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Reproductive Health Supplies Coalition

Promising Practices in Supply Chain Management for Community-Based Distribution Programs

Global Survey of CBD Programs

December 1, 2009 –
March 31, 2010

Updated August 2010

Erin Hasselberg
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John Snow, Inc. (JSI) is a U.S.-based health care consulting firm committed to improving the health of individuals and communities worldwide. Our multidisciplinary staff works in partnership with host-country experts, organizations, and governments to make quality, accessible health care a reality for children, women, and men around the world. JSI's headquarters are in Boston, Massachusetts, with U.S. offices in Washington, D.C.; Concord, New Hampshire; Denver, Colorado; and Atlanta, Georgia. We maintain offices in more than 40 countries throughout the developing world.

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Table of Contents

Table of Contents i
Acronyms and Abbreviations iii

Introduction 1

Results 2
Interviews 1
Region: Africa 1
Region: Asia 15
Region: Latin America and the Caribbean 18
Region: Global 21

Publications 22
Region: Africa 22
Region: Asia 25
Region: Latin American and the Caribbean 26
Region: Global 26

ANNEX 1: Interview Questionnaire 31
ANNEX 2: Excel Workbook 35

Acronyms and Abbreviations

AIDS	acquired immune deficiency syndrome
ARV	antiretroviral
CBD	community-based distribution
CEDPA	Centre for Development and Population Activities
CHW	community health worker
CHV	community health volunteer
COC	combined oral contraceptive
DMPA	depo-medroxy progesterone acetate
FCHV	female community health volunteer
FHI	Family Health International
FP	family planning
HBC	home-based care
HEW	health extension worker
HIV	human immunodeficiency virus
HMIS	health management information system
IPPF	International Planned Parenthood Foundation
JSI	John Snow, Inc. and JSI Research and Training Institute
LHS	lady health supervisor
LHW	lady health worker
LMIS	logistics management information system
MCH	maternal and child health
MOH	Ministry of Health
MSI	Marie Stopes International
NGO	non-governmental organization
ORS	oral rehydration solution
PDA	personal data assistant
PIH	Partners In Health
POP	progestin-only pill
PSI	Population Services International
RH	reproductive health
RHSC	Reproductive Health Supplies Coalition
SCM	supply chain management
SDP	service delivery point
STI	sexually transmitted infection
TB	tuberculosis
TBA	trained birth attendant
USAID	United States Agency for International Development
WHO	World Health Organization
WHR	Western Hemisphere Region

Introduction

Community-based distribution (CBD) offers the potential to significantly increase uptake of, and access to, a variety of health commodities and services, particularly by underserved groups. CBD programs have played and continue to play a significant role in around the globe in bringing health information, services and commodities to clients who otherwise might not have reliable access to such goods and services. With this increased demand, effective supply chain management (SCM) represents an essential part of the success of CBD programs.

Although significant attention is paid to areas such as training and supervision, limited resources are usually devoted to supply chain management (SCM). CBD programs have inherent characteristics that require special supply chain considerations, including the distributor's educational level, volunteer or part-time status, and access to resupply. To date no apparent guidelines or best practices exist specifically for supply chain management for CBD programs.

With support from the Reproductive Health Supplies Coalition's Innovation Fund, John Snow, Inc. (JSI), implemented this initiative to identify, develop and disseminate promising practices in supply chain management for CBD programs, thereby helping to increase access to family planning products and services. This project aims to assist program managers and other stakeholders design and implement stronger and more sustainable supply chains for their CBD programs.

This global survey documents the preliminary research and findings that the JSI team compiled. These findings were used to inform the final project document, *Supply Chain Models and Considerations for Community-Based Distribution Programs: A Program Manager's Guide* which analyzes current trends and practices in supply chain management and provide considerations for different supply chain models and functions for community-based distribution programs.

Methodology

The project's research design included a qualitative interview process and as well significant web-based searches for additional resources, publications, tools, materials, and program information.

Qualitative Interviews

The project team drafted a simple five-page qualitative questionnaire that included sections on general program information, storage and distribution, product availability and access, logistics management information systems (LMIS), waste management, organizational capacity and human resources, tools and technology, and recommendations/challenges. Prior to incorporation in this study, the questionnaire was tested with one country program to ensure ease of use and readability.

The team then compiled a preliminary list of organizations to interview—those with active CBD programs as well as JSI project offices that support CBD agents. This list then expanded as each interviewee would recommend others to interview or as web-based searches resulted in new contacts. The list included nearly 100 professional contacts although only 29 of these contacts yielded sufficient information to warrant inclusion in the study.

Web-based Research

The project team conducted extensive web-based searches using some combination of the following key terms:

Community-based distribution	Supply Chain Management
Community-based distributor	Supply Chain Practices
Community health worker	Logistics
Community health volunteer	Commodities
Health extension worker	Supplies
Community health provider	Distribution

The team consulted USAID's Development Experience Clearinghouse (DEC), MEDLINE, multilateral organization websites (including UNFPA and the World Bank), the JSI project and publications databases, as well as Google to find additional information on supply chain resources for CBD programs.

Results

The results of the preliminary results are reported in the tables that follow. These tables organize the project findings by the geographical region to which the programs relate. The team interviewed a total of 29 programs: 19 projects in Sub-Saharan Africa, 5 in Asia, 4 in Latin America and the Caribbean, and 1 global project. Within each region, the different interviewees or documents are described by Country, Organization/Project, Reference, a brief description, and then a summary of the supply chain promising practices and challenges. These results can also be found in the attached Excel Workbook and may be searched and sorted by a particular category (Region, Country, etc.).

Overall, more valuable and insightful information was found through the one-on-one interviews (conducted either via phone, email, in person or through some combination) as little evidence was discerned from publications on the web regarding supply chain practices for CBD programs and agents. A plethora of information exists generally on either CBD program research, project reports, and/or training resources, but few of these sources proved to have much information regarding supply chain responsibilities.

Interviews

Region: Africa

Country	Democratic Republic of Congo
Organization/Project	Population Services International (PSI)/Expanding Family Planning Program
Reference	Corker, Jamaica (Family Planning Technical Advisor, Democratic Republic of Congo). Email correspondence. January 2010.
Description	The Expanding Family Planning Program started in 2004 and is located in ten out of eleven provinces of the DRC. In this program, 103 female and male mobile educators (ME) primarily educate clients and sell small quantities of pills (COC and POP), female and male condoms, cycle beads and PUR water treatment.
Summary of CBD Supply Chain Practices	MEs resupply when needed at provincial PSI offices or at partner clinics and pharmacies, but at a higher price than offered at the PSI office. Because this program is focused on urban areas, access to commodities is more reliable through health facilities, as they are easily accessible and have constant supply. MEs also do not have established distribution routes. The most common reason for stockouts are due to low supply of FP products in country due to high demand and limited funding for FP from donors. MEs receive a 6 day comprehensive training in FP and carry information pamphlets, pocket calendars and flip charts in addition to products. MEs are supervised weekly by PSI staff and quarterly meetings are held with all MEs that also serve as refresher training. The biggest overall challenge is that the demand for FP products and information is higher than the supply and the lack of funding only allows for a small program. The biggest success has been in educating the public about FP and referring clients to FP clinics and pharmacies.

Country	Ethiopia
Organization/Project	Ministry of Health and Partners/Rural Health Extension Program (HEP)
Reference	Sanderson, Jeff (Country Director ,USAID | DELIVER PROJECT, Ethiopia); Dessalegn, Tesfaye (Commodity Security Advisor SCMS, Ethiopia); Betamariam, Wuleta (Project Director, Last 10 Kilometers Project, Ethiopia); Yalew, Samuel (Project Director, Urban Health Extension Program, Ethiopia); Mulligan, Brian (Project Director, Saving Newborn Lives Project, Ethiopia); Bulto, Tesfaye (Deputy Technical Director, Infant and Family Health Project, Ethiopia); Hailemariam Legasse (Health Specialist and Focal Person for CCM, UNICEF, Ethiopia). Email correspondence Jan/Feb 2010.
Description	The Rural Health Extension Program (HEP) program is a flagship program for the Federal Ministry of Health and is considered the primary means to the Millennium Development Goals. The program began 4-5 years ago, and now, a similar Urban Health Extension Program has just commenced. The rural HEP program model places two paid Health Extension Workers at each Health Post. With 15,000 Health Posts nationally, approximately 30,000 HEWs serve small communities (catchment of 5,000 per Health Post) with basic health services and also dispense between 15 and 20 different free-of-charge commodities including ORS, family planning (including injectables and Implanon),

	Coartem, malaria rapid tests, ITN, iron, Vitamin A, deworming medication, etc.
Summary of CBD Supply Chain Practices	The HEP program in Ethiopia is a different type of CBD program in that the Health Post is considered a facility in the supply chain where the two HEWs are based and from there provide services and commodities to the clients. Rural HEWs have a tenth grade education and undergo a one year training program. HEWs are required to keep Bin Cards for each product managed at the Health Post and each month also complete a "Monthly Report and Resupply Form" which is pre-printed with all of the products. The calculations for the HEW are kept to a minimum—they only report Stock on Hand at the beginning of the month; Stock on Hand at the end of the Month and any losses and adjustments. Remaining columns are completed at the Health Centre which include Calculated Consumption (the difference between Beginning and Ending Stock), maximum quantity calculations and resupply quantities. Health Post maximum stock levels are set at 2 months and the quantity is simply defined as the sum of the past two months' consumption. Challenges results when Health Centres do not have sufficient stock and are not able to resupply the Health Posts. Health Posts may go to the Woreda at the end of the month when they get paid and also get re-supplied. Major challenges to the program have been product availability caused in large part due to budget shortages to the HEP program for products.

Country	Ghana
Organization/Project	Planned Parenthood Association of Ghana (PPAG), International Planned Parenthood Federation (IPPF) Africa Region/On-going CBD Program
Reference	Obeng, Emmanuel (Monitoring & Evaluation Manager, Planned Parenthood Association of Ghana). Telephone interview. January 2010.
Description	PPAG has been in operation since 1967 and offers a comprehensive set of services to Ghanaians including community based sexual and reproductive health (SRH) services. The outreach portion of these services (started in 1974) is run by the staff, peer educators, and non-traditional distributors (CBS agents), who conduct behavior change communications, encourage male involvement in SRH, distribute contraceptives and offer some aspects of clinical services. The outreach program reached its peak in 1999 with funding from USAID and had 1,700 CBS agents; the program scaled-back in 2003 due to USAID Global Gag rule restrictions from funding PPAG. Currently about 200 CBS agents exist but not as a standalone program but as a smaller part of other PPAG programs such as HIV, etc. A significant number of previously trained CBSs- now called non-traditional distributors- continue their work voluntarily and buy their contraceptives (from PPAG) and distribute on their own with no supervision/support. As a separate program the CBSs distributed more than 2 million male condoms per year, oral pills, first aid for minor ailments, and also referred people for long-acting methods. The current non-traditional distributors focus mainly on condom distribution.
Summary of CBD Supply Chain Practices	The promising practices and challenges for the Ghana program are based on the non-integrated program that ended in 2003. CBS agents had a variety of resupply mechanisms; they could receive stock at their monthly supervision meetings, during supervision visits from the supervisor, or on an as-needed basis from the PPAG facility or MOH facility. Resupply quantities were calculated by looking at the CBS agent's notebook where he or she tracks what has been sold. The supervisor then collates all sales using a tracking sheet, reviews what was distributed, then adds on a 10% increase over what was dispensed last month, adding minimum stock level minus current stock on hand. Minimum stock levels are quantities—not a certain number of months of stock: 100 male condoms and 30

	cycles of oral contraceptives. This calculation is fairly simple and does not require averaging months of data or much multiplication. CBS agents had a fairly large incentive to sell their commodities; they were eligible to take home 40-50% of their sales money. The main supply chain challenges that PPAG reports that the program had were supply problems; PPAG did not have sufficient funding to purchase sufficient contraceptive supplies and there were delays in product delivery from a PPAG warehouse to facilities.

