



USAID | **KENYA**
FROM THE AMERICAN PEOPLE

KENYA: STOCK STATUS AND LOGISTICS SYSTEM ASSESSMENT 2006



MARCH 2007

This publication was produced for review by the United States Agency for International Development. It was prepared by the DELIVER project.



DELIVER
No Product? No Program. Logistics for Health

KENYA: STOCK STATUS AND LOGISTICS SYSTEM ASSESSMENT 2006

DELIVER

DELIVER, a six-year worldwide technical assistance support contract, is funded by the President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Agency for International Development (USAID).

Implemented by John Snow, Inc. (JSI) (contract no. HRN-C-00-00-00010-00) and subcontractors (Manoff Group, Program for Appropriate Technology in Health [PATH], and Crown Agents Consultancy, Inc.), DELIVER strengthens the supply chains of health and family planning programs in developing countries to ensure the availability of critical health products for customers. DELIVER also provides technical management of USAID's central contraceptive management information system.

Recommended Citation

Bunde, Elizabeth, Erika Ronnow, Gerald Kimondo. 2007. *Kenya: Stock Status and Logistics System Assessment 2006*. Arlington, Va.: DELIVER, for the U.S. Agency for International Development.

Abstract

The Kenyan Ministry of Health (MOH) and its partners have long recognized that a sound logistics system is critical if they are to achieve the continuous availability of public health commodities at health facilities. As a result, they have increased attention and resources to strengthen logistics systems. Key steps have been taken to ensure the availability of public health commodities: contraceptives, HIV test kits and blood safety commodities, drugs for sexually transmitted infection (STI)/opportunistic infection (OI), drugs for tuberculosis and leprosy, antiretroviral drugs, and condoms for HIV prevention. These steps also included designing and implementing logistics systems, training health workers on logistics, providing technical expertise, and formulating policy for commodity security.

In 2006, the Logistics Indicator Assessment Tool (LIAT) was used to take stock of the performance of the logistic systems and to provide stock status information for key public health commodities. Results of the assessment revealed that nearly all systems were implemented as designed, but strengths and weaknesses continue to exist. The widespread availability of key commodities for each program was found throughout the logistic systems. In addition, both commodity availability and logistics management practices in the ARV program are performing well. Products for the family planning and HIV test kits are available as are the recording of LMIS data and training in logistics. However, key logistics management practices for programs—STI/OI drugs and condoms for HIV prevention—have stopped. Profound weaknesses, generally found across all systems, include inadequate availability of recording and LMIS tools, poor quality of records and reports, inadequate logistics training, and stock levels outside the established minimum and maximum levels for several commodities.

During the past several years, the public health commodities logistics systems in Kenya have undergone several important improvements. However, for Kenya to avoid commodity shortages in the future and to ensure full supply pipelines and commodity security, more work needs to be done in logistic system design and implementation, monitoring, supportive supervision, and advocacy.

DELIVER

John Snow, Inc.
1616 North Fort Myer Drive, 11th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480
Email: deliver_project@jsi.com
Internet: www.deliver.jsi.com

CONTENTS

ACRONYMS	vii
ACKNOWLEDGEMENTS	ix
EXECUTIVE SUMMARY	xi
Findings for Product Availability	xi
Findings for Logistics System Performance.....	xii
Recommendations	xii
BACKGROUND	1
Malaria System.....	2
Tuberculosis and Leprosy System.....	2
Family Planning and Reproductive Health System.....	2
Condoms for HIV Prevention System.....	3
STI/OI System.....	3
HIV Test Kits and Blood Safety System.....	3
ARV System.....	4
ASSESSMENT PURPOSE AND OBJECTIVES	5
ASSESSMENT METHODOLOGY	7
Logistics Indicators Assessment Tool.....	7
Sample Methodology	7
Indicator Choice	8
Data Collection and Analysis	9
Quality Assurance	9
FINDINGS	11
Logistics Management Practices	11
Personnel	11
Transportation	12
Storage Conditions	12
Stock Availability by Product Type	13
FINDINGS FOR MALARIA COMMODITIES	15
Logistics Management Practices	15
Personnel	17
Supervision.....	19
Transportation	20
Storage Conditions	21
Malaria Stock Availability	22
Recommendations for Malaria Commodities.....	25
FINDINGS FOR TUBERCULOSIS COMMODITIES	27
Logistics Management Practices	27
Personnel	29
Supervision.....	31

Transportation.....	32
Storage Conditions.....	32
TB Stock Availability	34
Recommendations for TB Commodities	37
FINDINGS FOR REPRODUCTIVE HEALTH COMMODITIES.....	39
Logistics Management Practices.....	39
Personnel.....	40
Supervision	43
Transportation.....	44
Storage Conditions.....	44
FP Stock Availability.....	46
Recommendations for FP Commodities	49
FINDINGS FOR CONDOMS FOR HIV PREVENTION.....	51
Logistics Management Practices.....	51
Personnel.....	52
Supervision	54
Transportation.....	55
Storage Conditions.....	55
Condoms for HIV Prevention Stock Availability	57
Recommendations for Condoms for HIV Prevention.....	59
FINDINGS FOR STI/OI COMMODITIES	61
Logistics Management Practices.....	61
Personnel.....	63
Supervision	65
Transportation.....	66
Storage Conditions.....	67
STI/OI Stock Availability	68
Recommendations for STI/OI Commodities	71
FINDINGS FOR HIV TEST KITS AND BLOOD SAFETY COMMODITIES	73
Logistics Management Practices.....	73
Personnel.....	75
Supervision	77
Transportation.....	78
Storage Conditions.....	78
HIV Test Kit Stock Availability	79
Recommendations for HIV Test Kits	82
FINDINGS FOR ARV COMMODITIES	83
Logistics Management Practices.....	83
Personnel.....	84
Supervision	86
Transportation.....	87
Storage Conditions.....	88
ARV Stock Availability.....	89
Recommendations for ARV Commodities	91
REFERENCES.....	93

APPENDIX 1: DATA COLLECTION AND DATA ENTRY TEAMS.....	95
APPENDIX 2: SAMPLED FACILITIES.....	97
APPENDIX 3: ASSESSMENT TOOL	107

ACRONYMS

AIDS	acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
CDRR	Consumption Data Report and Request
COCP	combined oral contraceptive pill
DEH	Division of Environmental Health
DFID	British Department for International Development
DHMB	District Health Management Board
DHMT	District Health Management Team
DPHO	Deputy Public Health Officer
DRH	Department of Reproductive Health
DTLC	District TB and Leprosy Coordinator
ED	essential drugs
ECP	emergency contraceptive pill
FP	family planning
FPLM	Family Planning Logistics Management (project)
GOK	Government of Kenya
HIV	human immunodeficiency virus
HSSP	Health Sector Strategic Plan
IUCD	intrauterine contraceptive device
IV	intravenous (fluids)
KEMRI	Kenya Medical Research Institute
KEMSA	Kenya Medical Supplies Agency
KEPH	Kenya Essential Package for Health
LMIS	logistics management information system
LMU	Logistics Management Unit
MEDS	Mission for Essential Drugs and Supplies
MOH	Ministry of Health
MSCU	Medical Supplies Co-ordinating Unit
NASCOP	National AIDS Control Programme
NGO	nongovernmental organization
NHSSP	National Health Sector Strategic Plan

NLTP	National Leprosy and Tuberculosis Programme
NPHLS	National Public Health Laboratory Service
PHMT	Provincial Health Management Team
PHT	Public Health Technician
PHO	Public Health Officer
PMO	Provincial Medical Officer
POP	progestogen-only pill
PTLC	Provincial TB and Leprosy Coordinator
RH	reproductive health
SDP	service delivery point
STI	sexually transmitted infection
SWAP	sector wide approach
TB	tuberculosis
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VCT	voluntary counseling and testing

ACKNOWLEDGEMENTS

The authors of this report gratefully acknowledge the Ministry of Health (MOH) of Kenya, the United States Agency for International Development (USAID)/Kenya, and USAID/Washington for their continuous assistance and support, without which this assessment could never have been completed. Many people in those organizations deserve special recognition: Dr. S.K. Sharif, Head, Preventive and Promotive Health Services; Dr. Sitienei of NTLP; Dr. Kibaru and Dr. Solomon of the Department of Reproductive Health; and Dr. Mohammed, and Dr. Ayisis of NASCOP. Their assistance and support was invaluable during this assessment.

Appreciation is also extended to all organizations and individuals in Kenya who provided their time and insight into the operation of the public health commodities logistic systems through interviews or participation in assessment activities. Many of the findings in this report are based on those inputs.

The authors also thank the members of the assessment team who carried out the field work with complete dedication. Special thanks also go to Carol Mulinge for managing training arrangements and to the DELIVER and MOH drivers for safely transporting the assessment teams to the study sites.

An assessment of this magnitude involves inputs and contributions from more people than we are able to acknowledge by name; we are sincerely grateful for all the contributions and extensive assistance that they provided.

EXECUTIVE SUMMARY

The Kenyan Ministry of Health (MOH), in collaboration with other stakeholders, continues to work toward achieving commodity security for the public health care system. Key steps have been taken to ensure the availability of public health commodities: contraceptives, HIV test kits and blood safety commodities, sexually transmitted infection/opportunistic infection (STI/OI) drugs, tuberculosis (TB) and leprosy drugs, and antiretroviral (ARV) drugs, and condoms for HIV prevention. The steps also included designing and implementing logistics systems, training health workers on logistics, providing technical expertise, and formulating policy for commodity security. In 2005 and 2006, a pilot study was implemented in Eastern South province that included an improved logistics system and a focus on supportive monitoring and supervision. Lessons learned were to inform roll-out of a similar initiative in the rest of the country.

To measure performance of these logistics activities and initiatives, the MOH and DELIVER used a modified Logistics Indicators Assessment Tool (LIAT), a quantitative measurement tool developed by DELIVER, to undertake two studies. A baseline assessment was conducted in late 2005. Specific objectives included—

- establishing baseline indicators for monitoring and evaluating logistics systems performance during and after the pilot intervention
- assessing commodity availability in health facilities for TB and leprosy drugs, ARVs, HIV tests and blood safety commodities, reproductive health commodities, condoms for HIV prevention, malaria drugs, and STI/OI drugs.

An endline assessment was conducted in 2006 to measure the performance of the logistics systems, including the quality and flow of information through the system; commodity availability at all levels of the system; means of ordering and issuing; reporting; the method of monitoring and supervision; and storage conditions. In addition, the endline assessment provided information to specifically compare baseline and endline indicators in Eastern South province. Specific objectives of the endline assessment included—

- collecting stock status assessment information, including stockout rates, stockout duration, consumption/issues data, current stock on hand, product expiries, and storage conditions
- assessing selected inventory control procedures and logistics system management practices within the system, such as ordering and receiving products, transporting and distributing, supervising, and training.

The endline assessment took place in 43 districts from 7 provinces in Kenya. North Eastern and other northern parts of Kenya were excluded because of security concerns. The assessment teams visited 276 facilities (43 district stores and 233 health facilities) over two and a half weeks.

This report presents detailed findings from the endline assessment. Comparative results with the Eastern South pilot baseline are provided in a separate report.

FINDINGS FOR PRODUCT AVAILABILITY

Product availability for all programs revealed that key commodities in each program—rapid tests in the HIV tests system; pills and injectables in the family planning system; patient packs in the TB system; and

Coartem in the malaria system—are widely available. Other important commodities—laboratory supplies and reagents in the TB system and long ELISAs in the HIV test system—are less widely available.

In the ARV system, more than 95 percent of all facilities had all commodities in stock on the day of the visit, with the exception of Diflucan and nevirapine suspension.

In the family planning system, approximately 80 percent of all facilities and district stores had five methods in stock on the day of the visit (combined oral contraceptive pills, injectables, intrauterine contraceptive devices, emergency contraceptive pills, and male condoms). In addition, about half of all facilities and district stores had other family planning methods (Microlut, female condoms, and implants) in stock on the day of the visit.

In the HIV test kit system, approximately 90 percent of all facilities and 80 percent of all district stores had two rapid tests (Determine and Bionline) and the CD4/8 reagents in stock on the day of the visit. Approximately half of all facilities and district stores had the long ELISAs in stock on the day of the visit.

In the TB system, TB drugs were widely available in about 85 percent of all facilities and district stores, while lab reagents were not widely available.

In the STI/OI drug system, availability varied greatly depending on the level of the facility. STI/OI drugs were more available in health centers and hospitals (80 percent) and less widely available in district stores and dispensaries (60 percent).

In the malaria system, artesunate combined therapy has only recently been distributed to health facilities in Kenya. For that reason, Coartem was not presented in several of the stock status graphs. For other malaria commodities, availability was relatively low. About 60 percent of all facilities and district stores were stocked out of quinine (300 mg) on the day of the visit.

