities within USAID work against innovation and broader program impact.

4. *Are reports (technical, financial, etc.) provided as required by the task order contract? What additional reporting is requested by CSL and USAID Missions? Are these reports used by USAID Missions and in USAID/W, and how? What different reporting requirements would be more cost-effective?*

The multiplicity of reports, as well as people to report to, under multiple task orders is cumbersome at best, deleterious at worst. DELIVER has become good at putting together reports, workplans, self-assessments, and a plethora of articles and technical bulletins. But is this over documentation? Are the lengthy reports really useful, or even read? Worse, has DELIVER become task-driven, and does this take away from finding the right matches between what the field needs and what the connection to the U.S. and the global context should otherwise provide?

DELIVER submits required reports as well as workplans on time. Different task orders as well as field support at country level multiply the number of workplans and reports required. It would be useful to consider streamlining the central-level technical and financial reports required into one report to serve all. USAID and DELIVER also need to reflect on how useful the reports currently submitted are and how burdensome they may be to staff who could perhaps be better occupied doing other tasks.

It is of interest that the Monthly Report, which is not a project requirement, seems to be the most read and valued report of all. CSL uses it to stay up to date on what is happening across countries and within DELIVER's home office core teams. TO1 management uses it to help construct required annual and semi-annual reports. Countries use it to stay connected, and it is used globally for cross-fertilization of ideas and experiences. DELIVER field staff reports that assistance from the home office in producing these monthly reports alleviates much of the burden that would otherwise be on them.

Unlike the useful Monthly Reports, the semi-annual report may well be redundant and could be eliminated; monthly and annual reports should suffice.

5. *Does the task order manage its personnel to be responsive to requests from USAID Missions, USAID/W, and other organizations (e.g., for technical assistance, workplans, financial information)? How effective are the task order's organizational structure and processes in ensuring the quality of the task order's responses, in terms of cost, timeliness, and technical quality?*

RESPONSIVENESS

DELIVER manages its personnel to be responsive almost to a fault to requests from USAID Missions, USAID/W, and other organizations. Management's attitude has been to be open to what USAID wants, make sense of things, be flexible, graciously adjust, and thereby preserve good relations.

DELIVER's organizational structure and processes are set up to facilitate excellence and ensure quality. In the home office, the director of technical services oversees six core teams organized around six predominant TO1 themes. Each team has three to nine members and has access to other technical advisors as needed. The field technical director position parallels the director of

technical services to ensure that concepts and tools generated within the core teams have a path for transfer to country level. Both directors report directly to the TO1 director. TO1 is also organized to facilitate interface with procurement and MIS.

In the IQC component, senior program managers with technical skills contribute to the TO1 response both at country level and within the core teams. In practice, there is fluidity between core teams, country backstop teams, and various functional support groups. A management team headed by the IQC manager and the TO1 director adds input and provides oversight. Other personnel who are members of the TO1 management team are the director of finance and administration, the communications strategist, the project coordinator, the director of supply operations, and the director of country operations. Project performance and costs are tracked by the project performance manager and the director of finance and administration. Core teams also track team expenditures against budget allocations.

DELIVER safeguards its special niche by both proactively sharing the data it collects and being responsive to requests for information and assistance, especially when these come from missions or USAID/W. While key informants generally perceive DELIVER to be “very responsive,” USAID/W seems to harbor more complex feelings. To an extent, the start-up difficulties may still taint current perceptions. Some CSL staff view DELIVER with suspicion—what is this contractor trying to get away with? For its part, DELIVER’s need to find coverage for staff based in Rosslyn creates a tension that may feed such suspicions.

In both Tanzania and Zambia, DELIVER received accolades across the board, including from the USAID mission, for being highly responsive. The sentiment is widely held in these and other countries that it would be difficult to have the impact health projects are having without DELIVER being in place: no product, no program. Many also see a sea change, or as key informants from two countries independently observed, before and after DELIVER are “like night and day.”

6. Is the task order’s management of funds responsive to Agency requirements for reporting, as well as to the varying priorities of different funding sources and types? What burden does the management of different kinds of Agency funding place on the task order? What have been the opportunities to leverage the different kinds of funding?

The team surmises, though using a much lower standard than the internal audits JSI conducts regularly, that DELIVER manages its USAID funds responsibly and reports diligently. Project financial personnel are experienced and work closely with country backstop and technical teams to ensure that expenditures follow workplans. Tracking systems allocate staff time by codes that are aligned with approved field support funds and workplan activities. Since most positions in the home office are not fully covered by DELIVER, non-project work codes, such as for short-term assignments to SCMS or JSI Logistics Services, are also used. While the resulting system is complicated and burdensome, JSI financial managers report that they are able to manage it.