Country	Kenya
Organization/Project	Family Health International (FHI)/ The Translating Research into Practice: Introducing CBD of Depot Medroxyprogesterone Acetate (DMPA) in Kenya project
Reference	Olawo, Alice (Kenya). Telephone interview. Email correspondence. March 2010.
Description	The Translating Research into Practice: Introducing CBD of Depot Medroxyprogesterone Acetate (DMPA) in Kenya project (2006 – 2010) aims to increase access to contraceptives to rural and underserved populations. The MOH is the lead implementing partner and works additionally with JHPIEGO. This project is a pilot to work with CBD agents to distribute DMPA in three sites in one geographical location.
Summary of CBD Supply Chain Practices	A total of 31 female and male CBD agents were trained for the pilot and were selected by the community after agreeing to criteria established by implementing partners. All CBD agents have some education and are married. Condoms, pills and DMPA are distributed for free to clients. CBD agents are supervised by the nurse in charge of the health facility they work with and receive monthly monitoring visits conducted by the project team in conjunction with monthly meetings. CBD agents seek out resupply monthly at the health facility and complete three types of forms: client tracking card, referral form and monthly summary form. The client tracking card is an activity log of visits to clients, referrals, and other comments and is completed in triplicate. One form is used for each client visit made within one year. The monthly summary form summarizes activities conducted including a column for stock status, Information is used to compile project data by FHI, one copy is for the facility and one is kept with the CBD agent. The form is used to assess the CBD agent's ability to provide DMPA to the expected standards. Supervisors complete a supportive supervision checklist and training checklist for evaluating counseling and injecting skills. CBD agents are also given a safety disposal box which is returned to the facility once ¾ full. Training includes FP methods, infection prevention, injection provision technique and record keeping. The most common reason for stockouts is due to inadequate supply at higher levels. The biggest challenge of the program is the negative perception that CBD agents are doing the same level of work as nurses by providing injections of DMPA. The biggest benefit is the improved access to FP services.

Country	Madagascar
Organization/Project	Population Services International (PSI)
Reference	Call, Douglas (Senior Regional Director). Telephone Interview. May 2010.
Description	PSI has worked with over 5000 CBD agents in eastern, southern and northern Madagascar since 2006. The need to work with CBD agents was established to extend distribution and

	information of life saving products to rural people in Madagascar. PSI uses existing CBD agents that are affiliated with CBOs/PVOs/MOH to socially market various products including: condoms, OCs, bednets, POU water treatment, cycle beads, injectable contraception and ACTs. Products are bought by donors and then sold at a heavily subsidized price to the organization that manages the CBD agents and/or wholesalers and retailers. The CBD agent then buys the product to sell to clients. The wholesaler, retailers and CBD agents each make a profit. CBD agents primarily target their products towards women between the ages of 15-49, as well as some men. PSI provides training and IEC materials while the affiliated organization provides coordination and supervision. CBD agents are primarily women and have some literacy.
Summary of CBD Supply Chain Practices	CBD agents carry their products and distribute their products to clients by foot or bicycle and can also sell products out of their home. Distribution depends mostly on client demand or can be at a set time depending on the affiliated organization's system. CBD agents can focus on their own community/territory or have the option to travel to another community to sell products where there is need. The potential profit for the CBD agent is a strong incentive for demand creation and to continue working. Resupply points include wholesalers, CBOs/PVOs, MOH facilities or PSI sales agents. Wholesalers, retailers and CBD agents are less likely to buy too many products they think they can't sell, which has resulted in reduced expiries/wastage. Expired/damaged products are centralized and destroyed per the MOH guidelines. The main reason for stockouts has been that supplies are quickly exhausted. Programs depend on donors to bring the products in-country. CBD agents do not generally have their own established max/min inventory control levels, and most CBD agents determine their own minimum amount. CBD agents may have some training in determining amounts, when to go for resupply, etc., depending on the affiliated organization's specific training. CBD agents generally do not calculate quantities or collect logistics data. Some organizations have forms for their CBD agents. Some of the challenges for CBD programs are the on-going debate about free versus paid for products. Some of the GOM's policies mandating free products do not take into account the different models of product distribution (i.e., social marketing). CBD agents benefit from selling a variety of products, as selling only one or two products are harder to sell in rural areas and in turn create a lower profit. The biggest success has been product diversity and the option to sell them under the "open source model."

Country	Malawi
Organization/Project	Marie Stopes International (MSI)/ Banja La Mtsogolo (BLM), Programme of Work (POW) II
Reference	Edwards, Linda (Country Director, Malawi). Email correspondence through MSI/HQ. March 2010.
Description	The Banja La Mtsogolo (BLM) organization is implementing a second Programme of Work (POW) contributing to the reduction maternal mortality and rapid population growth, and combating HIV/AIDS in Malawi. The purpose of the POW is to increase the uptake of modern family planning methods, especially by the rural poor in all districts of Malawi. The POW II aims to scale up access to, and stimulate demand for, SRH services, particularly Family Planning services, throughout Malawi.
Summary of CBD Supply Chain Practices	The Banja La Mtsogolo (BLM) organization implements a CBD program in three regions of Malawi to disseminate sexual and reproductive health information (SRH), refer clients for SRH services and distributes condoms and pills. CBD agents are mostly female, married and literate volunteers who receive a stipend on per case basis for motivating clients to

	take up a family planning method of the client's choice. CBD agents resupply from the project's office and sometimes from the MOH health centres. Supplies are distributed daily and can be resupplied at anytime. The most common reason for stockouts is increased demand and not enough supplies. Maximum stock quantities for each CBD agent are determined by demand of services and are usually forecasted for a period of a month. The resupply quantity is calculated by subtracting stock on hand from the quantity ordered the last period. CBD agents also use bin cards and collect essential logistics data. A report is submitted monthly to the health facility which is then sent to the support office. CBD agents are selected from the hardest working referral agents and are trained on FP methods and counseling clients. They additionally carry pregnancy checklists and IEC materials. CBD agents are supervised once a month and meet together to discuss lessons learned. The biggest challenge the program faces is lack of motivation since CBD agents do not receive a salary and are classified by the GOM as volunteers. The biggest success is increased use of FP among clients.

Country	Malawi
Organization/Project	Ministry of Health (MOH) & John Snow Incorporated (JSI)/MOH/CBD Program and USAID | DELIVER PROJECT
Reference	Waweru, Jayne (Country Director, USAID | DELIVER PROJECT, Malawi); Kabuya, Willy (Malaria Logistics Advisor, USAID | DELIVER PROJECT, Malawi). Telephone interview. January 2010.
Description	The Government of Malawi's initiative to use CBD agents to distribute supplies and services was to increase access, especially in hard to reach areas. There are two types of CBD programs in Malawi that are operated by the government. Community Health Workers (CHWs) are volunteers and Health Surveillance Assistants (HSAs) are paid a monthly stipend. Malawi is decentralized and districts determine their needs and work with partners who support different programs. Currently there are programs working in 15 districts broken down by the following: 8 districts working with FP and HIV services with 2 districts soon expanding to include child health/illness; 6 districts focusing on child health/illness; and 1 district working with FP services exclusively. CHWs are supervised by HSAs and are mostly associated with faith-based hospitals. They distribute pills and male condoms and possibly female condoms in the future. HSAs cover 1,000 people each and are supervised by health facility staff. They provide contraceptives including injectables, child health/illness drugs, HIV testing, ACTs, vaccinations, collection of sputum specimens, and rapid tests for HIV and mostly use a bicycle to visit clients.
Summary of CBD Supply Chain Practices	Both CHWs and HSAs distribute products as needed to clients and seek out resupply at their closest health facility every month. They are given lockable boxes which can be stored at the clinic. CHWs/HSAs hold a maximum of two months of stock and a minimum of one month. The health facility manager uses the average monthly consumption and stock on hand to determine the resupply amount. The CHWs/HSAs collect consumption data, stock on hand and losses and adjustments on a monthly form which is completed in duplicate. Forms are entered into the Supply Chain Manager software and the program is working on disaggregating the data to determine CHW/HSA specific information. Training for HSAs includes 6 weeks of surveillance, health literacy and promotion. On-the-job training at the health facility is the only training provided for CHWs. Some of the challenges of the program include that the lockable storage boxes do not have sufficient space for supplies and CHWs/HSAs need

	larger bikes to carry products when resupplying. The biggest overall challenge is that supervision needs to be improved. The greatest success is improved access to health commodities for clients.

Country	Mozambique
Organization/Project	Pathfinder International/ Child Survival and Reproductive Health Services in Target Areas Project
Reference	Veken, Luc Vander (Project Director, FORTE Saúde, Mozambique). Email correspondence. February 2010.
Description	The CBD program was built on the existing or recently developed community health networks. CBD agents are mostly female volunteers and cover 10 households each. Supervisors/Trainers (SuFors) oversee 10 CBD agents or 100 households, and also dispense products. CBD agents distribute condoms, ORS, chlorine disinfectant water solution and bed nets (if available), while SuFors distribute pills.
Summary of CBD Supply Chain Practices	SuFors receive supplies from health centres and the district AIDS council and give products to CBD agents monthly. Stockouts are mostly due to lack of supplies at the higher level, incorrect ordering at the health centre level, poor forecasting and increased demand. SuFors give clients two cycles of pills and resupply when current users have one cycle left. Condoms are resupplied by a quarterly estimate. Quantities dispensed are reported monthly and CHWs use notebooks to record information, while SuFors use pre-printed forms. Data is aggregated at the SDP level with SDP dispensing data, thus CBD distribution data is not sent up distinctly from facility distribution data to higher levels. CBD agents participate in a month long training on FP methods and a TOT is provided for SuFors and also include other health topics. The biggest challenges include sustainability, the health system in general and the relationship between the SuFors and peripheral units. The biggest success is increased access and adherence to condoms, pills and other health issues for rural women.