FINDINGS FOR LOGISTICS SYSTEM PERFORMANCE

In general, the performance of the logistics systems at district stores was better than at the health facilities. More than 70 percent of district stores use stock cards to manage health commodities. This contrasts with the availability and use of stock cards at the facilities level, which is quite low with the exception of the ARV system (also about 70 percent).

Use of Consumption Data Report and Request (CDRR) reports however was found to vary with the type of program. About 90 percent of all facilities and district stores offering family planning services, about 65 percent of facilities offering HIV test kits, and about 93 percent of hospitals offering ARVs were using CDRR reports. All other programs, including STI/OI, TB, malaria, and condoms for HIV prevention systems performed poorly in terms of use of CDRRs. This good performance reflected by family planning, HIV, and ARVs programs could be a result of the intensive logistics training held for health workers.

RECOMMENDATIONS

Although there was evidence of high product availability for key commodities in specific programs and good logistics performance for some programs, the LIAT results exposed several significant weaknesses in the logistics systems. To address those issues, this report proposes feasible and specific recommendations for each system. Several selected recommendations include—

- *Design and implement improved logistics systems.* Re-examination and revision of the TB, condoms for HIV prevention, malaria, and STI/OI drugs logistics systems are needed to address existing system weaknesses. Appropriate logistics training for staff should be included as a part of the revisions.

- *Develop on-the-job training approaches.* Given the high staff turnovers, on-the-job training approaches would help address loss of trained personnel; it is needed to reinforce logistics concepts, strengthen skills on correctly completing relevant logistics management information system (LMIS) forms, promote adherence to distribution and reorder schedules and procedures, and ensure compliance with storage guidelines.
- *Increase the frequency and improve the quality of supportive supervision visits.* Supervision visits are a key opportunity for national and district logistics commodity managers to reinforce logistics concepts and to strengthen the skills of service providers. Regular visits would also help facility staff communicate problems to their supervisors and for supervisors to impart practical information on inventory control and logistics management information to facility staff.
- *Intensify advocacy activities.* Advocacy in logistics would raise the awareness of Ministry of Health officials about the importance of ensuring continuous commodity availability. This will stimulate interest in long-term forecasting and procurement to ensure commodity security.

BACKGROUND

The aim of the *Kenya Health Policy Framework (1994-2010)* is to ensure an efficient and high quality health care system that is accessible, equitable, and affordable for every Kenyan. The framework also forms the basis for revitalizing the health sector under the current *National Health Sector Strategic Plan II 2005-2010* (NHSSP II). Under the NHSSP II, emphasis shifts from addressing the burden of disease to the promotion of individual and community health by introducing the *Kenya Essential Package for Health* (KEPH). The KEPH focuses on the health needs of individuals through the six stages of the human life cycle. One of the systems supporting KEPH is commodity supply. The objective of the commodity supply system is to ensure that pharmaceuticals, non-pharmaceuticals, and equipment are sufficiently available and are used efficiently and effectively.

The Ministry of Health (MOH) has over the years engaged in several efforts to put commodity supply at the center of health services delivery. In 1997, a key stakeholders meeting proposed measures to implement the policy imperative of the *Kenya Health Policy Framework 1994-2010*. The main thrust of the proposed measure was to implement a shift from a supply-driven to demand-driven system. These efforts led to the creation of the Kenya Medical Supplies Agency (KEMSA) in 2001, with the mandate to forecast, procure, warehouse, and distribute a wide range of public health commodities.

However, the provision and management of public health commodities in Kenya has developed into a complex array of parallel logistics systems, which have emerged to support distinct vertical programs within the MOH. Though the parallel procurement, warehousing, and distribution systems have functioned relatively effectively, scarce resources could be used more efficiently for optimal system performance. With the increasing trend towards the decentralization of donor and government support for the health sector, coupled with the decrease in funding for some health commodities at the central level, streamlining functions and increasing efficiency are critical elements of the health sector reforms currently underway.

An automated integrated logistics management system was developed in 2004 to manage the parallel family planning, HIV/AIDS, TB, malaria, and STI/OI logistics system. It operates at the central level by personnel for the Logistics Management Unit (LMU) and housed at KEMSA. The automated system receives commodity consumption reports from the district and facility levels within each of these parallel systems. The information is analyzed and used to make informed decisions regarding re-supply, forecasting, procurement, and commodity security. One of the challenges in this automated system is the low amount of consumption reports received at the national level. Consequently, the analysis of these commodity consumption reports has to be supplemented with services statistics and other data to produce logistics data for commodity supply management decision-making.

There are seven separate and parallel logistics systems covered in this assessment: malaria, TB and Leprosy, family planning and reproductive health, condoms for HIV prevention, STI/OI, HIV test kits, and ARV. The following provides a brief overview of each system.

MALARIA SYSTEM

The MOH has prioritized the availability of anti-malaria drugs and insecticide-treated bed nets (ITNs) in all health facilities, with the participation of organizations such as USAID, UNICEF, WHO, Red Cross, GFATM, and DFID. The distribution of malaria commodities was previously integrated into essential drug kits.

Government transaction records, dispensing registers, and other reporting tools used in tracking malaria commodity movement and consumption have been distributed to facilities and district stores. Efforts to provide logistics data tools have been supported at various times by among others: the MOH, the Kenya Decentralization HIV/AIDS & Reproductive Health (DARE) project and DANIDA. Particular challenges for the malaria logistics system have included inadequate recording and reporting tools, poor reporting rates, and inadequate identification of information flow needs which need to be rationalized to be in line with the shelf life of these commodities.

TUBERCULOSIS AND LEPROSY SYSTEM

The National Leprosy and Tuberculosis program (NTLP) is the GOK agency tasked with overall responsibility for TB and Leprosy control through the development of related policies and guidelines, and mobilization of political support and resources to eradicate the threats these diseases currently pose. The current system routinely handles approximately 60 commodities. Funding has been supplied from various sources including the GOK, CIDA (through KNCV), WHO's Global Drug Fund (GDF), and GFATM. These commodities include drugs as well as products necessary for sputum TB diagnosis and smear leprosy diagnosis.

TB drugs are stored in the reproductive health section of KEMSA, where they are distributed to the regional depots into TB cages based on patient load data provided by the Provincial TB and Leprosy Coordinators (PTLC), of which there are currently 11. The PTLCs arrange for distribution to the district level, where District TB and Leprosy Coordinators (DTLCs) follow each case and ensure adequate drug supply at health facilities. Stock levels are monitored through monthly and quarterly consumption reports. All receipt, storage, and distribution functions are managed by KEMSA.

A new logistics system for TB and Leprosy commodities was designed in 2005 and piloted in nine districts of Eastern South region. The new system is a consumption-based design, using stock-on-hand, rate of consumption, and losses and adjustments data for decision making. The previous logistics system continues to be used in the rest of the country, pending national roll-out of the new system. However, the Logistics Management Information System (LMIS) tools developed for the new system were dispersed to all public and mission facilities offering TB services in the country.

FAMILY PLANNING AND REPRODUCTIVE HEALTH SYSTEM

The family planning and reproductive health commodities logistics system is currently under the overall management of the Division of Reproductive Health (DRH). Information and feedback about consumption is fed from the facility to district level, and then to the Logistics Management Unit (LMU) located at KEMSA. Dispensed-to-user data from health facilities and issues data from the districts are compiled quarterly and sent to the LMU. The LMU is automated and is currently run by personnel from the Department of Reproductive Health (DRH), with technical support from DELIVER. Data from the unit provides crucial information for making re-supply, forecasting and procurement decisions.

Contraceptives currently supplied through the public sector are Chagulangu (Microgynon), Microlut, Projestron only injectables (Depo-Provera, Megestron), IUCD (Copper T), implants (Jadelle and Implanon), emergency contraception (Postinor 2), male and female condoms. Most of these

contraceptives have generally been in full supply from the central level.

Storage and distribution of contraceptives is handled by KEMSA, who are also responsible for delivering the commodities to government health facilities. For non-government facilities, commodities are delivered to the district stores, where non-government health facilities collect supplies.

CONDOMS FOR HIV PREVENTION SYSTEM

In mid-2004 the MOH, through the Division of Environmental Health (DEH) and National AIDS and STI Control Program (NAS COP), piloted a six-month logistics system for condoms targeted at HIV prevention. The objectives of the initiative were to: promote the use of condoms for the prevention of STIs and HIV/AIDS; improve access of condoms to all people in need; educate the community on the importance of using condoms and proper disposal of used condoms; and promote the use of female condoms

These activities were primarily carried out by staff from the DEH, whose coverage areas were based on administrative boundaries. PHTs, PHOs, DPHOs are the responsible positions for the location, division, and district levels respectively. The condom distribution targeted social outlets such as lodges, youth groups, women's groups, bars and restaurants, hotels, markets, bus parks, hair salons and higher learning institutions.

Technical support provided for the initiative included designing the logistic system, developing reporting tools, and staff training on the use of the tools, reporting periods, and other logistics activities. DEH staff also received financial support to enable them to distribute the condoms and submit reports. When the pilot initiative ended, the MOH and KEMSA continued condom distribution to district stores and technical support in the form of supervision and on-job-training.

STI/OI SYSTEM

The STI/OI logistics system currently falls under the management of the National STD/AIDS Control program (NAS COP), with the objective of reducing the prevalence of sexually transmitted infections and the incidence of HIV infection.

In 1995, distribution of STI/OI commodities began with 143 local authority health facilities in the Nyanza district. Tools for recording and reporting dispensed-to-user data were also distributed to the facilities. A new logistics system was designed and by 1999 the number of sites receiving STI kits had expanded to approximately 550 sites. The system has subsequently expanded to all facilities in the country.

Distribution is direct to the facilities from the central warehouse every three months. The system of distribution also provides an opportunity for supervision and on-the-job training, where data are collected to make re-supply decisions. The monitoring of the overall system falls under the management of the Logistics Management Unit.

HIV TEST KITS AND BLOOD SAFETY SYSTEM

In August 2005, an improved HIV test kit and blood safety commodities logistics system was implemented by the MOH. This included country-wide trainings of district DHMT members and approximately two health workers in every health facility in Kenya. Some of the key features in the new system include, abolishing the regional KEMSA depots as distribution centers, allocating commodity management responsibilities to specific health workers at every level, and establishing minimum and maximum stock levels at national, district, and health facility levels.

Health facilities implementing the HIV test kit program, over 1,700 facilities at present, currently collect supplies from the district level stores, which are managed by the District Medical Laboratory

Technologist (DMLT). The district stores in turn receive supplies from the central stores every two months. The DMLT also ensures that consumption reports from the facilities and issues report from the district stores are sent to the automated LMU at the central level. Data analyzed at the LMU is used to make re-supply, forecasting and procurement decisions.

The success of the voluntary testing and counseling program as well as the expansion into diagnostic counseling and testing has presented a challenge to the maintenance of a full-supply system. In addition there have been frequent interruptions on the supply side with regard to procurement and financing. However the existing supply chain does have the advantage of flexibility as the district stores can accommodate an ever increasing number of service providers. The main funding for test kits for the past five years has been the World Bank DARE project, the Global Fund, and DFID, with smaller procurements funded by JICA.

ARV SYSTEM

The current logistics system for Antiretroviral Drugs (ARVs) has been in operation since mid-2005. The public system through the Ministry of Health supports a supply chain that provides drugs to over 40 percent of patients on ART in the country.

There is a strong Logistics Management Information System (LMIS) and inventory control procedures for the ARV program. The LMIS consists of a set of manual product tracking tools for the facilities, standard operating procedures, and a computerized central LMIS. High reporting rates in the system indicate that the LMIS is able to provide feedback and information on consumption, which is used to make re-supply, forecasting, and procurement decisions. The system forecast plan is updated every six months based on actual consumption at the health facilities.

Several challenges for the ARV system include: maintaining a full supply chain for an expanding number of health facilities providing ART; maintaining trained staff who are able to decide distribution issues with limited supplies; adequately addressing the lack of capacity to store large amounts of antiretroviral drugs, which are expensive and require additional security measures; addressing the shortage of skilled staff at the district level; and reducing the total dependency on donor funding for all antiretrovirals.

ASSESSMENT PURPOSE AND OBJECTIVES

The purpose of the Logistics System and Stock Status Assessment was to provide MOH, KEMSA, USAID and other key stakeholders in Kenya information regarding family planning, STI/OI, malaria, TB, and HIV/AIDS commodities availability and logistic system information. The assessment included central, provincial, district and health facility levels.

This and subsequent assessments will permit the MOH to monitor progress over time and identify key areas for building on system strengths. Specific objectives of the assessment included:

- Collecting stock status assessment information, including stockout rates, stockout duration, consumption/issues data, current stock on hand, product expiries, and storage conditions; and
- Assessing selected inventory control procedures and logistics system management practices within the system, such as ordering/receiving products, transport and distribution, supervision, and training.