JSI seems particularly adept at adjusting to the management structures and reporting systems under which it is asked to operate. However, efficiencies would be gained if USAID and allied development operations aligned management structures with more holistic approaches.

LEVERAGING

In-country, DELIVER often occupies a pivotal position, though forecasting and commodity security committees, in alerting donors to funding needs for contraceptives and other commodities. While such funds do not come to JSI, they are leveraged on behalf of host country governments. The same is true in the regions by way of information JSI routinely provides for the CAR working group.

JSI Logistics Services is the business unit within JSI that services non-DELIVER clients for logistic system and supply chain improvements. Among the 15 clients that have used or are using its services are the Gates Foundation, Global Fund, Unicef, UNFPA, and bilateral donors like the Netherlands. The activities it undertakes are often directly connected to or derived from work initiated under DELIVER.

DELIVER does not track funds leveraged as a result of project activities or expertise. However, as a result of DELIVER activities JSI often attracted funding from non-USAID sources. In Zambia, for example, the World Bank is funding JSI to evaluate a pilot being undertaken by Medical Stores Limited for an integrated system to distribute essential drugs, including contraceptives, to service delivery points. Recognizing the potential for expanding this approach nationwide, JSI/Zambia welcomed this additional funding and work.

7. How effective is the TO1 management (home office structure in supporting the interactions of objectives 1 and 2 with objective 3 to help ensure product availability for USAID programs in the field?)

Work related to objective 3 is centered within the DELIVER structure but, in the opinion of several observers, tends to operate almost as a separate project. The TO1 management structure has a procurement coordinator position and a CPT/pipeline officer who report directly to the TO1 director. (There is also a procurement excellence node in the core team structure that operates intermittently.) While there seems to be no direct path between the complementary functions of TO1, procurement, and MIS, some formal arrangements are in place. Well-established are several meeting venues, such as monthly MIS meetings with TO directors and regular TO-specific procurement meetings, to facilitate information exchange and communication. The supply operations team seems to have a particularly pivotal role in relation to MIS, IQC, and TO1 management. However, the organogram pathway from TO1—upward through the IQC manager, then down to the respective functions—is unable to reflect such intricate connections and interactions. On an operational basis, DELIVER and the individuals within it have built informal as well as formal pathways. Furthermore, what appears to be inefficient from the outside may in fact be an intended separation based on good accounting practice that seeks to prevent inappropriate influence on procurement and financial decision-making.

Interactions of objectives 1 and 2 with objective 3—to affect product availability in the field—remain more promising than proven in the case of TO1, but the promise has largely been fulfilled in the case of TO2 and TO3. This is possibly due to the direct contacts TO2 and TO3 staff is permitted to have with field missions as well as the procurement unit in Rosslyn. Even though DELIVER has direct responsibility for procurement, USAID missions continue to forward their procurement requests to CSL because that is how they are accustomed to processing these and that is how CSL wants to proceed.

The evaluation team sees a missed opportunity in this status quo. DELIVER's most important new work with best practices from the private sector, the integration/segmentation model (referenced in the main report and discussed more fully in Annex A), cannot be demonstrated in its TO1 work due to the required detour through CSL's procurement unit. Modern, efficient supply chains are based on operational control, communication, and visibility up and down the entire process, starting with forecasting, moving down through procurement, and ending at delivery to the end user. As a procurer/supplier, DELIVER is in an interesting space, having access to detailed information on country program needs and the ability to influence those needs. In the commercial sector, “knowing what the customer wants before he does” is seen as a gold standard. Yet in its TO1 operations, DELIVER is unable to fully realize the advantages in responsiveness and agility its position affords because it is constrained from communicating directly with its customers.

Nevertheless, the evaluators were pleased to learn from both JSI and CSL that under DELIVER procurement is now running more smoothly than it did during start-up . In fact, DELIVER has now managed to move procurement contracts and waivers through OAA faster than when CSL had that responsibility.

An additional difficulty of procurement for contraceptive as well as other commodities is a multiplicity of donors and projects. To an extent JSI's role in procuring contraceptives through DELIVER is dwarfed by the considerably larger and more visible presence of procurement through SCMS in a number of overlap countries. However, where substantial procurements are part of DELIVER's combined work with SCMS, as in Zambia, the result considerably enhances the efficacy of JSI's presence in a country. In Tanzania, where DELIVER and SCMS are both present but operating separately, some key informants expressed confusion about JSI's role there.