Country	Nigeria
Organization/Project	Centre for Development and Population Activities (CEDPA)/Kyautatawa Iyali Family Welfare Project
Reference	Cucuzza, Laurette (Senior RH Advisor). Email correspondence. May 2010.
Description	The "Kyautatawa Iyali" Family Welfare Project was designed in 2001 to address the complex reproductive health challenges faced in northern Nigeria using the two-pronged approach of demand creation and service provision. CEDPA works with local NGO/FBO partners who support a Project Coordinator that oversees the Field Supervisors (community health extension worker (CHEW) that supervise the CHEWs/TBAs (CBD). CHEWs are educated, trained in health, younger than 50 years and respected in their community. TBAs are mostly female, less than 50, mostly literate and married. CBD agents are unpaid but receive a monthly transportation stipend. CBD agents distribute pills, condoms and sometimes bed nets. The pills and condoms are sold at a subsidized price to clients to allow NGOs to earn a small profit to purchase more commodities. Bed nets are donated and are free.
Summary of CBD	CBD agents have their own locally made boxes to keep their products and are supplied

Supply Chain Practices	with kits supplied by NGOs/FBOs. They distribute products to clients daily and travel by motorcycle, foot and taxi. They resupply mostly monthly or when needed from implementing NGOs and/or public sector health facilities. CBD agents carry no more than month of stock at a time and can be resupplied sooner if there is higher demand. The supervisor or the accountant will assist the TBA CBD with calculations while the CHEWs do the calculations themselves. Because most TBA CBD agents are illiterate, they keep records in pictorial LMIS forms, and verbally report essential logistics data while the supervisor takes a physical inventory of the CBD agent's products. The health facilities or supervisor collects the CBD agent's records which are sent to the implementing NGO. The most common reason for stockouts is the due to lack of product availability at the higher levels, inappropriate ordering by supervisors, and lack of advocacy to release funds for purchase of contraceptives due to lack of belief in family planning. In Nigeria, NGOs have set up revolving funds for commodities for cost recovery. The small amount charged to clients is returned to the revolving fund instead of having the CBD agent keep the profit. This in combination with lack of public recognition has created somewhat of a disincentive for the CBD agents. There is varying criteria for TBA and CHEW CBD agents. Both are trained in FP and CBD roles and responsibilities, among other topics. One of the biggest challenges for CBD agents is the lack of contraceptive availability. The biggest overall challenges are irregular supervision and lack of training due to inadequate funds. The biggest successes of the project include the community involvement and ownership of the project and the increased acceptance of FP and child spacing in a conservative culture.

Country	Rwanda
Organization/Project	Partners in Health & Ministry of Health/Accompagnateurs Program
Reference	Hackett, Jill (Director of Training, Boston); Tisha Mitsunaga (Community Health M&E Research Assistant, Rwanda); Amber Gaumnitz (Project Manager, Boston); Julia Noguchi (Technical Writer, Boston); Rachel Ross (Project Manager, Boston). Telephone interview. June 2010.
Description	PIH began its Accompagnateurs program in Rwanda in 2005/2006. Since then the Ministry of Health has adopted a CHW program that focuses specifically on treating community and child health; therefore the CHW program takes on a more geographic focus and not such a disease-specific focus like the Accompagnateurs (TB & HIV) CHWs distribute Vitamin A, Zinc, Coartem, and medicines for treating pneumonia. The CHWs also carry rapid diagnostic tests that enable them to test for malaria. PIH works in 3 districts in Rwanda specifically supporting the Ministry CHW programs there. In Rwanda some CHWs are also Accompagnateurs; likewise some Accompagnateurs are not yet CHWs. Each CHW serves approximately 40-50 households. All CHWs are compensated for performance; CHWs must complete their monthly reports on-time in order to be compensated. In the Rwandan program, CHWs are not paid directly but rather a contribution is made to their CHW cooperative. They may access the cooperative to initiate income-generating activities for themselves.
Summary of CBD Supply Chain Practices	CHWs are supplied with commodities from Health Centers every month. Before going to the health center each month, Cell Supervisors work with their two or three CHWs to aggregate information from their patient registers and store forms (stock cards); the monthly summary report is fairly comprehensive and also a bit complicated requiring a certain level of literacy and computational skills. The biggest challenge for the CHW program in Rwanda is availability of essential medicine commodities. ARVs and TB medicines are in full-supply and always available from either the Rwanda Central

	Medical Store or PIH's own warehouse. Health centers request essential medicines (vitamin A, zinc, antibiotics, anti-malarials) from Districts and Districts request from the Central Stores. Numerous possibilities exist for the lack of commodities- improper forecasting, lack of Health Center budget, rationing by Central Stores, etc. Until the various problem points are determined and addressed the CHW program will not be able to be as successful as it could be. The biggest success for this program is its adoption by the Ministry of Health as a sustainable and successful way of engaging the community in health care.

Country	Tanzania
Organization/Project	Pathfinder International/Family Planning and HIV Integration program
Reference	Lyons, Jayne (Director of Operations, Tanzania). In-person interview. March 2010.
Description	Pathfinder's Home-based Care Volunteers focus on providing home-based health care to people living with HIV andAIDS. CHWs provide palliative care, treat some opportunistic infections, provide emotional support, help link clients to other services such as food security, and train families and neighbors to care for their friends and loved-ones living with AIDS; however, they have seen their work shift in the last two years from palliative care to general health care as clients are getting well. In addition, as clients get well and living longer, there is an importance of including HIV prevention counseling as well as family planning options; therefore some of Pathfinder's Home-based Care (HBC) Volunteers also distribute family planning products. This program is operational in three regions and is supported financially by USAID but approved by the Ministry of Health and Social Welfare.
Summary of CBD Supply Chain Practices	Each month the volunteers meet at their assigned health facility, meet with the HBC Coordinator and/or Reproductive Health Coordinator at the District, receive a monthly transport allowance, and are resupplied with a HBC kit. The kits are pre-packaged at the National Medical Stores department and expected to last at least three months; they are refilled as necessary at the District from the HBC Supervisor Kit contents. The kits do not include oral contraceptives but should include male and female condoms (sourced locally from social marketing vendors). HBC volunteers need to see the Reproductive Health Coordinator or facility staff to receive oral contraceptives. Pathfinder has developed a unique model that integrates HIV and Family Planning; however they are finding that their HBC Volunteers, who are on average a bit older, are not as comfortable in counseling on HIV prevention and family planning options. With regard to information systems, the National AIDS Control Programme has developed an extensive system for tracking HBC information including two logbooks that the HBC volunteers have to complete--a client book and a services book--as well as a referral book. The District then collects this information during the monthly visits and enters it into an Access database where the information is transmitted electronically to NACP. Because this system is new, it is unclear if it includes any kind of commodity ordering data. The biggest challenge that this program faces is poor availability of the HBC kits as well as contraceptives. As an observation from the interview, it also seems that there is a lack of a clear reporting system and clear roles/responsibilities of each level of the system (facility, District, HBC volunteer) to inform ordering authorities quantities of kits and contraceptives to have available at resupply sites.

Country	Uganda
Organization/Project	BRAC/ BRAC Uganda Essential Health Care Programme
Reference	Rahman, Habib (Program Manager, Uganda).Telephone interview. March 2010.
Description	The famous Bangladesh microfinance organization BRAC has expanded to other programmatic areas, including health, as well as other geographic areas. The BRAC Uganda Essential Health Care Programme (EHC) is a scalable model of community health care (and is also a similar model followed by BRAC health programs in other countries). The overall goal of the EHC programme is to improve health conditions and increase access to health services by providing basic health services in communities where BRAC has an established microfinance group. One member of each BRAC borrowing group is designated and trained as a Community Health Promoter (CHP). CHP's serve the health needs of the entire community, with particular attention to poor women and children. Each volunteer is responsible for 150-200 households and visit approximately 8 per day. As of 2010, the EHC program in Uganda has 1,600 volunteer CHPs who are affiliated with BRAC's 94 branch offices in 42 districts in Uganda with another 280 being trained up.
Summary of CBD Supply Chain Practices	The BRAC volunteer Community Health Promoters meet on a weekly basis at the BRAC branch offices. Approximately 20 volunteers are associated with each branch, and at these weekly meetings volunteers can purchase additional quantities of any of the 30 possible commodities (including oral contraceptives, condoms, ORS tablets, paracetamol, and other general health products), and volunteers also debrief on weekly activities and are updated of any program changes. Resupply quantities are based on how much the volunteer can purchase. The volunteers purchase supplies for a fixed cost and then may sell them at the slightly higher sale price--keeping the difference as an incentive to remain in the program. Volunteers are encouraged to sell at least $75 worth of commodities per month. BRAC volunteers do not have to complete any paperwork or logistics management forms. Data collection is completed at the BRAC branch office, and the only supply information that is collected is what quantities were sold to the volunteer and at what price. This information is then sent to the Central BRAC office each month where the information is aggregated as the total sales to CBD agents. BRAC also provides them with a small start-up stipend (approx $80 USD). BRAC's program is supported entirely by BRAC and while implemented with the approval of the Ministry of Health, BRAC fully supports their volunteers with BRAC-supplied commodities (locally and internationally procured) and are trained and supported by BRAC staff. Their biggest challenges currently are with volunteer turnover, price fluctuation of goods they purchase, transportation and storage.

Country	Uganda
Organization/Project	Family Health International (FHI)/ Contraceptive and Reproductive Health Technologies Research Utilization Project
Reference	Dr. Akol, Angela (Country Director, Uganda). Email correspondence. February 2010.
Description	The Contraceptive and Reproductive Health Technologies Research Utilization Project is providing research and technical support to USAID/Uganda and its implementing partners. FHI's research efforts in Uganda concentrate on

	increasing the information available to USAID/Uganda and its collaborating organizations on examining the method mix and sustainability of reproductive health (RH) programs, expanding options for contraception, linking RH and HIV/AIDS interventions, enhancing Ministry of Health capacity and translating research results into policy and programs. The project has 200 CBD agents operating in 7 districts in Uganda. CBD agents are female volunteers and selected by level of education, previous community RH work and good moral standing among others. CBD agents dispense pills, condoms and injectables free to clients depending on demand.
Summary of CBD Supply Chain Practices	CBD agents meet monthly to submit reports, follow-up on referrals, and resupply. They receive supplies from and submit reports monthly to the supervising health facility. Information from the reports is sent to the higher level. Clients have easier access to products through CBD agents than through health facilities. Stockouts result from lack of adequate forecasting at the higher level. Training for CBD agents includes FP, injection skills, waste management and counseling. CBD agents receive supervision monthly or quarterly by health facility staff which has improved performance. Some of the biggest challenges have been stockouts, inaccurate forecasting and lack of financial resources to sustain reporting and supervision. The biggest success has been the increased access and use of FP of women and men in rural underserved areas.