ASSESSMENT METHODOLOGY

LOGISTICS INDICATORS ASSESSMENT TOOL

The comprehensive assessment of the stock status and logistics system consisted of quantitative data collection utilizing the Logistics Indicators Assessment Tool (LIAT). The LIAT is an instrument developed by DELIVER to assess health commodity logistics system performance and commodity availability at health facilities. The instrument is designed to provide stakeholders with up-to-date information on the current operating systems for family planning, STI/OI, malaria, TB, ARV, HIV test kit, and condoms for HIV prevention commodities. The instrument was further adapted to the Kenyan context with input from survey team members during the training and following a pilot test of the tool.

SAMPLE METHODOLOGY

The assessment captured a nationwide sample throughout Kenya and included seven regions with the exception of North Eastern province and other parts of northern Kenya, which were excluded on the basis of security concerns. According to the Ministry of Health's 2003 database, there are approximately 4,215 health facilities in Kenya, sponsored by Armed forces, Mission, local authority, MOH, NGO and private agencies. For the purposes of the assessment, only public health facilities were targeted, and included only those affiliated with mission, local authority, MOH, NGO and private sponsoring agencies (approximately 2,526 health facilities).

A stratified sampling methodology was utilized to select 240 health facilities, representing approximately 9.5% of targeted facilities within the sampling frame. This sample included 60 facilities as an over-sample for Eastern South (intervention area), in order to match the size of the baseline sample for the assessment conducted there in 2005, and 180 for the rest of the country. In addition, in order to have an adequate representation of the ART and HIV test kit systems within the sample (primarily found in large facilities), purposive sampling was used to over-sample provincial, district and sub-district hospitals. Final total sampling size for health facilities, minus facilities that were unable to be visited (i.e. closed, no longer existed), was 233.

The strata considered in the sample included: hospitals (district, provincial, and sub-district hospitals), health centers and clinics, and dispensaries. Health facilities in the total 233-site sample consist of approximately 30% provincial, district, and sub-district hospitals (64 facilities); 40% health centers, clinics, and sub-health centers (95 facilities); and 30% dispensaries (74 facilities). In addition to the health facilities, 43 district stores were also included in the sample (one in each district visited) for a total of 276 facilities included in the sample.

There was an intentional over-sample from the previous baseline assessment in Eastern South in order to achieve the comparison objective with the earlier assessment. This approach, while not yielding a true probability sample, nevertheless provides a reasonable overview of logistic system performance for all commodities.

A list of all included facilities can be found in Appendix 2.

INDICATOR CHOICE

For the 2006 assessment, a set of standard indicators were selected to include those measured in 2005 as well as additional indicators to provide a broader measurement of the stock status and operating systems situation. This expansion of indicators maintains a level of comparability with 2005 results and provides stakeholders with more comprehensive information regarding the current situation. The final assessment instrument is included in Appendix 3.

Table 1. List of Indicators

Indicators	Data Source(s)
Logistics Management Practices	
1. Percentage of facilities using stock cards	Presence of stock cards in facilities and stores
2. Percentage of facilities with stock cards available and updated	Presence of stock cards and evidence of utilization in facilities and stores
3. Percentage of facilities with accurate stock balances on stock cards	Comparison of stock card balance and physical inventory count
4. Percentage of facilities ordering re-supply quantities based on product availability at higher level	Respondent
5. Percentage of health facilities submitting the appropriate LMIS form	Presence of LMIS reports and evidence of utilization in facilities and stores
Personnel	
6. Percentage of facilities with staff trained in logistics management of drugs in facilities and stores	Respondent
7. Percentage of facility staff trained in logistics who mention particular responsibilities taught in logistics course	Respondent
8. Percentage of facilities with qualified staff managing drug supply	Respondent
9. Percentage of facilities receiving supervision within a reasonable amount of time	Respondent and visitor's book
10. Percentage of facilities receiving logistics supervision within a reasonable amount of time	Respondent and visitor's book
Transportation	
11. Percentage of facilities receiving supplies from higher level	Respondent
Storage	
12. Percentage of facilities adhering to storage guidelines	Visual observation
Product Availability	
13. Percentage of sites stocked out of product at time of visit	Stock card records, respondent, and physical inventory
14. Percentage of sites stocked out of product in last 6 months	Stock card records and respondent
15. Average number of days stocked out in the last 6 months by product	
16. Percentage of sites stocked according to plan; months of supply on hand	Average monthly consumption, physical count of product at health facilities and warehouses
17. Frequency of stockouts	Stock card records

DATA COLLECTION AND ANALYSIS

Before implementing the assessment, 27 data collectors participated in a four-day training in the use of the LIAT instrument. As part of the orientation, data collection guidelines were discussed to identify the types of information to be gathered, standardize the data collection process, and promote comparability of results. During the training, the instrument was pre-tested in four pilot sites in the Machakos district to allow data collectors to experience practical application of the tool and to identify any additional modifications to the tool that would improve data collection. The changes identified by participants during the training and pilot tests were incorporated into the tool.

Twelve teams, consisting of two to three data collectors, were dispatched to each of the 7 regions over a two and a half week period to collect data from each of the selected facilities. Each data collection team was assigned a team leader who was responsible for overseeing the process in each designated area. In addition, each team was joined by a member of the district supervision team to provide data collecting assistance, ensure adherence to quality standards, and troubleshoot any problems that may arise in the field. A list of data collectors can be found in Appendix 1.

Data were entered into Epi Info and converted into the SPSS statistical analysis software for analysis. Data were cleaned and data quality checks were completed in Kenya. Further data cleaning, analysis and report writing were completed in Washington in collaboration with the DELIVER/Kenya field office team.

QUALITY ASSURANCE

Several methods were employed to ensure quality adherence throughout the assessment process. The data collection instrument was reviewed prior to the training to ensure it was adapted to the current situation and then reviewed and modified again following a pilot test during the training. The training also included a comprehensive review of the tool to ensure data collectors were fully versed in the questions and methodology prior to field data collection.

During data collection, each team provided a daily review of all completed instruments, guided by a quality control checklist to ensure that the instruments were filled out properly and included all necessary information. Each instrument was reviewed again by the supervision team prior to data entry.

Once data were entered into the SPSS database, all questionnaires were reviewed again to ensure accuracy of data entry. Preliminary analysis and frequencies were run prior to full data analysis to ensure consistency within the database.

FINDINGS

The same indicators were analyzed for each of the seven vertical systems separately. The findings have been organized by individual systems for clarity in presentation and analysis. Each section of the findings includes the following categories of analysis: logistics management practices; personnel; supervision; transportation; storage conditions; and stock availability. All analysis was done only for facilities that report managing the product. A description of each category in the analysis follows.

LOGISTICS MANAGEMENT PRACTICES

Logistics records serve as the primary framework for every logistics system. The records are designed to capture critical logistics data at each level of the health system. The data captured on logistics records are then brought together to form logistics reports, which are used for crucial decision-making about re-supply quantities, forecasting, and procurement decisions.

STOCK CARDS AVAILABLE AND UPDATED

The value in logistics records lies in the extent to which they are used appropriately and consistently. In the case of stock cards, inventory information kept on the stock cards allows facility staff and managers throughout the health system to make informed decisions about what and how much to order each month. Consistent and accurate use of stock cards is essential to successful inventory management. Interviewers requested to see stock cards to ascertain their availability while a stock card was considered updated if it had an entry within the last 30 days from the day of the visit.

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

Data collectors also observed the accuracy of the balance on stock cards at those facilities that both managed the product and had stock cards available; another indicator of logistics system performance. This was done by comparing the balance listed on the stock cards to the results of a physical inventory count conducted for each of the selected products on the day of the visit. For a stock card to be considered accurate, no discrepancies could be found between the stock card and the physical count. A near accurate stock card was defined as having up to a 10 percent discrepancy.

DETERMINING RE-SUPPLY QUANTITIES

The assessment also looked at how re-supply quantities are determined at the dispensary, health center and hospital levels. Facilities were asked if they used a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level. Greater utilization of the S-11 and S-12 forms indicates that facilities were determining supply quantities based on product availability at a higher level rather than based on needs determined by logistics records and consumption levels at the facility.

UTILIZATION OF LMIS REPORTS

The information needed on reports for proper commodity management includes the stock on hand, amount dispensed to clients or used for testing, and any losses or adjustments. These three essential data items constitute the foundation of a functional and effective logistics system and are the basis of all logistics decision-making. Therefore, it is critical that these data be supplied to decision-makers at all levels of the health system.

PERSONNEL

Appropriate and trained personnel managing a commodity are essential for effective logistics management. Under personnel, the assessment reviewed two key personnel issues: the type of facility

personnel primarily responsible for managing malaria commodities; and the training received by the key personnel.

TRAINING

In every logistics system, personnel managing commodities will require training in the use of logistics forms and reports. Training through a logistics workshop provides the most focused and most efficient means with which to train personnel. However financial constraints can limit its use on a large scale. Consequently, numerous personnel are trained on logistics activities while on the job by another trained staff member. Additionally, some personnel receive various levels of logistics training during their schooling while other personnel rely on self-teaching to master the use of logistics forms and reports. It should be noted that training on logistics forms and reports was self-reported.

SUPERVISION

Supervision is a crucial element of quality assurance for the performance of any logistics system and is related to all aspects of logistics management. Supervision helps to improve both individual and system performance and can alert managers to potential problems, such as stockouts, poor storage conditions, reporting difficulties, and products near their expiry dates. Supervision can take several forms: the supervisor may review incoming reports; have face-to-face contact with those he or she supervises by bringing them to a central location; or can visit each site.

Frequency of supervision is an essential element and a useful indicator in assessing potential quality of supervision and its effect on system performance. Supervision also presents an opportunity to reinforce new systems and forms.

TRANSPORTATION

Fundamental to the success of a health logistics system is the ability to reliably move commodities through the supply chain so they are available for use at health facilities when needed. As part of the assessment, respondents were asked who is responsible for transporting supplies to their facilities.

STORAGE CONDITIONS

To provide clients with high-quality products, each facility must have safe, protected storage areas to help prevent damage and ensure efficient handling of products. In assessing storage areas, the study examined the level of compliance with 14 guidelines for proper storage, assessing through direct observation and interview questions asked of facility staff. The guidelines include:

1. Products ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.
2. Products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO) counting and general management.
3. Cartons and products are in good condition, not crushed due to mishandling. If cartons were open, personnel check whether products are wet or cracked due to heat or radiation.
4. Facility makes it a practice to separate damaged and/or expired products from good products and remove them from inventory.
5. Products are protected from direct sunlight at all times of the day.
6. Cartons and products are protected from water and humidity.
7. Storage area is visually free from harmful insects and rodents.

8. Storage area is secured with a lock and key but is accessible during normal working hours, with access limited to authorized personnel.
9. Products are stored at the appropriate temperature according to product temperature specifications.
10. Roof is maintained in good condition to avoid sunlight and water penetration at all times.
11. Storeroom is maintained in good condition (i.e. clean, all trash removed, sturdy shelves, and organized boxes).
12. The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for the foreseeable future).
13. Fire safety equipment is available and accessible (any item identified as being used to promote fire safety should be considered).
14. Products are stored separately from insecticides and chemicals.

At each facility visit, data collectors visually inspected storage areas based on the above conditions.

STOCK AVAILABILITY BY PRODUCT TYPE

The most important outcome of a logistics system is stock availability. The survey collected data on both stock on hand, stockouts on the day of visit, stockouts during the previous six months prior to the survey, and the frequency and duration of stockouts during the same 6 month period.

Stockouts in any health system represent a critical failure of the logistics system. They can result in a lack of availability of life-saving medicines, negative disruptions in the continuum of a course of medicine, and a reduced level of confidence in the health system on the part of clients and service providers alike. Even where stockouts are not high, facilities with too little stock at the time of the visit are either likely to stock out or will require an emergency order before they receive their next routine order.

While stockouts demonstrate one outcome of a poorly functioning logistics system, overstocks are another important indicator of a logistics system's lack of effectiveness. Overstocks put the products at greater risk of expiration or damage before they can be distributed and used. They also take up space, and may leave other facilities with inadequate stock.

To assess a facility's stock status, the average monthly consumption was calculated over the previous six months and adjusted for periods of stockouts. The current stock on hand or physical inventory count was divided by average monthly consumption to determine how many months of stock were available for each product at the facility. This calculation could only be made for facilities maintaining adequate stock records.

The findings are organized by facility type and include analysis of the following indicators:

- *Percent of facilities that manage the product and were experiencing a stockout on the day of the visit.*
- *Percent of facilities that manage the product and experienced a stockout during the six-month period prior to the survey.* Since some of the facilities did not have adequate records, the stockouts that were recorded underestimate the actual frequency of stockouts. Presumably, facilities with accurate and complete records manage their stock better, so they should have fewer stockouts than facilities without records.