USAID DOMAIN

There are higher-level synergies to seek for improving product availability that probably lie outside the domain of DELIVER and may more properly be addressed by USAID in its capacity as a major donor of commodities. To some extent donor coordination for procurement occurs in-country, often with DELIVER playing a helpful role. Though beyond the scope of this evaluation, more coordination is likely needed at the global level.

What the RHSC attempts to do for contraceptives needs to be expanded to a much broader array of donated commodities. USAID leadership in this arena could prove useful and effective. Not only could economies of scale be sought but also systemization (such as agreements on standardized packaging or even bar coding) to facilitate in-country receipt and distribution of donated commodities.

PROCUREMENT TECHNICAL ASSISTANCE

There is one procurement-related country-level role that DELIVER could have that would affect product availability, though it has not yet been tasked or organized to do so. Just as DELIVER has helped a number of countries access Global Fund resources to procure contraceptives, so could it assist in-country procurement units in negotiating particularly burdensome procedures. At the top of the list would be assistance in dealing with the often onerous World Bank —no-objection” oversight.

8. Does the management structure (in particular that of the core technical teams) facilitate cross-fertilization of ideas/best practices within TO1?

A complicated project structure that starts with two separate but related contracts is mirrored by a complicated organogram. The saving grace is the dual roles of many staff, JSI's corporate culture, and many informal pathways to get the work done. While the formal management structure of TO1 seems cumbersome, senior managers and staff work to facilitate cross-fertilization of ideas and best practices.

CROSS-FERTILIZATION—CORE TEAMS

Although some USAID/W key informants expressed concern about a lack of synergy and cross-fertilization between the technical teams, the evaluation team did not find this to be the case. With the team structure as supported by senior management, there is considerable cross-fertilization among the five technical teams that manage the bulk of core-funded activities: supply chain management, monitoring and evaluation, policy, organizational strengthening, and HIV and laboratories. Each team has a designated technical lead and three to nine team members. To enhance performance, technical teams draw in expertise from other DELIVER staff as needed. CSL staff members also align with particular technical teams to provide input on and monitor workplan activities.

Because each technical team member is only partially funded for work done within these teams, some synergy derives from other work that they do. Having responsibilities outside of the technical teams facilitates cross-fertilization across the project. The teams are also transparent in how they function and what they are working on, and technical team leaders meet together about once a month. To compensate for the possibility of structural obstructions, senior managers are intentional about communicating across teams. Similar arrangements are in place for country teams headed up by senior personnel managers within the IQC pool.

WORKPLAN DEVELOPMENT

On workplan development, the evaluation team found ample communication between CSL and DELIVER central staff. Key informants from both describe a somewhat lengthy but engaging process of interaction on workplan activities. However, communication with countries on developing the workplans seems more perfunctory than productive. Emails asking country directors for input into central workplans occur late in the process. While country backstop teams are somewhat involved in country workplans, technical teams seem to be much more removed from reviewing or providing input into them. While the team believes that there may well be active engagement of technical team members in developing and identifying fulfillment of in-country short-term technical assistance needs, systematic involvement in country workplan development was less evident. Furthermore, ostensibly for budget reasons there has been only one meeting in Rosslyn of country directors and technical staff, and that was during the first year of the new project, though the team understands that in February 2010 a number of field staff participated in a highly engaging week of interactions and exchanges with CSL and Rosslyn-based DELIVER staff.

Development of the annual workplan for core-funded activities is the pivotal process for aligning central TO1 funds with innovation. Once the core workplan is approved, the flow from technical team activities to implementation in the field seems to be smooth.

Unfortunately, the workplan process does not build upon the valuable assets and activities that DELIVER has in-country. It is unfortunate that this important resource for information on which innovations could be most useful and used is not more directly involved. If funding for seminal meetings to make this happen is the constraint, that is short-sighted and deleterious to deriving innovation from the field, where it is most needed. It also misses out on the opportunity for cross-country fertilization, which now occurs only sporadically or serendipitously, sometimes through technical assistance visits to one country and then another.

CROSS-COUNTRY FERTILIZATION

The evaluation team found deficiencies in sharing best practices across countries; more cross-fertilization is needed, since what works well in one country can sometimes be replicated in another. The logistics newsletter created in Zambia and now also used as a communication tool in Ethiopia is one example.

While DELIVER has made some conscious effort to help Latin American countries communicate with and learn from each other, the project has done little in this regard in Africa or Asia. At the moment there are few opportunities for countries to learn from each other and adapt promising practices. For example, the various supply chain integration efforts underway are known but not shared for the learning that could emerge. Similarly, the innovative response to the near-emergency situation in Zimbabwe, the DTTU, may well have application elsewhere.