Country	Uganda
Organization/Project	John Snow, Inc., Northern Uganda Malaria, AIDS, & TB Program (NUMAT)
Reference	Makumbi, Med (Chief of Party,Uganda); Tumukurate, Espilidon (Malaria Services Program Manager, Uganda). Telephone interview. January 2010.
Description	The Northern Uganda Malaria AIDS & Tuberculosis Program (NUMAT) is a five-year USAID-funded program that was designed in consultation with the Ministry of Health, Uganda AIDS Commission, international agencies, non-governmental organizations, community-based organizations, and People Living with HIV and AIDS (PLA) networks. The program began in August 2006 with the goal of expanding access to and utilization of HIV, tuberculosis, and malaria prevention, treatment, care and support activities in Northern Uganda. One way NUMAT has expanded its coverage is through the work of the Village Health Teams (VHT). In each village there are a maximum of 4 volunteers on the VHT- one volunteer serves approximately 10-25 households which if nationally implemented would mean 11,000 volunteers. NUMAT's target is to reach at least half of that. The volunteers can do an array of activities including health promotion and education, distributing malaria medicines and nets, observing TB treatments, and condom distribution.
Summary of CBD Supply Chain Practices	NUMAT's most significant supply chain challenge was related to the availability of commodities- particularly the Alu (Coartem) for treating malaria; Coartem stock issues were related to higher level supply chain issues including a delay in Global Fund funding for Coartem procurement. Condom and TB drug availability was usually good and many volunteers would switch over to work on those programs if Coartem was not available (usually the 4 volunteers were each assigned a program in their village- malaria, TB, or condom/HIV prevention). The LMIS for this program was kept very simple. Volunteers did not keep registers for condoms or Coartem distributed and Health Facilities kept a separate stock and Stock Card for the Community Health Volunteer Coartem from which the volunteers were re-supplied. Volunteers meet quarterly with all volunteers, but they do report on the services that they rendered each month to the health facility (which

	does include how much Coartem was dispensed) and are then re-supplied if needed, (usually a quarter's worth of supply based on number of clients or activities) and can go back to the facility any time if they need additional supply. Coartem, given the stock problems, is usually rationed- enough for 20 patients. Given that National Malaria, TB, and HIV programs were involved reporting of services rendered had to go via different channels depending on the volunteers activities- condom distribution data to the HIV program, Coartem dispensing data to the National Malaria Program, etc.

Country	Uganda
Organization/Project	Save the Children/ Community-Based Family Planning Project
Reference	Mwebesa, Winnie (Senior Technical Director for Reproductive Health, USA). Telephone Interview. March 2010.
Description	Save the Children (SC) is implementing a 4-year three-district Family Planning Project, Community-Based Family Planning Project in the central districts of Luwero, Nakaseke and Nakasongola, Uganda. The project aims to increase and sustain the use of key family planning services and RH behaviors among women and men of reproductive age. The overall project goal is to improve the survival and health of mothers and their children. The project works with a total of 120 volunteer CBD agents, with 2 CBD agents serving 5000-10,000 people. CBD agents provide pills and male condoms. If they have additional training, they also provide injectables. All products are free to clients.
Summary of CBD Supply Chain Practices	When distributing products to clients, CBD agents put together a plan with a number of people to visit and target eligible couples. CBD agents maintain maximum and minimum stock levels and collect essential logistics data in exercise books or forms. CBD agents resupply at health facilities and submit reports monthly. The monthly report summarizes activities and referrals and CBD agents determine their resupply quantity based this data. Since CBD agents see many clients, most of the data on couple years of protection (CYP) is collected by them. Data is collated and submitted to the health facility, and then to the district. It is also entered into the HMIS and submitted to SC for donor reporting. The contraceptive prevalence rate (CPR) is second highest in the country outside Kampala which is thought to be attributed to the many years that CBD agents and Save the Children have worked in the area. The program also sets up camps where health workers come from district hospitals to provide long acting and permanent methods (LAPM). CBD agents refer clients to the camps or to the health facility for these methods. The most common reason for stockouts is lack of central level supplies. Supplies are often transported from one health facility to another when higher levels are stocked out. Specifically with injectables, CBD agents will sometimes receive depot medroxyprogesterone acetate (DMPA) without syringes. In this case, CBD agents must ask their clients to buy syringes which can create the impression that clients must pay for the service. CBD agents are supplied with sharps boxes and return full boxes and damaged/expired products to the health facility. CBD agents receive a five day training on the following topics: counseling, FP basics, healthy timing and spacing of pregnancy (HTSP), methods provided and how, side effects, referrals, infection prevention, record keeping and reporting. The DMPA training is for 3 weeks and includes waste disposal. Health extension workers (HEWs) provide supervision and regularly meet at the health centre with CBD agents to review reports, discuss problems, help resupply, dispose of waste and help organize community sessions. SC recommends refresher training and holding annual meetings which makes CBD agents feel rewarded. The biggest challenge of the

	project is stockouts and the greatest success has been improved access to injectables.

Country	Uganda
Organization/Project	Uganda Health Marketing Group (UHMG)/On-going CBD Program
Reference	Katarikawe, Emily (Managing Director, Uganda).Telephone interview. January 2010.
Description	The Uganda Health Marketing Group (UHMG) designs and implements strategic and integrated health marketing interventions intended to improve the overall wellbeing of the country's population, while stimulating and increasing commercial sector participation. Only a year old, the UHMG has established relationships with local pharmaceutical distributors who are given a line of credit to supply UHMG's network of 300 pharmacies and 1,147 drug shops. Some of these pharmacies and drug shops have CBD agents that sell products door-to-door in hard-to-reach communities. They sell UHMG branded products and USAID-donated products including ORS, Zinc, water sanitization products, ACTs for malaria, bed nets, condoms, oral contraceptives and cycle beads.
Summary of CBD Supply Chain Practices	This UHMG program is still in its nascent stages and determining operational procedures-- mainly related to monitoring and supervision and expanded distribution. For supervision and monitoring UHMG currently relies on the support of local CBOs. The CBD volunteers themselves have relationships with their pharmacies or drug shops and, therefore, are re-supplied whenever they feel like selling more product. Resupply quantities are calculated by the CBD and the pharmacy with no set formula or maximum quantity. CBD agents would buy the products to be distributed in the community from the network of UHMG pharmacies and drug stores- and sell them for a slightly higher price- keeping the difference as payment. For those CBD agents who did not have funds to purchase the commodities up front, pharmacies could give them a small line of credit and then pay them a percentage of the sales when they return with the total commodities sold. Pharmacies and drug shops do record what they sell to the CBD agents, and UHMG uses this information to report to USAID. Otherwise pharmacies and drug shops use this data as they would their own sales data to order directly from the local distributor. CBD agents do report back to the facility with what products they have dispensed and the money that they have made. UHMG is getting ready to launch an SMS campaign with the Ministry of Health and is looking into ways that CBD agents can also utilize this technology for reporting.

Country	Uganda
Organization/Project	John Snow, Inc., Uganda Program for Health and Holistic Development (UPHOLD)
Reference	Kironde, Samson (Chief of Party STAR-EC Project, Uganda, former Chief of Party for UPHOLD). In person interview. January 2010.
Description	UPHOLD was an integrated social services program designed by the Government of Uganda and USAID that ran from 2002-2008. The program was strategically designed to increase the utilization, quality, and sustainability of education, health, and HIV and AIDS services in 28 districts covering approximately 42% of the country's population.

	One component of UPHOLD's programming included supporting and expanding the governments' community-based programs for fever management, malaria treatment and prevention, and child growth monitoring. UPHOLD worked with NGO partners in each district to implement these programs. Volunteer Community Drug Distributors dispensed products in the Homapak® (pre-packaged chloroquine plus sulfadoxine-pyrimethamine) provided through the Ministry supply chain system. CDDs were supplied the closest health facility.
Summary of CBD Supply Chain Practices	Challenges for the Community Drug Distributors (CDD) and the Home-based Fever Management program are well-documented in the "Review of Implementation" report (Aug 2005). A number of supply chain challenges and policy changes caused supply problems for CDDs. Some districts operated a pull system and other a push system. Pull system districts had to order Homapak® through their HMIS ordering system with a few challenges- Homapak® was not listed on the drug order list and CDD reporting rates were very low on which to base orders. This caused stockouts in some districts. In the push system, the National Malaria Control Program determined a set number of doses of Homapak® for each district based on population and resupplied districts this way. Either way depending on the district that you were in, different donors were able to supplement stock levels which led to maldistribution of Homapak® across all districts. Homapak® also proved very bulky and hard to transport from the District to the Health Center level. Mid-way through the program the Government of Uganda changed the Standard Treatment Guidelines for malaria to include Coartem instead of Homapak® would cause significant change to the program- training, etc. CDDs did not complete the drug registers well or report on time (30% reporting rate) and supervision efforts were quite low. Even with these supply chain challenges, this program was very successful and ultimately expanded by the Government of Uganda.

Country	Zambia
Organization/Project	Ministry of Health (MOH) & John Snow Incorporated (JSI)/MOH CBD Program, USAID | DELIVER PROJECT
Reference	Simpungwe, Gamariel (Senior Public Health Logistics Advisor, Zambia); Nicodemus, Wendy (Senior Technical Advisor, Zambia); Zyambo, Rabson (Public Health Logistics Advisor, Zambia); Sanabria, Arturo (Deputy Director, Malaria & Essential Drugs, Zambia). Telephone Interview. February 2010.
Description	No nationally organized or implemented CBD program exists in Zambia but a number of districts and faith-based organizations do operate their own programs. In addition, in collaboration with the USAID | DELIVER PROJECT, a pilot is being conducted in 40 districts for the distribution Artemether/Lumenfantrine (AL), Rapid Diagnostic Tests, and bednets by Community Health Workers (CHW), as they are called in Zambia. In the government program CHWs distribute condoms and contraceptives as well as other basic health supplies for treating minor ailments at no charge. These products are supplied to them in a kit. While most CHWs are unpaid, it is reported that some charge a small fee for their services. CHWs either meet every two weeks, every month, or every quarter depending on the District. The exact number and extent of all informal CBD programs in Zambia is not known.
Summary of CBD Supply Chain Practices	The central medical store in Zambia packages Community Health Worker Kits which get delivered down to the health facilities who request/order them. Each CHW gets one kit and get another kit when that kit runs out. CHWs can seek out additional supplies at

	their health center, but CHWs report problems with stock outs of certain products given the structure of the kit. In the Kasama District, they report using a "Community Health Worker Reporting Form" that is similar to a ledger but it keeps a running total of all products in the kit and what they dispense and when. This report is brought to the Health Center if they need resupply in the interim before another kit is available to them. Other programs report that CHW's simply using notebooks and loose-leaf to record any dispensing data. The pilot for malaria commodities introduces a two-bin type inventory control system into the CHW program. In this program each CHW is provided with two boxes of AL 1x6. Then they run out of one box, they are instructed that this is the time to go back to the Health Center and get another box. CHWs record all transactions in a notebook and bring this book with them to the Health Center monthly to report this information. The Health Centers order CHW kits and malaria commodities through the national ordering system and do not separate out dispensed data by CHWs from regular Health Center dispensed data (apart from how many CHW kits they order). One challenge reported was that there is no standard CHW program and no standard way of reporting by the CHW.