- *Average frequency of stockouts.* This calculation is based on number of stockouts observed in facilities' records. Consequently, this analysis includes facilities that had stockkeeping records available for the full 6 month period and adjusted for facilities with less than six months of stock. Where these data are unavailable, this measurement cannot be made (i.e. the indicator is based on a smaller number of facilities). Therefore the stockouts in these section's figures potentially underestimate the frequency of stockouts for the products in this survey.
- *Average duration of stockouts.* This indicator measures on average how long facilities experienced stockout during a six month period. The calculation is based on number of days and number of stockouts observed in facilities' records. Consequently, this analysis only includes facilities that had stock-keeping records available for the full 6 month period and adjusted for facilities with less than six months of stock. Where these data are unavailable, this measurement cannot be made (i.e. the indicator is based on a smaller number of facilities). Therefore the stockouts in these section's figures potentially underestimate the duration of stockouts for the products in this survey.
- *Average months of stock on hand on the day of the visit by facility type.* This is based only on facilities that had physical inventory and consumption records available, thus the number of facilities included in these calculations (i.e., the "n") is lower than the number of overall facilities managing the products.

FINDINGS FOR MALARIA COMMODITIES

The 2006 assessment measured four types of malaria commodities: Coartem (Artemether-Lumefantine); Quinine (300 mg); Quinine injection (2 mls); and 5% Dextrose infusion (500 mls).

Malaria commodities can be found throughout the four tiers of the health care system. Of those facilities included in the assessment, approximately 63 percent of dispensaries, 60 percent of health centers, 64 percent of hospitals, and 63 percent of district stores reported managing malaria commodities, as indicated in Table 2 (below).

Table 2. Percent of facilities that manage malaria commodities

Facility	Manage Malaria Commodities
Dispensary	62.9
Health Centers	59.6
Hospitals	63.5
District Stores	62.9

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

In general, availability of stock cards for malaria commodities was fairly low at health facilities, ranging from 29 to 70 percent, and higher at the district store level, ranging from 64 to 100 percent. Stock card availability for all commodities was lowest at the dispensary level. Among the malaria commodities, results of the assessment show that a higher number of facilities had stock cards available for Coartem than the other commodities. It is important to mention that Coartem was only recently introduced into the health system, and included training of health workers in logistics and distribution of recording and reporting tools.

Updated stock cards for all facility levels ranged from approximately 48 percent to 100 percent for all commodities. At the dispensary level, stock card availability ranged from approximately 29 percent (Quinine) to 56 percent (Quinine injection), with Coartem unavailable at the dispensary level. Updated stock cards ranged from about 48 percent (Quinine injection) to 60 percent (Quinine).

At the health center level, stock card availability ranged from 35 percent (Quinine) to almost 70 percent (Quinine injection). Updated stock cards fared better at the health center level than the dispensary level, ranging from almost 56 percent (5% Dextrose infusion) to 100 percent (Coartem).

At the hospital level, availability of stock cards increased slightly on average for most commodities, with a low of 33 percent (Coartem) to approximately 63 percent (Quinine injection). Updated stock cards also fared slightly better, with a range of approximately 53 percent (5% Dextrose infusion) to 100 percent (Coartem).

At the district store level, availability of stock cards was generally the highest, ranging from approximately 64 percent (Quinine) to 100 percent (Coartem). Updated stock cards were also higher on average, ranging from approximately 56 percent to 100 percent for Quinine and Coartem respectively.

The following table illustrates stock card availability and utilization by commodity and facility type on the day of the visit.

Table 3. Percent of facilities where stock cards are available and updated for use in managing malaria commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	Available	Updated	Available	Updated	Available	Updated	Available	Updated
Coartem	-	-	50.0	100.0	33.0	100.0	100.0	100.0
Quinine (300 mg)	29.4	60.0	35.0	57.1	61.5	62.5	64.3	55.6
Quinine injection	55.8	47.8	69.8	71.4	63.4	65.4	70.0	71.4
5% Dextrose infusion	34.4	54.5	38.3	55.6	46.3	52.6	75.0	66.7

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

In general, there were variations in levels of accuracy among commodities and facility levels, with both health centers and district stores achieving 100 percent accuracy for Coartem.

At the dispensary level, between 38 and 80 percent of available commodities had accurate stock card balances, with only the near accurate balance for Quinine injection having an increase. At health centers, accurate balances ranged from 47 percent (Quinine injection) to 62 percent (5% Dextrose infusion). The near accurate range remained the same for all commodities at this level, with the exception of Quinine injection, which increased only slightly to 50 percent. At hospitals, the range of accurate balances was slightly lower than at other facilities (33 percent to 43 percent). The near accurate balances remained the same for all commodities, indicating the remainder of the stock card balances is greater than the 10% margin.

District store accurate ranges went from 40 percent (5% Dextrose infusion) to 83 percent (Quinine). The near accurate ranges for all commodities remained the same with the exception of 5% Dextrose infusion, which increased to 60 percent.

Table 4. Percentage of facilities that had accurate or near accurate balance entries on stock cards for malaria commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
Coartem	-	-	100.0	100.0	0.0	0.0	100.0	100.0
Quinine (300 mg)	60.0	60.0	50.0	50.0	33.3	33.3	83.3	83.3
Quinine injection	37.5	50.0	46.7	50.0	42.9	42.9	54.5	54.5
5% Dextrose infusion	80.0	80.0	61.5	61.5	42.9	42.9	40.0	60.0

DETERMINING RE-SUPPLY QUANTITIES

The study also assessed how re-supply quantities are determined at the dispensary, health center and hospital levels using blank S-11 or S-12 forms for order quantities based on product availability at a higher level. Approximately 33 percent of dispensaries, 53 percent of health centers, and 13 percent of

hospitals ordered re-supplies utilizing blank S-11 and S-12 forms, which were filled based on higher level commodity availability.

UTILIZATION OF LMIS REPORTS

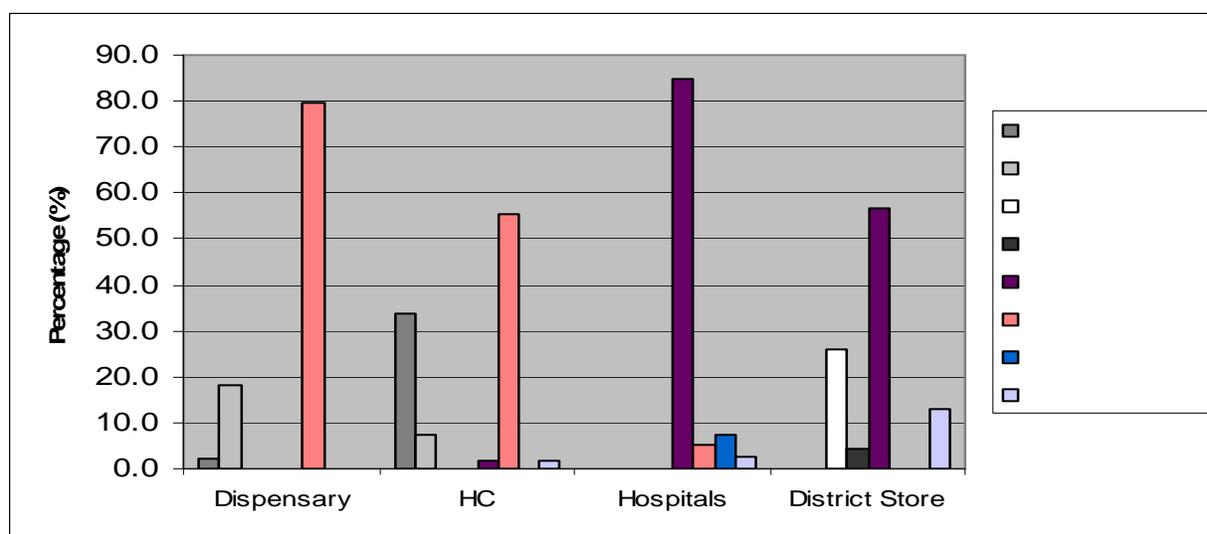
Logistics data and information for malaria commodities, through the use of either the CDRR or improvised reports, is not effectively moving up through the health system. Utilization of the CDRR is the highest at hospitals (29 percent), dropping to 10 percent at district stores, 7 percent at health centers, and 5 percent at dispensaries. In the event that improvised reports are being utilized, use tops out at 5 percent at the district store level.

PERSONNEL

COMMODITY MANAGEMENT

Across the four facility levels, there is a mix of primarily person managing malaria commodities. At both the dispensary and health center level, the primary staff managing malaria commodities are nurses (80 percent and 55 percent respectively). At both the hospital and district store level, the primary staff managing malaria commodities are pharmacists (85 percent and 57 percent respectively).

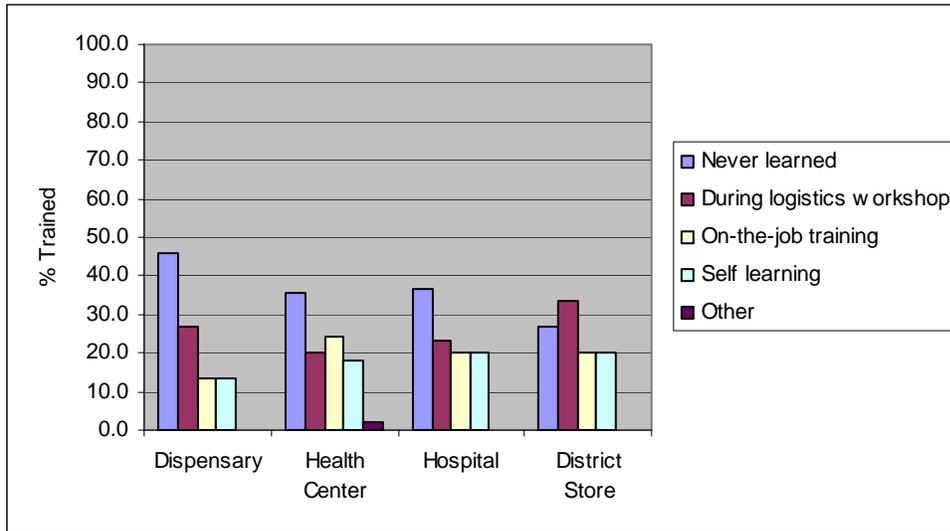
Figure 1. Percent of facility personnel managing malaria commodities



TRAINING

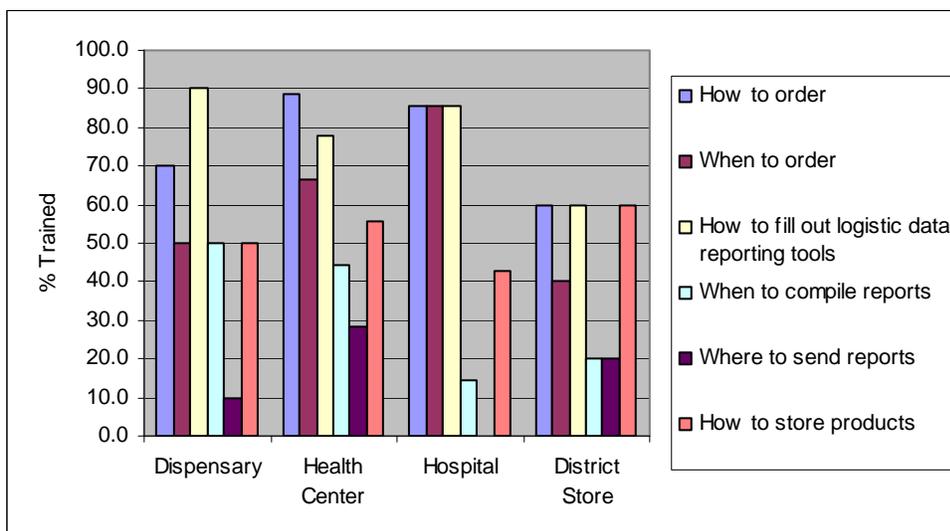
A substantial proportion of facility personnel reported never having learned how to complete logistics forms and records. Dispensaries have the greatest percentage of staff never having learned (46 percent), followed by hospitals (37 percent), health centers (36 percent), and district stores (27 percent). A combined score that includes both training at a logistics workshop and on-the-job training constitute how the majority of personnel managing malaria commodities were trained. However, this also indicates that almost half of the providers at the health facility and district store level were never formally trained in logistics. Figure 2 (below) illustrates the ways in which malaria commodity managers throughout the health system learned to complete logistics forms and reports.