However, sharing lessons seems slow and left largely to chance. Monthly reports, website postings, and occasional cross-border visits provide some means to disseminate information from country to country. DELIVER avows that technical team advisors, assigned to help formulate country strategies and workplans, also help disseminate best practices. It should also be noted that

IAPHL provides a mechanism for sharing experiences across countries. Finally, some higher-level meetings are occasionally held, such as the recent Colombia conference for LAC and the joint meeting of almost all Africa country teams in Dar es Salaam in 2008, which offer forums for sharing best practices and lessons learned. However, most countries operate largely on their own without extensive central encouragement to help one country learn from another.

Some informants reported that field-based staff who have lengthy tenure within JSI communicate informally, allowing some cross-learning to occur. However, DELIVER's senior management should more deliberately ensure such exchanges. During this evaluation, two countries in particular, Zambia and Bangladesh, emerged as potential models, with approaches and activities that deserve to be shared. While the Monthly Report is a primary cross-fertilizer, more specific attention should be given to useful ideas emerging from within countries to ensure the possibility of their extension to others.

9. How well has the TO1 management structure supported country programs with management, administrative, and technical support? How dependent are country offices on the home office for support? To what extent do central technical staff review and advise on the development and implementation of country strategies and workplans, facilitating the incorporation of best practices?

Except for two positions, the CPT/pipeline officer and the procurement coordinator, the TO1 management structure draws on IQC resources for management and administrative support to country programs. The TO1 management structure clearly supports, but does not direct, country programs, technical support for which comes from both TO1 and the IQC. In the TO1 structure, the field director, the director of technical services, and the core technical teams contribute to field support. The IQC structure houses the director of country programs (also functioning as overall IQC manager) and the team of senior program managers reporting to him.

While country offices are clearly dependent on the home office for certain important functions (financials, procurement, contracts clearance), in many ways they operate as independent entities. Since they are principally financed through field support from USAID missions, this autonomy is appropriate and appreciated. Nevertheless, a variety of mechanisms are in place to ensure coordination of in-country efforts and compliance with workplan budgets and activities: biweekly calls with the backstopping teams comprised of a senior program manager, program officer, and financial officer; periodic visits to the country from members of the backstopping team, particularly the senior program manager; and home office assistance in formulating monthly reports.

CENTRAL REVIEW AND ADVICE ON COUNTRY WORKPLANS

There is some intersection on workplan development between the country level and the home office, but they draft their workplans separately. Country workplans have the mission and the MOH as the target audience; Rosslyn workplans clearly target, and to some extent are driven by, USAID/W. JSI country backstop teams review country workplans, and country directors are invited to give feedback on central TO1 workplan drafts. This occurs within a temporal context of different budgeting and preparation cycles.

FACILITATION OF BEST PRACTICES

While the country level is receptive to innovation, it is cautious about —innovation for innovation's sake.” Practical tools and approaches that promise near-term improvement of logistics and supply chains are welcome. However, tests of interesting ideas from Washington that are not likely to have immediate practical relevance are not welcomed by either mission or DELIVER staff.

Among the innovations that are making their way into the field is the use of cell phones to upload consumption reports. Another innovation the evaluators feel is needed are end-user efforts to unify logistics and service delivery system reporting. The SmartCard client record underway in Zambia, a CDC-driven approach for which DELIVER is piloting a small study to look at potential uses for commodity reporting, is a fledgling example of what is needed.

At an operational level, the team endorses building flexibility into projects, particularly those as large as DELIVER. The team was pleased to learn that, apart from committed core funds tied to workplan activities, CSL provides project flexibility in the form of “shelf funds.” Such flexible funding is a critically important and useful for serving the needs of both USAID/W and the field. It has enabled DELIVER to respond rapidly to needs as they arise and to further opportunities for pursuing innovations of particular interest and merit. For example, during the last year shelf funding provided support to operationalize supply chain segmentation within two states in Nigeria. Since annual workplans are being drafted some six months before funds are released, having such a flexible mechanism within DELIVER is extremely useful.

10. Overall, how effective is the TO1 management structure in serving the needs of USAID/Washington and field programs?

The TO1 management structure in Rosslyn is set up to serve the needs of USAID/W, and through that avenue USAID’s field programs, with information, reports, and technical interventions. It provides counterparts across functions and at different levels as appropriate for meeting CSL needs. For example, the CSL COTR meets with the TO1 senior management team biweekly to discuss a wide range of issues. The COTR also meets every other week, as calendars allow, with certain DELIVER directors for more informal discussions on both administrative and implementation issues. On a lower level, technical personnel from CSL assigned to specific TO1 themes align with counterparts in DELIVER’s core team structure. Thus, each core team working on a technical theme, such as organizational strengthening or policy, relates to a CSL staff member for technical advice. Similarly, individuals at CSL assigned to backstop specific countries have counterparts in DELIVER’s country team structure, primarily in the person of the senior program manager who heads the country team. In addition, high-level DELIVER managers, such as the TO1 director and the field technical directors, monitor program performance, report to USAID/W COTRs, ensure that TO priorities are incorporated in workplans, visit high-priority countries, and interact with missions as needed.