Country	Zimbabwe
Organization/Project	Ministry of Health- Zimbabwe National Family Planning Council & John Snow Incorporated (JSI)/ ZNFPC CBD Programme
Reference	Kawaju, Louis (Deputy Logistics Advisor, USAID | DELIVER PROJECT, Zimbabwe); Takawira, Eunice (ZNFPC CBD Programme Manager MOHCW, Zimbabwe). Telephone interview. January 2010.
Description	Zimbabwe has a long history of CBD programs for family planning and due in part to its successful CBD program was formerly lauded as having one of the best family planning programs in Africa. The first CBD program began in 1967 as a peer education and contraceptive referral program and expanded in 1976 to allow CBD agents to dispense contraceptives for a small fee. Currently around 800 CBD agents exist under ZNFPC and there are plans to expand the program to 2,000 CBD agents. CBD agents are paid a small monthly salary, dispense male and female condoms and oral contraceptives free of charge, and cover approximately 20 km each. With the expected expansion, there are also plans to possibly include PMTCT and other products into the CBD agent's distribution.
Summary of CBD Supply Chain Practices	Zimbabwe operates under an informed push system whereby Delivery Teams drive to health facilities each quarter, collect commodity data, and then top-up facilities, as well as CBD agents, with the correct amount of commodities. This system ensures stock availability and also reduces reporting burden on the CBD workers. Each quarter they only need to complete a physical count of the supply that they have and report that to the Sister-in-charge at the health facility. The DTTU team will then complete all of the calculations (average monthly consumption) necessary to top-up the CBD agents to the established 6 month maximum all on the Delivery/Receipt Voucher. Some CBD agents do have trouble carrying/storing this six month maximum, and some store portions of their "supply" at the health facility or nearby hospital until they need it. If the CBD does need additional supply before the DTTU truck comes, she/he is able to visit the nearest health centre and request supplies. Stockouts have been reported to have gone down dramatically with the implementation of the DTTU toping up system. ZNFPC reports that its most challenging supply chain issue is transport for the CBD agents to the nearest hospital or clinic (and back) to collect the 6 month supply of

	commodities.

Region: Asia

Country	Bangladesh
Organization/Project	Ministry of Health (MOH) & John Snow Incorporated (JSI)/MOHFW CBD Program
Reference	Anwar Hossain, Muhd. (Country Team Leader USAID | DELIVER PROJECT, Bangladesh). Email correspondence. February 2010.
Description	The primary CBD program in Bangladesh is managed the MOH Family Welfare (MOHFW). Donor-funded NGOs also operate a smaller CBD network. There are approximately 30,000 under the MOHFW and serve 6000 people each or 1200 eligible couples. There are approximately 10,000 CBD agents working under NGOs that serve and undetermined amount of clients. CBD agents are mainly female and distribute male condoms and pills to clients and provide referrals for other contraceptive methods.
Summary of CBD Supply Chain Practices	All MOHFW CBD agents are paid employees, while CBD agents under NGOs have less job security as they rely on donor funds. CBD agents under the MOHFW provide pills and referrals for free and charge a marginal amount for condoms. CBD agents under NGOs charge a fee for their services. NGOs buy products from social marketing companies and have injectables in some areas. CBD agents under the MOHFW distribute products daily and resupply clients every three months for current users and every 4 months for new users. NGO CBD agents distribute and resupply depending on client demand. Both programs distribute products every month. MOHFW CBD agents receive supplies from sub district FP stores and NGO CBD agents resupply at NGO stores. The main reasons for stockouts are lack of supplies available at the FP or NGO stores or the CBD agent is not able to come to pick up supplies. The MOHFW CBD agents have max of 3 months of stock (MOS) and minimum of 2 MOS. CBD agents submit monthly reports that report supplies received, dispensed and stock on hand the information is used to determine the issue quantity to supply the CBD agent to the maximum level. All CBD agents record essential logistics data items. CBD agents under the MOHFW use a register to collect this information. Data from all levels are sent to the national level. Training length depends on donor or MOHFW and includes counseling, motivation, client selection, determining dispense quantity, record keeping, etc. Supervision occurs twice a month and mainly constitutes reviewing progress and stock. The program recommends an electronic reporting system which it believes would save time for completing and sending reports. Challenges include the need for strengthened procurement at the higher level in order to ensure supplies at the lowest level of the system and the need for strengthened monitoring and supervision for the CBD agents. The biggest challenge is the retirement of older CBD agents and immediate need to refill and train new ones. The greatest success is that door step FP services are available to clients.

Country	India
Organization/Project	World Vision/ Healthy Timing and Birth Spacing project
Reference	Allison, Adrienne (Project Director, Birth Spacing Integration, USA).Telephone interview. March 2010.

Description	The Healthy Timing and Birth Spacing project in India started by using existing community health workers (CHW) working with the MOH of Uttar Pradesh and a child survival project also implemented by World Vision (WV). The program focuses on helping women and couples plan, space and limit pregnancies. For this project, one female CHW covered 2000 women clients, with 120 CHWs total participating in the project. Additionally, some male CHWs helped with mobilization. Female CHWs dispensed condoms, pills, cycle beads for free and referred clients to the closest health facility for other methods.
Summary of CBD Supply Chain Practices	CHWs in the project were unpaid but received a stipend of 1000 Ruppees/month and travel money for the monthly meetings. Monthly reports, including a list of products they distributed were submitted by the CHWs and weekly action plans were reviewed at monthly meetings with WV staff. Most of the female CHWs were semi-literate, while 10% were fully literate. Many forms were used; however information was lost due to the illiteracy. CHWs carried a register for consumption and keeping track of clients. CHWs were supplied at monthly meetings, but could go to health facility if running low. The resupply amount was determined by the last month's consumption. Since products were supplied by the MOH, stockouts resulted when the MOH did not take into account newly created demand when forecasting for products. CHWs were given a 6 day training and a handbook. Supervision was provided at monthly meetings and technical staff made themselves available in different geographical areas every week. The biggest challenges of the program were illiteracy and the large geographic area that needed to be covered. The greatest success was increased demand and knowledge of FP among clients.

Country	Nepal
Organization/Project	John Snow Incorporated (JSI)/ Nepal Family Health Program (NFHP) II & Morang Innovative Neonatal Intervention Program (MINI) II
Reference	Shrestha, Ashoke (Director Nepal Family Health Program, Nepal); Dawson, Penny (Director, MINI Program, Nepal). Telephone interview. January 2010.
Description	The goal of the Nepal Family Health Program (NFHP) II is to improve provision and use of public sector FP/MNCH and related social services, supporting the Government of Nepal's intention to reduce fertility and mortality. NFHP II focuses on community-level and other peripheral FP/MNCH services and works primarily in support of public-sector services. The Morang Innovative Neonatal Intervention Program (MINI) II's objective is to define the most efficient model for scaling-up community based management of neonatal sepsis and determine the effect on community health worker performance and program coverage with decreased external supervision and support. The projects works with 50,000 female CBD agents which cover 1,000 clients each in the flat lands, 350 clients in the hills, and 200 in mountainous districts. CBD agents distribute male condoms, COC pills, ORS, Iron, Zinc and Cotrimoxazole as well as provide services such as health assessments.
Summary of CBD Supply Chain Practices	CBD agents seek out resupply every month from the closest GON health facility Supervisor. Districts determine the quantity of products supplied to the CBD agents based the past three month's consumption, but for pills only a set number (100) of cycles is resupplied. The minimum level of stock held is 45 days and 10 days of stock as an emergency order point. CBD agents use forms to record consumption data, and supervisors use requisition forms to get supplies from health facilities. All data is aggregated and sent

	to the higher level and for some commodities, to the highest level for the national report. The most common reason for stockouts are lack of supplies received from the higher level and health facilities not placing orders to the district on time. CBD agents go through an 18 day basic training and carry pictorial job aids for clients. The biggest challenges are that there are not enough CBD agents for the many programs who would benefit from their services and attrition from lack of mobility from old age and physical geography. The biggest successes are increased CPR, health seeking behavior and utilization of services and reduced maternal and child mortality.

Country	Pakistan
Organization/Project	Marie Stopes International (MSI)/ National Expansion Project
Reference	Dr. Ahmed Memon, Ashfaque (National Manager CBD Initiative, Pakistan). Email correspondence through MSI/HQ. March 2010.
Description	The National Expansion Project was launched in July 2007 in 49 districts of all 4 provinces to address the high unmet need for FP in Pakistan. The project is approximately covering 490,000 married women of reproductive age (WRA) and will include more in the coming year. Each district has 10 female CBD workers, two supervisors, and a static center which all covers approximately 10,000 married WRA.
Summary of CBD Supply Chain Practices	Regional and support offices and a National Manager constitute the higher levels. CBD agents deliver and sell supplies on foot directly to client homes mostly on a monthly basis. They receive their supplies from static centers on average monthly and the resupply amount is determined by consumption and demand. They also prepare a field visit plan one week in advance. Supervisors then consolidate all CBD agent requests and submit it to the static center. Once the supervisor receives the supply, it is recorded in a register and then given to CBD agents who signs when she/he receive the supplies. Stockouts result from static centers inability to resupply stocks from a higher level on time. CBD agents receive training on counseling, registration, and record keeping and receive a manual. The program recommends that CBD carrier bags be designed with temperature in mind. The biggest challenge of the program is finding and retaining CBD agents who are literate, do not have any conflicts in the community and are able to visit clients without mobility restrictions. This is additionally challenging due to social, religious, cultural and literacy barriers. The biggest success has been the increased use of FP products. This is especially significant since 80% of supplies are distributed through CBD agents.

Country	Pakistan
Organization/Project	Ministry of Health/ National Program for Family Planning & Primary Health Care
Reference	Mir, Ahmed (Deputy Program Manager (Logistics), Population Council/ FALAH Project, former Provincial Logistics Officer in Balochistan Province from 1996-2008 with the LHW Program, Pakistan). Email correspondence. January/February 2010
Description	In operation since 1994, the National Program for Family Planning & Primary Health Care (commonly known as the Lady Health Worker Program) is still operating nationally with more than 100,000 workers currently covering all 135 districts in Pakistan. The program began with the purpose of "bringing health care and family planning to the

	masses," reducing maternal and infant mortality rates as well as increasing contraceptive prevalence rate. The Lady Health Workers are paid a small monthly stipend, provide primary health care and family planning counseling, and distribute approximately 28 primary health care commodities including family planning products all free of charge.
Summary of CBD Supply Chain Practices	Lady Health Supervisors (LHS) oversee approximately 20-25 Lady Health Workers and meet with them every month. At these monthly visits, LHWs are not only re-supplied with a kit of a set quantity of products, but they also submit their monthly reports which record, among other service data, quantities of stock received from the facility, quantity distributed, current stock on hand and days out of stock. The Health Facility also has a Monthly HMIS report that does report the quantities of supplies issued to LHWs. The LHW has a unique inventory control system in that it is forced ordering (LHWs are supplied monthly with a kit), but LHS also top-up LHWs when they are out on supervision visits to ensure that LHWs always have sufficient supply. LHWs receive an extensive 3 month training with 12 months of monitored field experience. The LHW program is highly respected and also highly successful; one challenge is that other programs see the reach that the program has and want to add on to the number of products and services that the LHWs currently offer.