Figure 2. Type of training received by malaria commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. The reporting tasks (“when to compile reports” and “where to send reports”) generally was the least mentioned task across all facilities, with no personnel from the hospital level reporting this was covered. This is particularly interesting to note given the extremely low usage of CDRR and improvised reports for malaria commodities. The task “how to order” was among the most mentioned task reported by respondents across all facility levels.

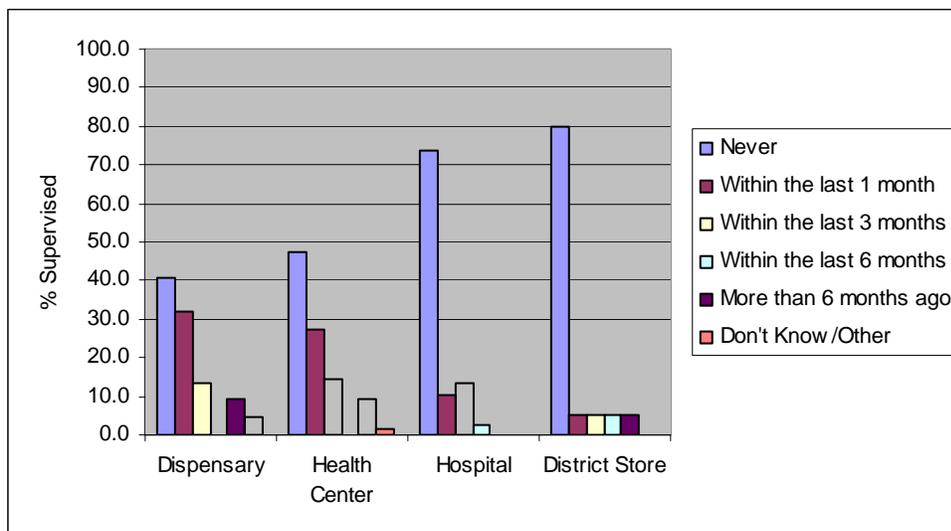
Figure 3. Main logistics tasks malaria managers trained on



SUPERVISION

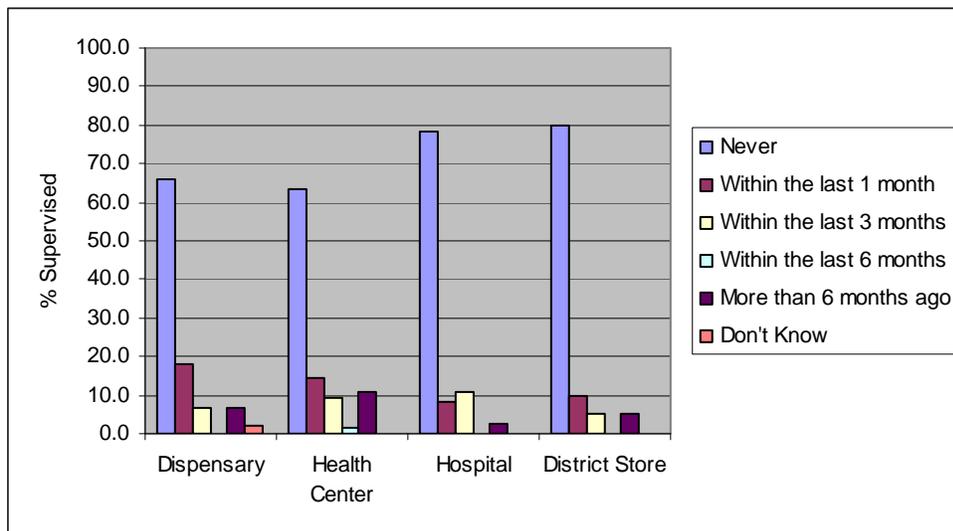
A substantially high proportion of respondents indicated that they had never received a supervision visit for malaria commodities. This is particularly high for hospitals (74 percent) and district stores (80 percent). In the last 1 to 3 months, only 10 percent of commodity managers at district stores reported receiving a supervision visit. Dispensaries fared better with approximately 45 percent of commodity managers reporting receiving a supervision visit within the last 3 months, followed by health centers (42 percent), and hospitals (24 percent). Figure 4 (below) presents of breakdown of generalized supervision visits received by facilities.

Figure 4. Percent of facilities who received a supervision visit for malaria commodities



Of greater concern is supervision that included commodities management. An overwhelming majority of all facility levels have never received commodities related management supervision - 80 percent of district stores, 78 percent of hospitals, 66 percent of dispensaries, and 64 percent of health centers. In addition, the percentage of facilities reporting having received commodities management supervision within the last 1 to 3 months is low. Only 25 percent of dispensaries reported receiving this type of visit, followed by health centers (24 percent), district stores (15 percent), and hospitals (9 percent).

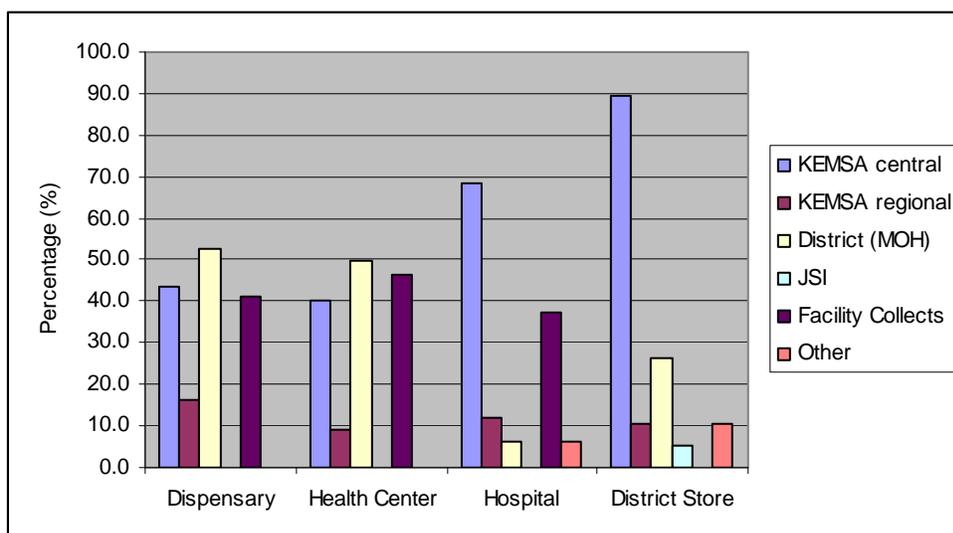
Figure 5. Percent of facilities who received a supervision visit that included commodity management



TRANSPORTATION

At the dispensary, health center, and hospital levels, malaria commodity managers report that the facility itself is responsible for collecting malaria commodities (41 percent, 46 percent and 37 percent respectively). However at the dispensary and health center levels, KEMSA central and the district (MOH) are both responsible for transporting malaria commodities. Both hospitals and district stores reported they are also reliant on KEMSA central for transport of malaria commodities, at 69 and 90 percent respectively. These results indicate that malaria commodity managers at all levels are unclear regarding who has the primary responsibility of transporting malaria commodities in the system.

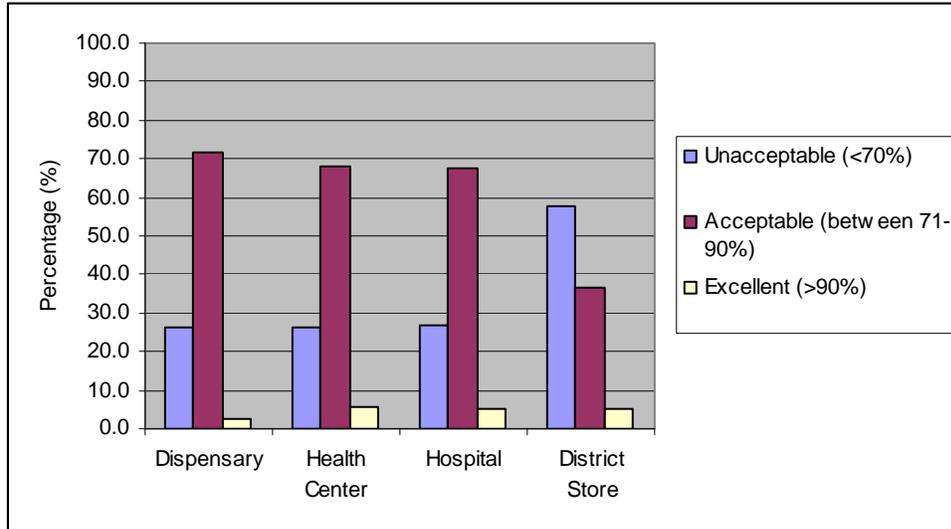
Figure 6. Responsible for transporting malaria commodities to the facility



STORAGE CONDITIONS

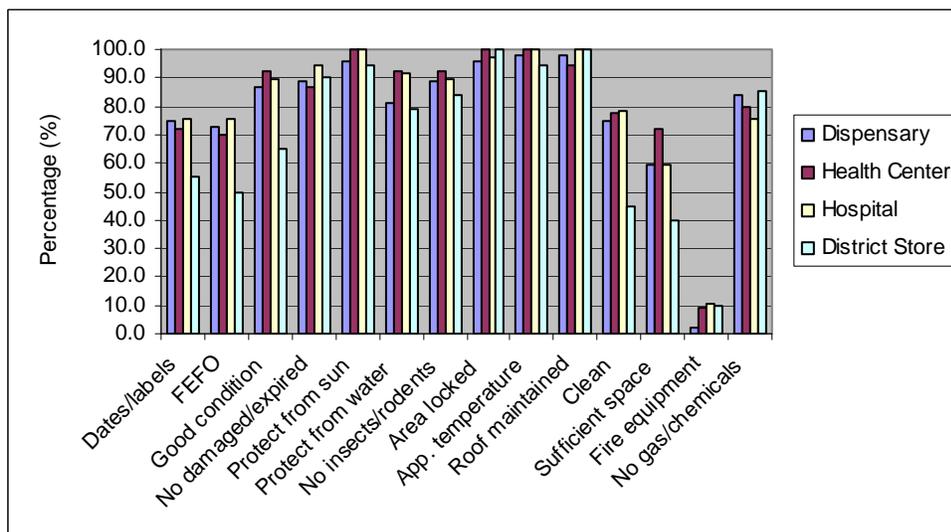
The majority of facilities met acceptable storage condition standards (71 percent for dispensaries, and 68 percent for health centers and hospitals), with the exception of district stores, which fell into the unacceptable range (58 percent).

Figure 7. Percent of facilities meeting acceptable storage conditions for malaria commodities



The three conditions most satisfied by all facilities included well-maintained roof, appropriate room temperature, and keeping the storage area locked. The least satisfied condition across all four facility levels was availability of fire equipment. In addition, there was generally insufficient space, lack of commodity organization by First-Expiry-First-Out, and non-visible dates and labels at all four facility types as well.

Figure 8. Percent of facilities meeting specific storage conditions for malaria commodities

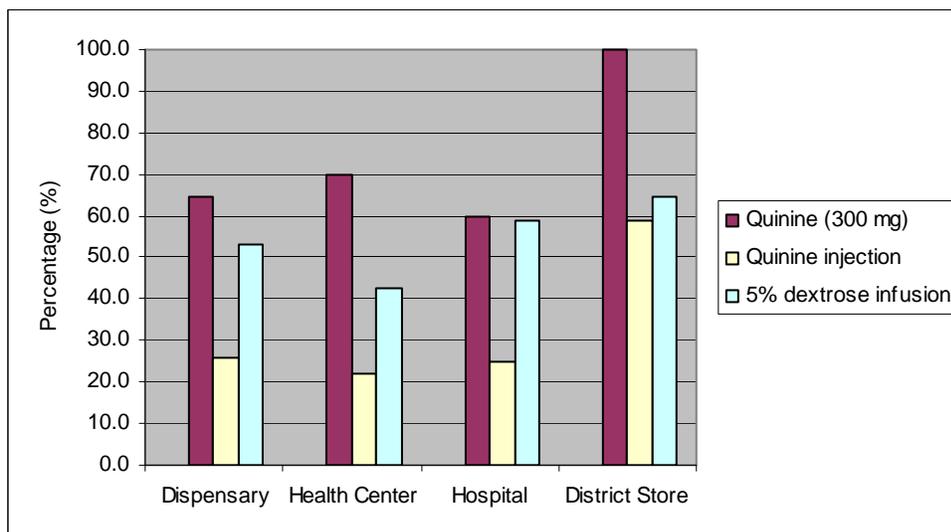


MALARIA STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

As seen in Figure 9, there were significant stockouts of malaria commodities on the day of the visit across all facility levels. Quinine stockouts were the most prevalent at all levels (at 100 percent of district stores, 70 percent of health centers, 65 percent of dispensaries, and 60 percent of hospitals). The assessment also found high stockout rates for 5% Dextrose infusion (65 percent of district stores, 59 percent of hospitals, 53 percent of dispensaries, and 43 percent of health centers). Quinine injection stockouts at facilities were relatively low for dispensaries and hospitals (at 26 and 25 percent respectively) but were much higher at the district store level (59 percent).