There is, however, one linkage that is missing with regard to serving the needs of USAID’s field programs: direct communication between TO1 DELIVER staff in Rosslyn and USAID field missions. TO2 and TO3 appear to directly communicate with missions, though primarily on procurement issues. TO1 does not. It may be useful and instructive to determine the extent of direct communication between USAID/W COTRs of TO2 and TO3 with USAID missions in situations where DELIVER does and does not have an in-country presence.

Apart from procurement, there is much direct communication between DELIVER and USAID missions through the country director where DELIVER has this presence. In turn, country directors have regular communication links with Rosslyn-based senior program managers who head country teams. In the process, however, sometimes critical information may not get passed along fast enough, or at all. USAID/W’s concern that it is sometimes not alerted to a brewing crisis early enough may have to do with the channels field-level information passes through as it moves from the IQC structure, where country directors are managed, to the TO1 management structure. There is also a proclivity among most contractors, perhaps JSI in particular, to try to sort problems out themselves before calling in USAID/W. The structure and style of DELIVER could therefore inadvertently lead to country concerns not reaching USAID/W until they are actually in crisis.

11. To what extent has the DELIVER IQC “environment” and management structure fostered cross-fertilization to the mutual benefit of the three task orders?

This evaluation is focused on TO1. With TO1 considerably broadened to encompass a range of commodities, DELIVER was prepositioned to encompass TO2 and TO3. As CSL leaders have pointed out, TO1 could have itself absorbed all additional needs for services without resort to new task orders. However, given the need for line responsibility, USAID managers responsible for administering avian flu and PMI funds felt compelled to have the clear reporting lines and managerial oversight that separate task orders would provide.

The extent to which the DELIVER IQC environment and management structure have fostered cross-fertilization to the mutual benefit of the three task orders has been for the most part unremarkable. How individual people participate and share is much more conducive to cross-fertilization than the management structure within which they operate.

The management structure across the three TOs is primarily linked through the IQC management team comprised of the three TO directors, director of country programs, director of supply operations, director of finance and administration, communications strategist, project coordinator/STTA manager, and TO1 director of technical services.

To understand operational distinctions and differences with TO1, the evaluation team tangentially reviewed TO2 and TO3 and found them to have much in common with SCMS and its emergency response to get products in place. While commodities and supply lines for TO1 and TO3 have some similarities, influenza (TO2) is quite different in content and operations. Neither TO2 nor TO3 approach TO1’s considered commitment to strengthen the systems through which supplies are provided. In consequence, the DELIVER IQC environment does not itself greatly favor or facilitate cross-fertilization for the mutual benefit of the three different task orders. However, how DELIVER is managed affords some opportunity for cross-learning among task orders.

DELIVER is managed within the broader JSI culture of transparency and inclusiveness. Though its structure exhibits, as one CSL official noted, —(levels of) managers on managers,” communication and access across and within this structure is nevertheless relatively free-flowing. Exchange access among different task orders is further facilitated when staff members serving in TO2 and TO3 have prior histories within DELIVER and contraceptive logistics.

In-country, the task orders are practically seamless. Though rigorous in accounting for time allocations, field staff easily flows from carrying out responsibilities under one task order to another. Furthermore, country offices have embraced and extended JSI’s transparent culture to field operations and management.

As a result of the way DELIVER is managed, there has been interaction and synergy among the task orders, though less so between TO2 and the other task orders due to the decidedly different nature of flu epidemic responses. By comparison, consistency and steadiness in meeting supply needs are as much hallmarks for FP, HIV/AIDS, and essential drugs under TO1 as they are for malaria under TO3.

The evaluation team did not directly observe TO2 activities in the field or conduct interviews in countries where TO2 activities were underway. However, they did note intersections and synergies between TO1 and TO3 in both Tanzania and Zambia. The end user tool being applied for TO3 in Zambia and Tanzania has been directly adapted from the Logistics Indicators Assessment Tool (LIAT).

For more information, please visit
<http://www.ghitechproject.com/resources.aspx>

Global Health Technical Assistance Project

1250 Eye St., NW, Suite 1100

Washington, DC 20005

Tel: (202) 521-1900

Fax: (202) 521-1901

www.ghtechproject.com