Region: Latin America and the Caribbean

Country	El Salvador
Organization/Project	Ministry of Health (MOH) & USAID | DELIVER PROJECT (JSI)/MOH CBD Program
Reference	Luna de Aguirre, Luz Elda (Logistics Consultant, El Salvador). Telephone interview. February 2011.
Description	In operation since 1999, the "Promotor de Salud" (Health Promoter) program of the Ministry of Health covers nearly 90% of the country with 2,400 salaried health promoters. All promoters have at least a high school degree, but the program prefers that each promoter has a college degree in a health field. They dispense oral contraceptives, male condoms, injectables (monthly, bimensual, trimensual), DPT and Polio vaccines, as well as other general health supplies (alcohol, cotton, bandages, etc.) free of charge. Each promoter receives 3 months of training in various modules including contraceptive counseling, technology, and logistics. Supervision has been a critical part of the success of this program with 400 program supervisors at the Regional and Central levels and also from 16 specific technical health teams (SIBASI).
Summary of CBD Supply Chain Practices	The Ministry of Health in El Salvador is committed to strengthening the link between the flow of commodities and information between the health facility level and the health promoters. As such, two comprehensive manuals have been developed for the Health Promoter program that document Administrative and Managerial issues of the program. Each health promoter is required to complete nine forms--some annually, some monthly, some daily. Those forms pertaining to logistics include a stock card and a daily dispensing register that also includes some client information. The inventory control system for this program is also unique in that maximum stock quantity is simply considered a 25% increase on monthly consumption. When the health promoters report to the Health Facility each month, the health facility takes a copy of their daily register and calculates a 25% increase on that month's consumption and supplies the promoter with that quantity (minus what he/she already has on hand). The Health Facility does not track CBD client consumption data

	separately but rather includes that consumption data from the daily register in its own monthly report that moves to the Regional level.

Country	Haiti
Organization/Project	Partners in Health
Reference	Lutz, Ali (Program Coordinator, Boston). Telephone interview. April 2010.
Description	There are currently three types of community health workers who have been trained to provide outreach, education and support within their own communities in Haiti through PIH/ZL. Women's health agents (*ajan fanm*) provide reproductive health information and counseling including family planning and safe delivery services. *Ajan fanm* provide family planning education, counseling and delivery services, advise women on prenatal care, safe delivery and STI prevention, and identify women in need of advanced or urgent care and refer them to the appropriate health facility. Health agents (*ajan sante*) provide basic health education including hygiene, childhood vaccination, and nutrition. *Accompanateurs* provide support for patients living with HIV, making daily (sometimes twice daily, depending on a patient's treatment regimen) visits to patients in the patients' homes to deliver medication and to oversee treatment. Through their daily visits, accompagnateurs teach patients how to manage complex drug treatments and cope with possible side effects; they also provide social and emotional support. All three types of CHWs are paid by Partners in Health for their work. Since the February 2010 earthquake, many of the CHWs have also been used for mental health counseling and support.
Summary of CBD Supply Chain Practices	All CHWs receive commodities from the PIH supported Ministry of Health facilities. CHWs attend a 7-day training, a model that PIH has developed and implemented all over the world. The training provides CHW with information about treatment, prevention, and risk factors for HIV, TB, malaria, and other infectious diseases; defines the CHW roles and responsibilities; develops CHW competencies in active case-finding, communication, and psychosocial support. A small yet interactive portion of the training focuses on commodity management and filling out required forms. With a variety of types of CHWs operating in Haiti, PIH is considering a similar model as their Rwandan program- one that has a more geographic community health focus rather than simply being disease specific.

Country	LAC Region
Organization/Project	International Planned Parenthood Federation (IPPF) Western Hemisphere Region/Multiple CBD Projects
Reference	Ramirez, Maria Cristina (Senior Program Advisor/Logistics, USA). In-person interview January 2010. Makleff, Shelly (Services Analyst Evaluation Unit, USA). Email correspondence. January/February 2010.
Description	IPPF Western Hemisphere region has seen a dramatic decrease in the number of CBD program supported by their 32 Member Associations with the decrease of USAID-funding to IPPF since 2005. In 2005, just over 10,000 CBD agents worked with IPPF across WHR, but as of 2008, this number has decreased to approximately 6,500 with additional decreases expected in 2009. Programs in Guatemala and Honduras are still operating

	with 3,500 and 1,500 CBD agents respectively. Each Member Association tailors its CBD program to the country's needs, but most IPPF CBD agents sell their commodities for a small fee, collect a small percentage of those sales as payment, counsel clients on family planning methods, and refer clients for IUD and implant insertions. While it varies country-to-country, generally IPPF/WHR CBD agents dispense oral contraceptives, injectables, and male and female condoms and can sell implants and IUDs to private providers.
Summary of CBD Supply Chain Practices	CBD agents working with IPPF/WHR member associations sell their products both to clients as well as providers and, therefore, become a unique link in the distribution cycle of contraceptives in many countries. Interviews with the Global Staff at IPPF/WHR did not result in much detail on the logistics information management or supply chain operation of the various member associations. However, the majority of all IPPF/WHR CBD programs do collect information on commodities and have multiple forms to complete; the program in Guatemala has recently shifted to having CBD agents use cell phones and computers to report data thus reducing the paper reporting burden but it has increased the educational qualifications of the CBD agents. In programs where CBD agents purchase the products from the facility at a reduced cost, sell products, and then keep the money that they make from selling the products. In this case, any product that is sold to the CBD agent is considered and reported as dispensed. A challenge with this model is that it is dependent on the CBD agent having enough up-front capital to purchase the contraceptives but then also assumes that the CBD agent sells the contraceptives for the correct cost and sells all her stock.

Country	Nicaragua
Organization/Project	Profamilia (Asociacion Pro-bienestar de la Familia Nicaraguense), International Planned Parenthood Federation (IPPF) Western Hemisphere Region/ Red de Distribucion Comunitaria de Anticonceptivos
Reference	Silva, David (Director, Nicaragua); Alarcon, Nimia Chavere (Supervisor of Promoters, Nicaragua). Telephone interview. February 2010.
Description	Profamilia (Asociacion Pro-bienestar de la Familia Nicaraguense) began its CBD program (Red de Distribucion Comunitaria de Anticonceptivos) in 1992 with funding from USAID and operated through 2005 when USAID funding ceased. The program was supported entirely by Profamilia and did not have a specific relationship with Ministry of Health. This network had 1,042 promoters, 242 distributors in urban areas, and 19 supervisors. The promoters not only distributed family planning products but also provided general health advice, family planning counseling, and referrals to clients. The promoters sold oral contraceptives (the method of choice in Nicaragua), Depo-Provera, and male condoms for a small fee. The promoters would keep a small percentage of all of her sales as her payment.
Summary of CBD Supply Chain Practices	This network had programmatic challenges related to being supported almost entirely by USAID. Thus when funding ceased, the program did as well. Promoters were resupplied on either a monthly or bimonthly basis depending on their how far they were located from the Profamilia regional health facility or based on how quickly they were dispensing products. Not only did these promoters have to keep daily dispensing logs (with monthly totals) and complete monthly reports, but they also collected the money from their sales. With the data collected, apparently supervisors were able to note up to six months of dispensing data. This data was given to the supervisor (at least every three months if not more frequently). The data was collected in Profamilia's

	automated system but aggregated into facility data for quantities distributed. The sales money was also brought to the regional supervisor each month and promoters took approximately 1-2% of those sales home as payment for their services. Resupply quantities were also calculated by the supervisor during those quarterly visits (and also more frequently) according to approximately a 25% increase of current users. The training and capacity-building process was a constant process for Profamilia given turnover of the promoters and also expansion of the program and methods provided. Other challenges included program stock-outs due to inability to go for resupply (seasonal, roads, etc.) or due to larger Profamilia stock-outs.

Region: Global

Country	Global
Organization/Project	Population Council/ INOPAL Projects I - III and FRONTIERS Project
Reference	Dr. Foreit, James (former Director, INOPAL and Frontiers Project, USA). Telephone interview. January 2010.
Description	Through a series of reproductive health projects [INOPAL Projects I - III (1984-1998) and FRONTIERS Project (1998 – 2008)], Population Council has compiled significant resources and information on CBD program models across the globe. INOPAL focused on Latin America and working more closely with NGOs like IPPF; FRONTIERS was a global program with additional focus on working with government programs. None of the programs focused specifically on CBD, but CBD was one innovative intervention for improving family planning, safe motherhood, and other reproductive health services.
Summary of CBD Supply Chain Practices	Being able to speak from a global perspective, Dr. Foreit did comment that waste management and reverse logistics has not been a major challenge for CBD programs globally. As injectables are now entering the CBD portfolio of products, these challenges may start to arise, but generally managing the disposal or return of expired or damaged products or waste has not been a major issue (due in part to the small stock supplies that most CBD agents carry). Most CBD programs follow national guidelines and have enough interaction with their "supplying level" to be able to return such commodities if these problems do arise. In addition with the advent of cellular technology, he also mentioned that the relationship between the CBD agent and their "supplying level" can be much closer and also much more responsive should products be needed by the CBD agent.

Publications

Region: Africa

Country	All
Document Type	Report
Reference	Frontiers in Reproductive Health Program (FRONTIERS). 2002. *Best Practices in CBD Programs in sub-Saharan Africa: Lessons Learned from Research and Evaluation.* Washington, D.C.: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	Report from a seminar organized collaboratively by the Population Council's Frontiers in Reproductive Health Program (FRONTIERS), Family Health International (FHI), and Advance Africa and attended by participants of the U.S. Agency for International Development (USAID) and its collaborating agencies (CAs). The one- day event: (1) summarized evidence on the effectiveness, impact, cost, and sustainability of various CBD models; (2) identified best practices in African CBD programs; and (3) described how CBD programs can meet reproductive health needs in sub-Saharan Africa. Key issues reviewed included: effectiveness, cost, and sustainability of various CBD models; (2) identified best practices in African CBD programs; and (3) described how CBD programs can meet reproductive health needs in sub-Saharan Africa. While the document did not focus largely on supply chain practices for CBD agents the "Maximizing Impact" section states that for commercial CBD "Program managers might look to the commercial sector to address questions on how products reach households, and on whether direct sales is the best way to create a demand for family planning products. Making sure that product is available is crucial to a program's success. Data from Nigeria suggest that CPR is higher when product availability is higher (Aronovich 2002). Managers need a sound logistics system that includes methods of forecasting supply needs, distribution, procurement warehousing, storage, and end-dates for perishable products. Programs should conduct a periodic analysis of logistical systems to ensure reliable delivery of supplies to clients."