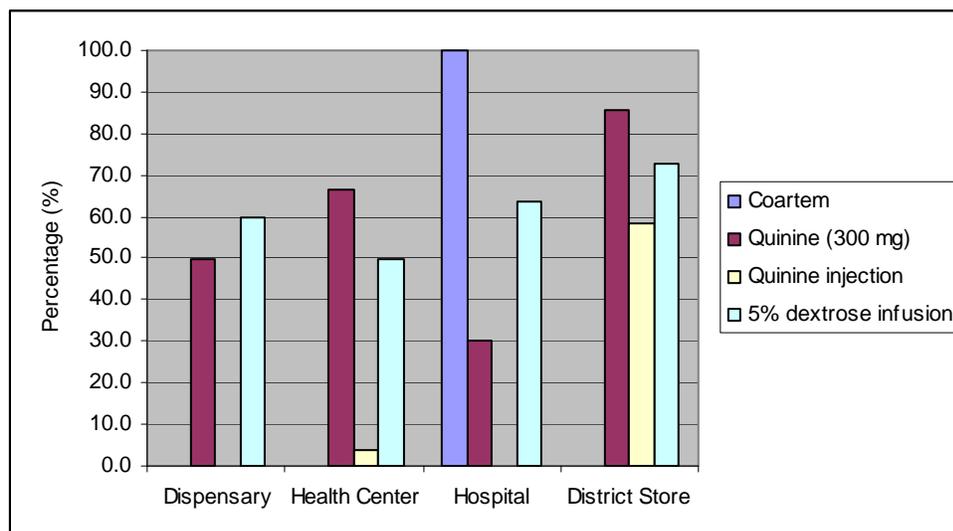
Figure 9. Stockouts of malaria commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

During the six month period prior to the assessment, all facilities reported high levels of stockouts primarily for Quinine and 5% Dextrose infusion. Stockouts for both of these commodities was highest at the district store level (86 percent and 73 percent respectively). About 50 percent of all service delivery points were stocked out of Quinine and 5% Dextrose infusion in the last six months.

Figure 10. Stockouts of malaria commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of malaria commodities, stockouts occurred most frequently at the hospital level, with an average of 2.76 times for all commodities, followed by the district store level, with an average of 2.46 times for all commodities. Dispensaries and health center levels stocked out an average of once for each of the four commodities.

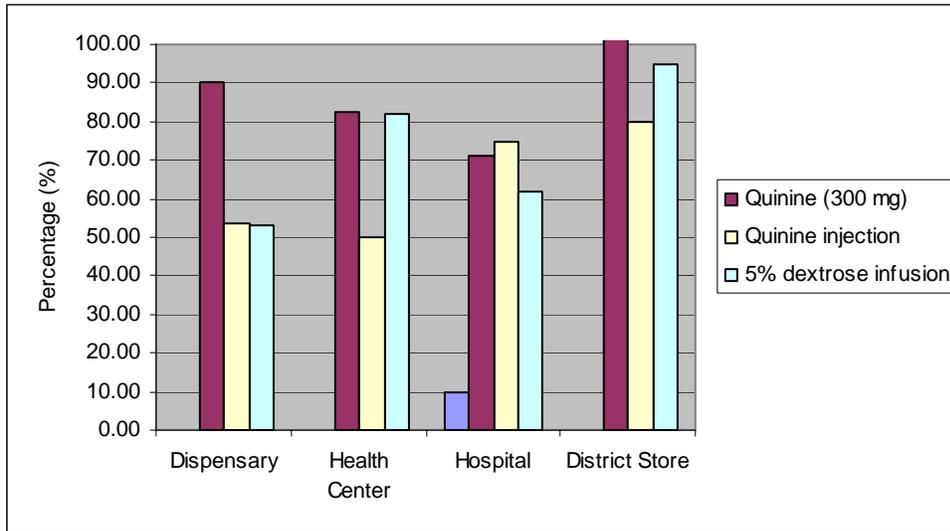
Table 5. Frequency of stockouts for malaria commodities within the last six months (by product)

Product	Dispensaries	Health Centers	Hospitals	District Stores
Coartem	-	-	3.00	-
Quinine (300 mg)	1.00	1.00	3.67	2.40
Quinine injection	1.40	1.19	2.38	3.00
5% Dextrose Infusion	1.00	1.00	2.00	1.88

DURATION OF STOCKOUTS

The average duration of stockout of malaria commodities was high at all four facility levels. The highest was the district store level, with an average of 93 days for all commodities, followed by health centers (72 days), dispensaries (65 days), and hospitals (54 days). Again, Quinine and 5% Dextrose infusion in general had a slightly higher average duration of days of stockouts among all four types of malaria commodities.

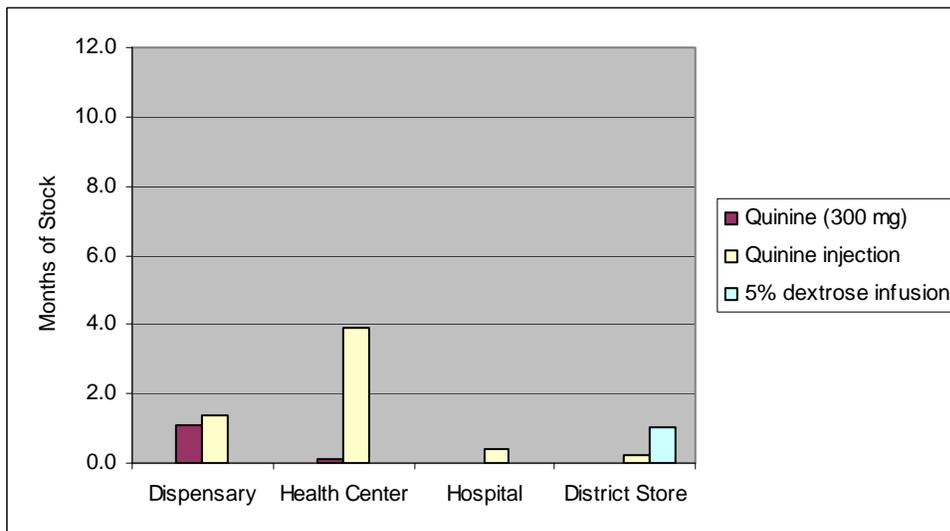
Figure 11. Average duration in days of malaria commodity stockouts (by product)



MONTHS OF STOCK ON HAND

In the case of months of stock on hand for malaria commodities, there have been no minimum and maximum commodity levels set with which to gauge if current inventory levels fall within an appropriate range. The assessment shows that months of stock for malaria commodities is relatively low. Quinine injection is the highest, with approximately 4 months of stock on hand at health centers. However, dispensaries are carrying an average of one month of Quinine and Quinine injection and no stock of 5% Dextrose infusion. For health centers and hospitals, the only product stocked over 0.5 months is Quinine injection at health centers (3.9 months). District stores were also found to have dangerously low levels of malaria commodities.

Figure 12. Months of stock on hand for malaria commodities on the day of visit (by product)



RECOMMENDATIONS FOR MALARIA COMMODITIES

Recommendations for the malaria system include the following:

- *Ensure availability of recording tools.* Stock card availability was relatively low across all facilities, with the exception of Coartem which could be a result of the relatively new introduction of this commodity into the system. Without adequate stock card availability, the management of malaria commodities for procurement and reporting becomes compromised.
- *Augment training for staff regarding the correct completion of recording and reporting tools.* The updating of stock cards, accuracy of balance entries, and use of CDRR reports remains relatively low throughout the system. In addition, the majority of staff reported never having learned how to complete logistics forms and reports. Intensified efforts, including training through logistics workshops and on-the-job training opportunities, would be needed to address this gap. In addition, adequate training, combined with ensuring availability of recording and reporting tools, would also help address the high percentage of stockouts throughout the system.
- *Increase the frequency of supervision visits that include inventory management at all levels of the system.* A substantially high proportion of malaria commodity managers reported never having received a supervision visit, and even those that report receiving one in the last 1-3 months is quite low. Supervision visits provide a key opportunity for logistics concepts to be reinforced, to strengthen the skills of service providers, and address problems within the system. Increased structured supervision is needed to address this gap.
- *Clarify transportation responsibilities.* There exists a lack of clarity regarding which level is responsible for transporting malaria commodities throughout the system. Such confusion can cause delays in ensuring supplies at the facility level. Roles and responsibilities regarding the transport of malaria commodities need to be clarified at all levels throughout the system.
- *Improve storage conditions, especially for district stores.* Though the majority of facilities had acceptable storage conditions, with the exception of district stores, all facilities fell short with respect to space, organization of commodities to ensure first-expiry-first-out, and fire equipment availability. Ensuring adequate storage conditions and identifying areas of weaknesses could be addressed through regular and structured supervision visits.
- *Review the system to establish appropriate minimum and maximum levels.* The current system does not currently have established min-max levels, an issue that may be significantly contributing to high levels of stockouts on the day of visit, during the past six months, and the high frequency and long duration of stockouts. Establishing appropriate min-max levels would contribute to improved ordering and procurement of malaria commodities by helping malaria commodity managers to anticipate and proactively address low stock levels to ensure continuous availability for clients.
- *Intensify advocacy efforts for malaria commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous malaria commodity availability.

FINDINGS FOR TUBERCULOSIS COMMODITIES

The 2006 assessment measured three TB drug types: Rifampicin/Isoniazide (RH) 150/75 mg; Streptomycin injection (1000 mg); and TB patient packs (RHZE/EH). Also included in the assessment were laboratory reagents and supplies, including poly pots, basic fuchine powder (25 gms), phenol crystals, and methelene blue (25 gm).

TB products, particularly treatment products, are managed at each level of the system. As expected, the TB treatment and testing is available at 100 percent of the hospitals, at 90 percent of health centers, and about half of the dispensaries.

Table 6. Percent of facilities that manage TB commodities

Facility	Manage TB Commodities
Dispensary	51.6
Health Centers	89.6
Hospitals	100.0
District Stores	90.5

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

TB treatment drugs with accompanying stock cards were found at less than half of the hospitals. Where stock cards were available, they were only updated 54 to 68 percent of the time. For TB laboratory supplies, the percent of facilities using stock cards to manage products plummets to between 18 and 27 percent. Of that small sample of hospitals that had stock cards available, between 71 and 89 percent were updated.

At district stores, stock cards for treatment products were much more readily available, at 86 percent for all treatment commodities. For laboratory products, fewer facilities had stock cards available (between 56 and 65 percent). Though still low, it is vastly better than availability in hospitals. Updated stock cards varied across treatment and laboratory supplies, from a low of 58 percent for basic fuchine powder, to a high of 77 percent for TB patient packs.

Table 7 (below) illustrates stock card availability and utilization by commodity and facility type on the day of the visit.

Table 7. Percent of facilities where stock cards are available and updated for use in managing TB commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	Available	Updated	Available	Updated	Available	Updated	Available	Updated
Rifampicin/Isoniazide	37.5	83.3	26.2	81.3	44.6	68.0	86.1	67.7
Streptomycin Injection	36.4	100.0	32.1	100.0	45.6	53.8	86.1	67.7
TB Patient Packs	26.1	83.3	24.0	94.4	46.6	59.3	86.1	77.4
Basic Fuchine Powder	-	-	-	-	22.0	88.9	64.5	57.9
Poly Pots	-	-	-	-	26.5	75.0	68.8	68.2
Phenol crystals	-	-	-	-	17.9	71.4	56.3	76.5
Methelene Blue	-	-	-	-	22.0	88.9	61.3	61.1

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

For TB drugs, accurate stock card balances were generally highest at the district store level (between 40 and 57 percent), and generally lowest among hospitals (between 16 to 33 percent). Near accurate balances (within the 10 percent margin) were also generally highest at the district store level.

Stock cards for laboratory reagents and supplies were only available at hospitals and district stores. Stock cards with no discrepancy and within 10 percent accuracy were highest at the district store level.

Table 8. Percentage of facilities that had accurate or near accurate balance entries on stock cards for TB commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
Rifampicin/Isoniazide	40.0	40.0	46.2	46.2	15.8	26.3	41.7	54.2
Streptomycin Injection	25.0	25.0	35.3	41.2	33.3	33.3	56.5	60.9
TB Patient Packs	20.0	20.0	50.0	56.3	27.8	38.9	40.0	60.0
Basic Fuchine Powder	-	-	-	-	44.4	44.4	61.5	61.5
Poly Pots	-	-	-	-	50.0	70.0	56.3	56.3
Phenol crystals	-	-	-	-	66.7	66.7	92.9	92.9
Methelene Blue	-	-	-	-	50.0	50.0	76.9	76.9

DETERMINING RE-SUPPLY QUANTITIES

The study also assessed how re-supply quantities are determined at the dispensary, health center and hospital levels using blank S-11 or S-12 forms for order quantities based on product availability at a higher level. Approximately 68 percent of hospitals and 32 percent of health centers ordered re-supplies utilizing blank S-11 and S-12 forms.