Country	All
Document Type	Training Guide
Reference	The Family Planning Service Expansion and Technical Support Project (SEATS). 1994. *Management of Community-Based Family Planning Programmes: Manual for Trainers.* Washington, D.C.: for the U.S. Agency for International Development. The Family Planning Service Expansion and Technical Support Project (SEATS). 1994. *Management of Community-Based Family Planning Programmes: Manual for Trainees.* Washington, D.C.: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	These Trainer and Trainee manuals offer standardized curriculum guidelines for teaching program management skills specific to CBD programs. The material is geared toward mid-level managers of CBD programs (therefore the Trainee is the manager). It is available in French and English and was utilized in the early 1990's in Kenya. Of the 19 sessions, one session focuses specifically on logistics and one also focuses on Management Information System (MIS). The logistics section is two sessions (total 3 hours) and the objectives include: Explain the functioning of an effective logistics system for a CBD program; forecast contraceptive requirements for a CBD program; describe appropriate storage conditions,

	inventory control, and distribution systems for CBD programs; design implement, and operate effective systems and procedures for monitoring contraceptive use for CBD programs; and discuss strategies for solving transport problems specific to CBD programs. The MIS section is four sessions (6 hours total) and objectives include: understand basic principles of information systems; design a basic integrated information system; utilize data to monitor performance, assess impact, manage operations, and present results to others; and be able to identify MIS needs and express these needs to MIS design specialists.

Country	All (based on Madagascar and Uganda)
Document Type	Handbook
Reference	Weil, Benjamin, Kristen Krueger, John Stanback, and Theresa Hatzell, Hoke. (Family Health International). 2008. *Provision of Injectable Contraception Services through Community-Based Distribution*. Research Triangle Park, NC: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	Based on pilot program experiences in Madgascar and Uganda, this handbook outlines nine basic steps for introducing and ultimately maintaining injectable contraceptives into existing family community-based distribution programs. The fifth step "Set up a Logistical System that Ensures a Steady Provision of Supplies" identifies six basic principles to follow to make sure that supplies are readily available for the program. Specifically this section recommends linking to health facilities and the existing government supply chain; forecasting adequate quantities of supplies; properly disposing of waster; and ensuring timely reporting by CBD agents. Fourteen appendices supply a plethora of resources ranging from a rapid assessment guide for CBD agents to a CBD training curriculum. Appendix 12 of the document also offers an example Contraceptive Stock Control that collects data on products received and used (Microgynon, Lofemenal, Ovrette, condoms, and DMPA).

Country	Ghana
Document Type	Report
Reference	Population Council and Planned Parenthood Association of Ghana. 2000. *An Assessment of the Community-Based Distribution Programs in Ghana.* Washington, D.C.: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	This publication has extensive information on the mainly NGO-supported CBD programs in Ghana, and it includes much more information on the PPAG program than the phone interview with PPAG staff yielded. Major findings included finding that PPAG reporting systems were not being followed and subsequently as a result of the study PPAG revised its reporting system for CBD agents to that which was described by PPAG in the phone interview. In the section "NGO CBD programs in Ghana" there is a "Record Keeping" section which states the following: "All programs expect their agents to keep monthly records of their activities, including numbers of new, resupply, and referral clients, as well as the number of contraceptive and other health care commodities dispensed. The records kept vary from program to program and is determined by the range of services the agents provide. ADRA has trained its illiterate agents to use pictorial methods for record keeping. PPAG agents also keep records of all contacts made for educational or information giving purposes (i.e. with individuals, home visits, rallies, and group meetings, drama and video contacts). For all programs, supervisors use the agents' records to compile monthly,

	quarterly and annual performance reports for their area of coverage. These reports are supposed to be submitted to headquarters, usually via district or regional channels. This survey found, however, that record keeping in all programs is extremely poor, and whatever records are collected are often not reported through the program structure. There is no feedback to supervisors and agents, and the quality of the reports at headquarters level is not sufficient to inform senior management and donors about program performance. No policy guidelines or mechanisms exist to ensure that NGO programs submit their CBD records to the National Population Council. Even at the district, regional and national levels, NGOs are not required to forward their output to the respective MOH officials."

Country	Ghana
Document Type	Report
Reference	PRIME. 1996. *Technical Report 5: Assessment of Community-Based Distribution in the Republic of Ghana*. Chapel Hill, NC: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	In the 1990's Ghana had five very active CBD programs. Each program sourced its own contraceptive products, had different brands of products, and priced their products at various levels. These five programs also had their own individual distribution systems. The Republic of Ghana was hoping to develop a national strategy for CBD and commercial distribution of contraceptives. INTRAH/PRIME, conducted a national assessment of existing CBD programs with the Ministry of Health. In terms of logistics and supply chain management the assessment recommended the following: 1. As much as possible, organizations receiving donated products should ensure continuity in the types and brands of contraceptives distributed. 2. The Ministry of Health should monitor and coordinate the introduction of the new brands of contraceptives in the country to avoid uncontrolled proliferation of brands in the field. 3. Organizations should harmonize their pricing policies to limit/reduce differences in price for similar products as much as possible, in order to allow clients to make a choice based on their preference, rather than on financial considerations.

Country	Guinea
Document Type	Report
Reference	Pour Renforcer les Interventions en Santé Reproductive et MST/SIDA (PRISM). 2007. *Guinea PRISM Final Report 2003 - 2007*. Cambridge, MA; for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	Management Sciences of Health Project Summary report on the Ministry of Health and MSH's efforts through PRISM I & II(1997-2002; 2003-2007 respectively) to build fully functional service delivery points at all levels, including at the community level. In 2005 and 2006, the project supported direct distribution of family planning commodities to CBD agents which in turn minimized stock outs and increased client confidence in the system. The project created incentives for CBD agents to dispense products—CBD agents received 30 percent of value of what they sold which was deposited into a bank account to fund community development activities. At the end of the project, almost 24 percent of the value of the contraceptive products sold at the community level went back to the communities through this performance-based mechanism. This unique model for involving CBD agents in other community activities did increase contraceptive access as well as economic empowerment for the community.

Country	Malawi
Document Type	Evaluation Report
Reference	Support to AIDS and Family Health Project (STAFH). 1996. *Quality of Family Planning: Community-based Distribution Services in Malawi*. Lilongwe, Malawi: for the U.S. Agency for International Development.
Summary of CBD Supply Chain Practices	This comprehensive report documents the selection, functioning, and quality of CBD services in Malawi in order to evaluate their strengths and weaknesses. Includes Swahili language CBD agent client contraceptive tally sheet that uses tick marks, as well as client card and referral letter in the annexes (pp 120-2). The study found that only 50% of CBD agents perceived they had sufficient supply. Contraceptives were supplied on supervisory visits to CBD agents as well as on visits to mobile clinics, project offices, and referral clinics. A total of 16.5% reported difficulties in maintaining supply due to the following reasons: supervisor did not bring enough supplies on visits; supervisors did not make monthly visits due to transportation difficulties; supervisors bought supplies only when requested; a lag-time between placing an order and filling it; and travel/distance challenges for a CBD agent who had to walk to referral clinic to obtain supplies when he/she missed the supervisor's visit. The evaluation found no relationship between a specific type of distribution system and supply availability. In each project where CBD agents were understocked, different distribution systems had been used. Giving a month's supply of medicine at a time might be implicated in high discontinuation rates (pg. 27). CBD agents were asked to record client information in register books but most records incomplete although most recorded they had no problem filling out the books. Many CBD agents were also found to make errors in the tally sheets. Although managers reported improvements under close supervision, there is evidence that they were not aware of the errors. The Annex does provide examples of tally sheets and training guides.

Region: Asia

Country	India
Document Type	Report
Reference	Paxman, John M. et. al. 2005. *The India Local Initiatives Program: A Model for Expanding Reproductive and Child Health Services.* Studies in Family Planning. 36[3]: 203-220.
Summary of CBD Supply Chain Practices	This journal article, authored by a combination of MSH staff, documents how a model adapted from Indonesia and Bangladesh shaped the India Local Initiatives Program. The program enrolled 1,850 Community Health Volunteers (CHVs) who delivered health information and services (including contraception) to their neighbors. The program established a simplified, management information system that tracked services provided and health status of clients. The CHVs utilized a map of their community and utilized simple symbols and color coding for each of the components of the program to log the health status or services rendered onto the map. This pictorial reproductive and child health map was used to record reproductive and child health status of each home, and allowed volunteers to keep track of trends and give verbal reports. Program staff then used those maps and verbal reports to complete paper-based and electronic registers to track progress. Program staff used maps to monitor performance and identify necessary modifications. Assessments found that information on health status of individuals were correctly reported 96% of time. No systemic under- or over-reporting was found. Data from maps were often used for decision making.

Country	Philippines
Document Type	Curriculum
Reference	Integrated Population and Coastal Resource Management Initiative (IPOPCORM). 2004. *Training Curriculum for Community-Based Distributors*. Manila, Philippines: for PATH Foundation Philippines, Inc.
Summary of CBD Supply Chain Practices	The IPOPCORM project aimed to improve reproductive health outcomes among people living in coastal communities in the Philippines. The curriculum is designed to guide Community Health Outreach Workers (CHOWs) in training selected CBD agents in reproductive health information, education, communication, and products. The one day training covers five main topics including CBD Program structure and Management information systems. The IPOPCORM program had varying scenarios where CBD agents either distributed product for free or sold products to clients on a sliding scale. The management information section instructs CBD agents on how to complete the CBD Outlet Reporting Form (products delivered, distributed, end balance, and funds collected) and CBD Record of FP commodities sold/distributed (more a client tracking sheet with some commodity data).

Region: Latin American and the Caribbean

Country	Guatemala
Document Type	Report
Reference	Management Sciences for Health. *Ensuring Supply, Cutting Costs, Raising Quality: Health Volunteers apply a Business Model to Contraceptive Distribution.* Available at http://www.msh.org/projects/mandl/6.8.html (accessed on March 15, 2010).
Summary of CBD Supply Chain Practices	The APROFAM project (IPPF affiliate) found success and 70% self financing of its CBD project by using Palm Pilots to manage inventory. Volunteer CBD agents (who are visited by local residents instead of visiting homes themselves) are visited by APROFAM staff who upload sales data to the clinic, thus, automatically generating resupply. Information is also sent to a management system where there is a continuous program of monitoring and evaluation. These technological innovations were patterned after a private sector program designed by Pepsi (PepsiCo, Inc.) in Guatemala.

Region: Global

Country	All
Document Type	Report
Reference	Burket, Mary K. 2006. *Improving Reproductive Health through Community-Based Services: 25 Years of Pathfinder International Experience.* Watertown, MA: Pathfinder International.
Summary of CBD Supply Chain Practices	The report highlights major lessons learned in Pathfinder's extensive history with CBD programs globally. The report does not provide any lessons learned on commodity or information management that would relate to the supply chain. There are a few lessons learned regarding public-private partnerships and unique distribution points that have implications for the supply chain but those inferences would have to be made by the reader.