UTILIZATION OF LMIS REPORTS

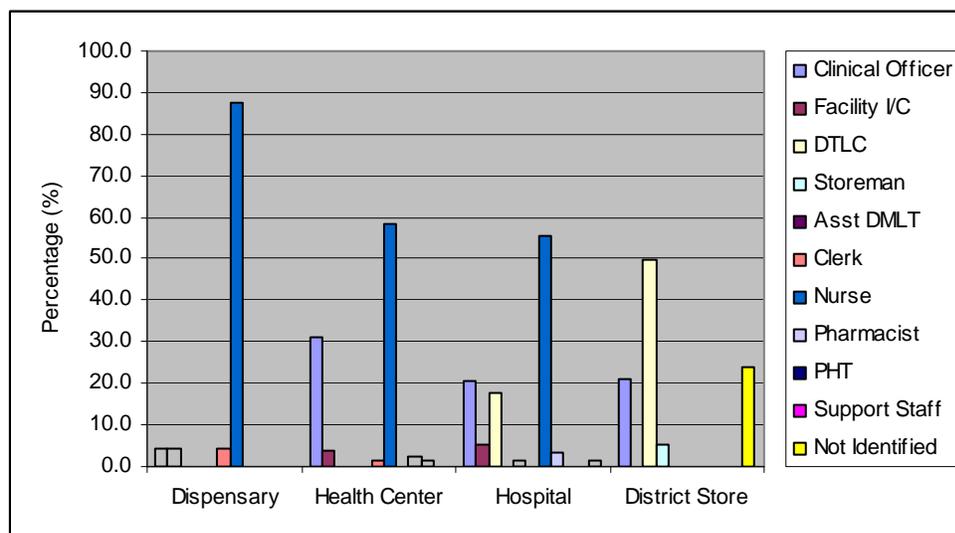
Logistics data and information for TB commodities system through the use of either the CDRR or improvised reports is not effectively moving up through the health system. Utilization of the CDRR is highest at the district store level (47 percent), dropping to 40 percent at hospitals, 31 percent at health centers, and 17 percent at dispensaries. Improvised report levels are even less, topping off at 12 percent at district stores, and dropping to 4 percent at both dispensaries and health centers.

PERSONNEL

COMMODITY MANAGEMENT

In smaller facilities (those facilities with a smaller number of staff) TB commodities are managed primarily by clinical personnel. This was found to be the case for 92 percent of the dispensaries and 77 percent of the health centers. There is a slight shift at the hospital level, with 66 percent reporting clinical personnel managing TB commodities, while about 15 percent reported management by the DTLC or storeroom staff. At the district store, the vast majority reported TB commodity management is being done by the DTLC.

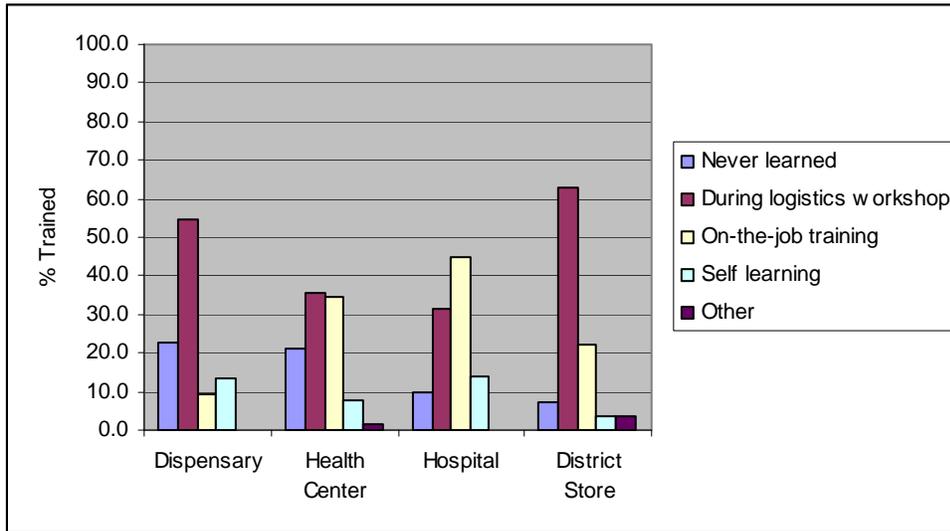
Figure 13. Percent of facility personnel managing TB commodities



TRAINING

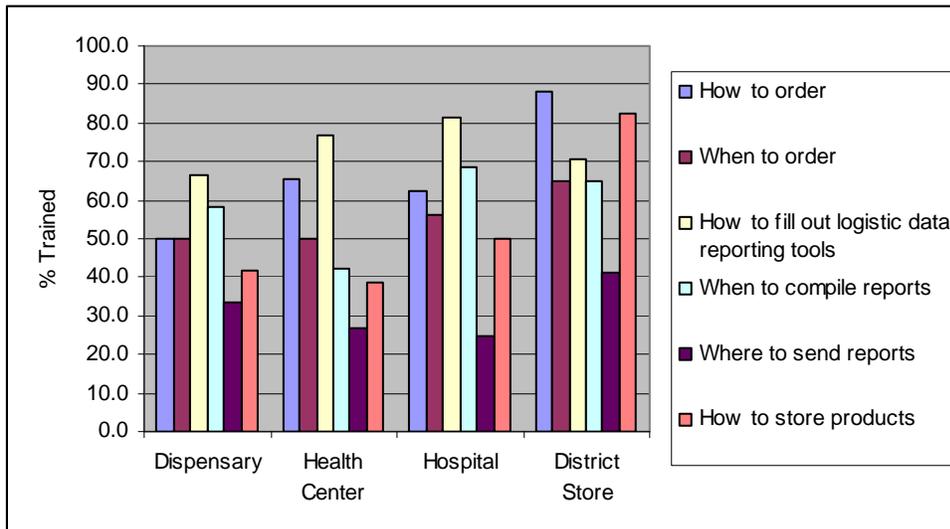
Across all facility levels, the majority of TB commodity managers reported they learned how to complete logistics forms and reports during a logistics workshop, ranging from 31 percent at hospitals to 63 percent at district stores. The percentage of TB commodity managers reporting they never learned how to complete the related logistics forms and reports was relatively low across all facility types, at 7 percent at districts stores to 23 percent at dispensaries.

Figure 14. Type of training received by TB commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. At the dispensary, health center and hospital levels the task most mentioned was “how to fill out logistics data reporting tools”. The task least mentioned was “where to send reports”. For district stores, “how to order” was the task most mentioned (88 percent), with “where to send reports” the task also least mentioned (41 percent).

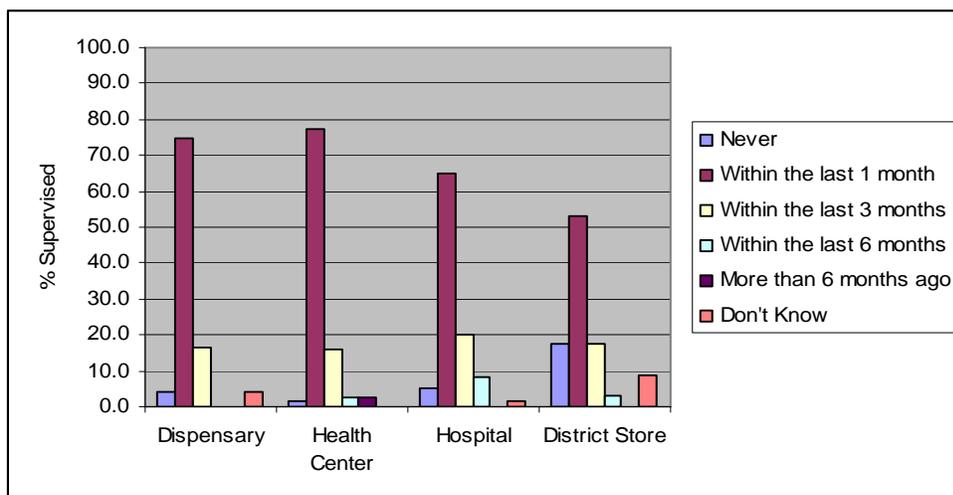
Figure 15. Main logistics tasks TB managers trained on



SUPERVISION

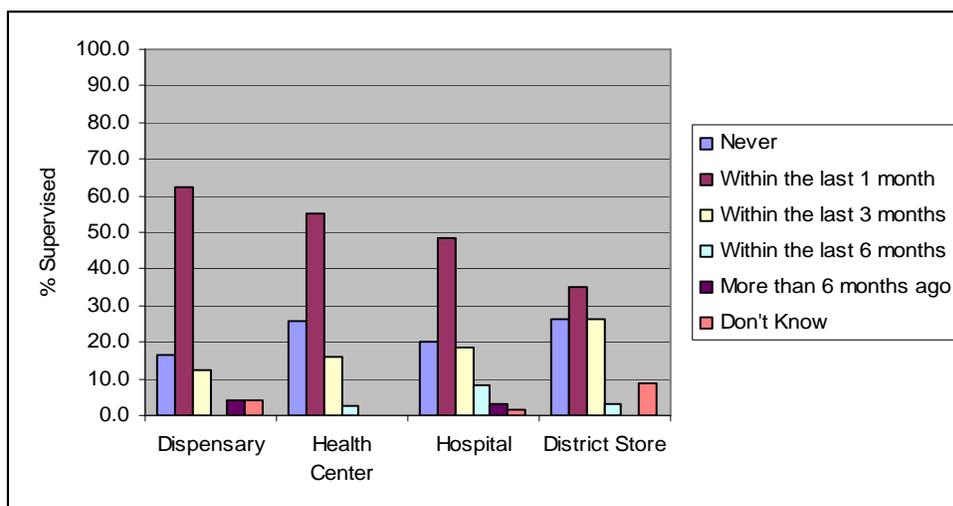
Supervision for TB commodities within the last 1 month was relatively high for all four facility levels, ranging from 53 percent at district stores to 77 percent at health centers. In general, TB commodity managers reporting never having received a supervision visit was low across all four facility levels.

Figure 16. Percent of facilities who received a supervision visit for TB commodities



The situation regarding supervision that included commodities management for TB commodities was somewhat similar. While a high percentage at dispensaries reported receiving a commodities related supervision visit within the last month, this dropped to 35 percent at district stores. More concerning is the percentage reporting never having received commodities management supervision increased more significantly, from 17 percent at dispensaries to 27 percent at district stores.

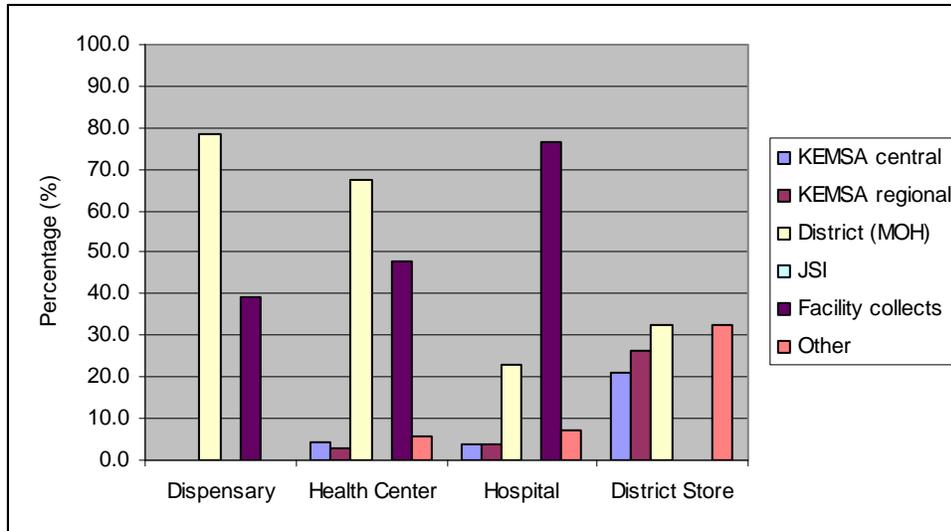
Figure 17. Percent of facilities who received a supervision visit that included commodity management



TRANSPORTATION

At the dispensary, health center, and hospital levels, TB commodity managers report that the facility itself has primary responsibility for collecting malaria commodities, at 39 percent, 48 percent and 76 percent respectively. However at those three levels, respondents also reported that the district (MOH) is also responsible for transporting TB commodities. These results indicate that TB commodity managers at all levels are unclear regarding who has the primary responsibility of transporting malaria commodities in the system.