Country	All
Document Type	Case Study
Reference	Wolff, James et. al. 1990. *Beyond the Clinic Walls: Case Studies in Community - Based Distributions.* West Hartford, CT: Management Sciences for Health.
Summary of CBD Supply Chain Practices	The case studies in this publication may serve as a guide to program managers who are designing CBD programs or also as a training tool for small groups/organizations working in CBD program management. Part III of the document focuses on "Information for Effective Management" and presents three different case studies that identify various challenges in many CBD programs. The fourth case study "Dealing with Data" contains an example organizational chart (pg. 44) as well as sample forms for the CBD agents. Additional sample forms such as client referral cards and tick sheets can be found in the annexes. The document summarizes that information management is critical for any CBD program but must be designed with the CBD volunteer in mind as well as who will be using what information. Author emphasizes that the physical design of forms are important, must be clear, uncluttered and easy to use to increase adherence of report and record-keeping. Forms should be designed so data is entered only once, and color coding and graphics help make forms easy to use. Pictures and simple counts help for non-literate CBD agents.

Country	All
Document Type	Report
Reference	Prata, Ndola et. al. 2005. *Revisiting community-based distribution programs: are they still needed?* Contraception 72: 402– 407.
Summary of CBD Supply Chain Practices	This journal article reviewed over 30 years of findings and experiences of CBD programs across the world to determine whether this type of service had a significant impact and was still needed in relation to other family planning health delivery services. The article in part analyzed what factors would make CBD programs more cost-effective and found that one way to increase cost-effectiveness and possibly strengthen the logistics system is by optimizing supervisory visits to local posts. By limiting supervisory visits to quarterly visits, travel costs decrease significantly and supervisors are able to oversee more posts, thus, decreasing the number of supervisors needed. Reducing restocking visits from monthly to quarterly is more cost-effective, regardless of front-end costs of providing each post with adequate supply of contraceptives. It should be noted, however, that decreased supervisory visits may compromise the quality of care provided by agents and/or agent motivation, and as such, it may be most effective to maximize supervisory visits as an opportunity for on-the-job training.

Country	All
Document Type	Executive Summary
Reference	Global Health Workforce Alliance. 2010. *Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems.* Montreux.
Summary of CBD Supply Chain Practices	On April 29-30, 2010 a Global Consultation on Community Health Workers (CHW) was held to discuss recent findings of a systematic review of CHW programs. The review was conducted with the intention of identifying CHW programs that had/have a positive impact on the Millennium Development Goals (MDGs) focusing on human resource indicators and health program impact. Human resource indicators specifically focused on selection, training, supervision, in-service training, performance, deployment patterns, standards for evaluation and certification, CHW classification, and impact assessment. Health impact indicators focused on MCH, HIV/AIDS, TB, Malaria, mental health and non communicable diseases. The three objectives of the consultation were to: i) identify best practices and lesson learnt, ii) identify implementation challenges, connect knowledge and programs; and iii) identify strategies for disseminating recommendations and information sharing. The consultation reviewed case studies conducted in eight countries (Mozambique, Uganda, Ethiopia, Bangladesh, Pakistan, Thailand, Brazil and Haiti). The summary describes key findings, strategic messages, identifies areas of further study needed, and provides further recommendations on how the Global Health Workforce Alliance can use the study findings. A full report on the consultation was not available at the time of this research.

Country	All
Document Type	Training Guide
Reference	Partners in Health. 2007. *Accompagnateur Training Guide: Facilitator's Manual and Accompagnateur Handbook*. (English-Pilot Testing Edition). Boston, MA. http://model.pih.org/accompagnateurs_curriculum
Summary of CBD Supply Chain Practices	PIH describes their curriculum as "an easy-to-follow fifteen unit training guide includes both a facilitator's manual and participant handbook. This pilot curriculum for accompagnateurs comprises 15 units, with a focus on treatment and support for patients with HIV/AIDS and tuberculosis. The training is tailored to be given over seven consecutive or separate days, after participants have received their initial orientation by PIH clinical staff. The curriculum includes parallel materials for use by trainers and participants, as well as visual aids for use with each unit. The Accompagnateur Training Guide for facilitators provides detailed steps on how to train accompagnateurs in the skills and knowledge needed to carry out their work. The Accompagnateurs Handbook is designed to be used by accompagnateurs both as a manual during the training and as a reference when they are working with patients in the community. Visual aids are also provided in two alternative forms – flipcharts and slides. The curriculum covers the following topics:* Treatment, prevention, side effects, and risk factors for HIV, TB, sexually transmitted infections (STIs), and other infectious diseases; * The roles and responsibilities of accompagnateurs; * Challenges faced by accompagnateurs and ways

	of dealing with them; * The impact of HIV/AIDS on women; * Recognizing and reducing stigma and discrimination; * Effective communication and psychosocial support. Based upon adult learning principles, the curriculum incorporates a variety of participatory approaches to teaching and learning that build upon the existing knowledge, skills and experience of the participants. PIH is currently pilot testing this curriculum with four partner programs in Haiti, Lesotho, Malawi, and Rwanda." While the curriculum focuses only minimally on supply chain management, Unit 13 does review how to complete the "Accompagnateur Form" which is a dispensing register as well as the importance of storing medicines properly and forming a strong relationship with the clinical team. The overall framework, design, and implementation of this training are comprehensive yet simple to follow and are a good model to be shared and expanded upon by any program.

Country	All
Document Type	Tool
Reference	USAID | Health Care Improvement Project.2009.*Rapid Assessment of Community Health Worker Programs in USAID Priority MCH Countries Draft Tool for Field Testing*. Bethesda, MD: USAID Health Care Improvement Project
Summary of CBD Supply Chain Practices	This tool is intended for USAID missions, implementing partners, ministries or other organizations to assess functionality as well as provide action plans and promising practices to improve CHW programs. It uses the AIM approach, which is based on organizational best practices. The tool assesses functionality for 15 programmatic components that are generally part of CHW programs, some of which include SCM, namely: equipment and supplies, supervision, information management, community health facility linkages and community ownership (in development). The tool is currently under Beta testing and in draft form. It can be viewed at the following website: http://www.hciproject.org/node/1224

ANNEX 1: Interview Questionnaire

Best Practices in SCM for CBDs	
INTRODUCTION	
Project Summary Blurb	
Contact Name, Title, Org	
Email:	
Phone:	
CBD PROJECT/PROGRAM INFORMATION	
Name of Project:	
Dates of Project Operation:	
Country/Region of Operation:	
What was the impetus for involving CBD's in the program? - Were there any major challenges to incorporating CBDs into the program?	
Brief description of organizational structure of CBD program -including approx # of CBDs; catchment area, etc -selection criteria -do the CBDs meet together as a group? (how often?) -are the CBDs paid? -do they have specific targets? -who manages the CBD program? (MOH? A Program within the MOH)	
What is the general profile of a CBD in your program? (Sex, age, literacy level, married/single, etc.)	
Do the CBDs dispense/distribute/use health commodities (pills, condoms, test kits, bed nets, etc.)? If yes, which ones? If yes, are these products free or do they collect fees?	*If answer is no, ask why they do not and then skip to end of questionnaire.*
STORAGE AND DISTRIBUTION	

How do the CBDs carry their supplies (while working)? Is this mechanism provided to CBDs by the program?	
How/where do CBDs store their products while not "working"?	
How often do CBDs distribute products to clients?	
How do CBDs travel to their clients?	
Where do CBDs receive their supplies/commodities? -Are there alternative sources for them to resupply? -How often do they get re-supplied?	
PRODUCT AVAILABILITY & ACCESS	
Is access to products/commodities for clients better through CBDs or through health facilities?	
Have there been any challenges with expiries, damaged or lost/stolen products with the CBDs?	
What are the reported reasons for stockouts at CBD level (e.g., inappropriate resupply by higher level, inappropriate ordering by CHW, poor forecasting, and increased demand)?	
Do CBDs have incentives to take ownership of supply and ensure they are never stocked out (e.g., options such as charging a fee or carrying other items that they know mothers/kids will want/need that they can charge for)?	
INVENTORY CONTROL	
Is there a maximum stock quantity that a CBD can hold? (either in quantities, bags, kits, or *months of stock (MOS)*)?	
Is there a minimum stock quantity a CBD should always have? (either in quantities, bags, kits, or MOS)	
Is there an Emergency Resupply point that indicates to the CBD that she should immediately seek resupply?	
How does the CBD know when she must go for resupply?	
How does the CBD know if she is at/over her Maximum stock level, at/under her minimum stock level, or at/under her Emergency Order Point?	
Does the CBD know how to or need to calculate *average monthly consumption (AMC)* or Max/MIN MOS? How does she calculate it?	
Does the CBD need to submit/report to be resupplied? How is the resupply quantity calculated? (determine if this is a push or pull system?)	

LMIS	
Does the CBD collect any of the essential logistics data items? (dispensed-to-user/usage, stock on hand, losses/adjustments?) If so, how?	
Does the CBD use any forms to request resupply/order? What do these forms look like (pre-printed or handwritten?, booklet, notepad, loose leaf? Carbon copies?)? If so what are they and is it possible to have a copy of those forms?	
What happens to any information that the CBDs supply to their resupply point? Do the health facilities record the information just by writing it down/do they physically collect a copy of the form? How is this information sent UP the system?	
How/where do the CBDs get additional copies of the forms/registers?	
Do you believe that collecting and using logistics data has improved/could improve product availability and the CBDs' ability to manage the products?	
WASTE MANAGEMENT	
How do CBDs dispose of expired or damaged products?	
Do CBDs pick up damaged or expired products from clients?	
Is the CBD program waste management guideline in line with any official MOH or national policies?	
ORGANIZATIONAL CAPACITY & HUMAN RESOURCES	
How are candidates to be CBDs selected?	
What does the training program for CBDs include?	
Do CBDs carry job aids such as pregnancy checklist, visual aids for clients, etc? If yes, what are they? Are they more visual/pictorial or written instructions? Do you have a copy that I could see?	
What other training materials or resources do the CBDs have if any?	
Do CBDs receive supervision? How frequently & by whom? Do supervision visits improve performance?	

What types of capacity-building techniques work the best for CBDs? (on the job; stand-up trainings; CD; etc.)	
TOOLS & TECHNOLOGY for SCM for CBDs	
Do you know of /Can you recommend any tools/resources that can be used for improving supply chain management skills for CBDs?	
Are there technical innovations that can improve the management and transmission of logistics information (cell phones, PDAs, etc.)?	
BIGGEST CHALLENGES IN Supply Chain Management FOR CBDs	
BIGGEST OVERALL CHALLENGES FOR CBD PROGRAM	
BIGGEST SUCCESS/BENEFIT OF CBD PROGRAM	
RECOMMENDATIONS OF OTHER ORGANIZATIONS/PEOPLE TO SPEAK WITH ABOUT SCM FOR CBDs?	

ANNEX 2: Excel Workbook

See attached file "CBD Promising Practices Spreadsheet.xls"