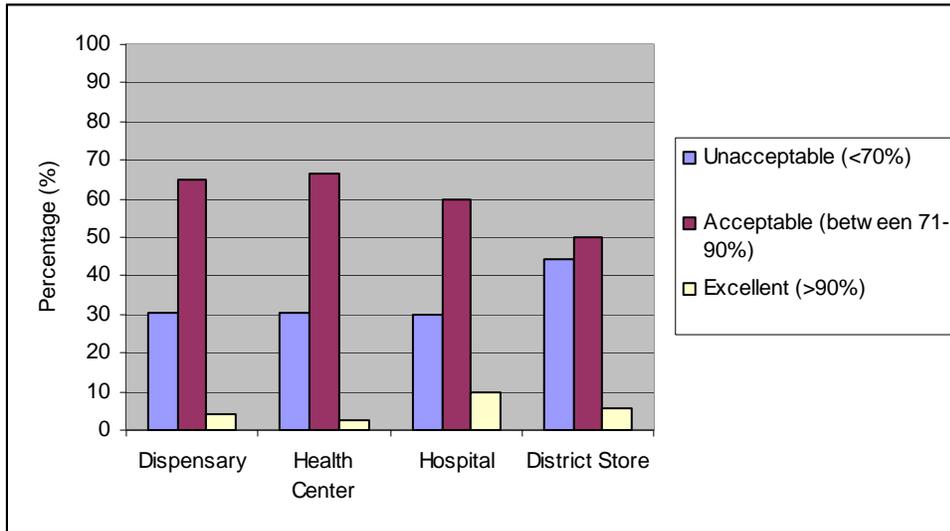
Figure 18. Responsible for transporting TB commodities to the facility



STORAGE CONDITIONS

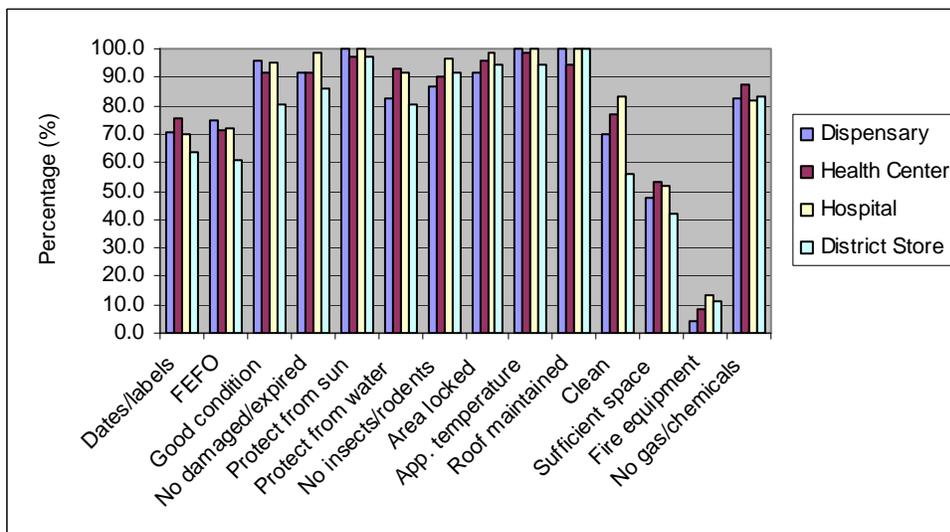
The majority of facilities fell within the acceptable range of storage conditions, at 65 percent (dispensaries), 67 percent (health centers), 60 percent (hospitals), and 50 percent (district stores). However a relatively high proportion also fell within the unacceptable range, at around 30 percent for dispensaries, health centers, and hospitals, and 44 percent for district stores.

Figure 19. Percent of facilities meeting acceptable storage conditions for TB commodities



Regarding specific storage conditions for all four facility types, product protection from sunlight, appropriate room temperature and roof maintained received the highest ratings. Available fire equipment and sufficient space was low in all four facility types.

Figure 20. Percent of facilities meeting specific storage conditions for TB commodities

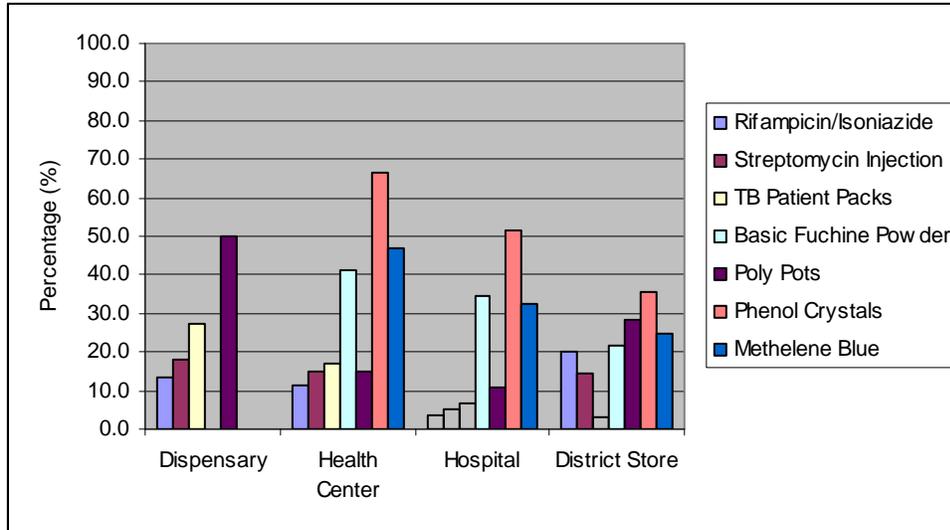


TB STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

For TB drugs, stockouts were generally slightly higher at the dispensary level and lowest for all commodities at the hospital level. TB patient packs were stocked out the most at dispensaries (27 percent), health centers (17 percent), and hospitals (7 percent). The highest stockouts of Rifampicin was at the district store level (20 percent). For laboratory reagents and supplies, stockouts were generally high at the hospital level, with phenol crystals stocked out 52 percent on the day of the visit.

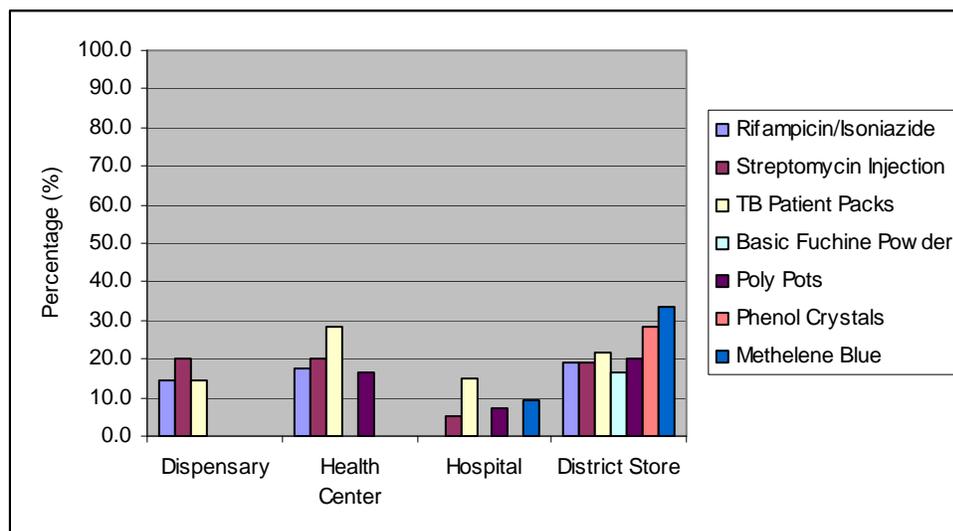
Figure 21. Stockouts of TB commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

Stockouts during the last six months was relatively low for all facility levels. For TB drugs, Streptomycin injection was stocked out at 20 percent of dispensaries and health centers during the last six months, with TB patient packs having the highest TB drug stock out rate at 29 percent at health centers. For laboratory reagents and supplies, stockouts were significantly higher at district stores than at hospitals, with 33 percent of methelene blue and 29 percent of phenol crystals stocked out at the district store level.

Figure 22. Stockouts of TB commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of TB commodities, the frequency of stockouts for TB drugs within the six month period prior to the assessment was fairly similar across all facility types (between an average of 1 to 2 times among all drug commodities). Frequency of stockouts for laboratory reagents and supplies was higher at the district store level.

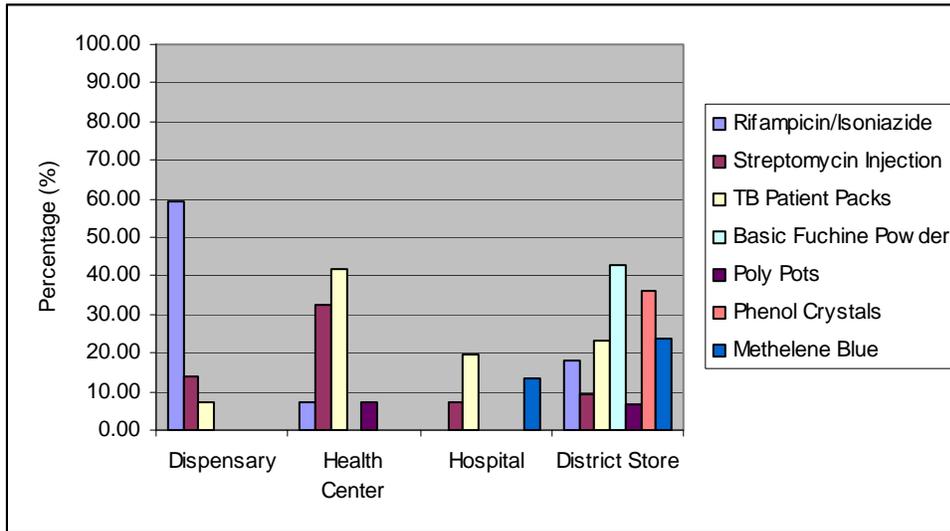
Table 9. Frequency of stockouts for TB commodities within the last six months (by product)

Product	Dispensaries	Health Centers	Hospitals	District Stores
Rifampicin/Isoniazide	2.00	1.00	-	1.00
Streptomycin Injection	1.00	1.50	1.00	1.50
TB Patient Packs	1.00	1.33	1.67	1.20
Basic Fuchine Powder	-	-	-	1.00
Poly Pots	-	1.00	-	1.67
Phenol crystals	-	-	-	1.50
Methelene Blue	-	-	1.00	1.00

DURATION OF STOCKOUTS

The average duration of TB commodity stockout varied across facility types and by product type. The average duration of Rifampicin stockout was highest at the dispensary level (60 days); for TB patient packs, it was highest at the health center level (42 days). In general the average duration of stockout for all TB drug types was lowest at the hospital level. For laboratory reagents and supplies, the average duration was higher at the district store level, ranging from 7 days (poly pots) to 43 days (basic fuchine powder).

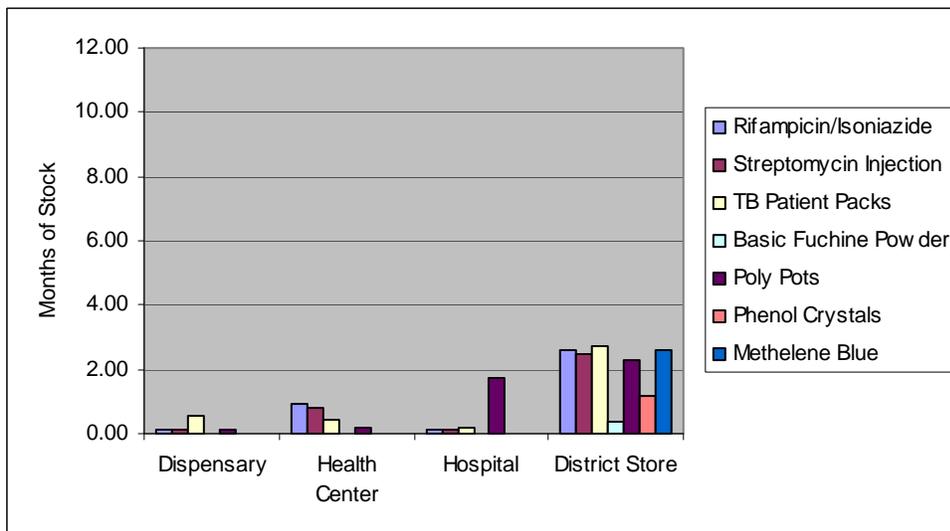
Figure 23. Average duration in days of TB commodity stockouts (by product)



MONTHS OF STOCK ON HAND

In the case of TB commodities, the minimum stock levels established at the district store level is 3 months, and the maximum stock level is 6 months. For facilities, the minimum is 2 months and the maximum established level is 3 months. Based on these min/max stock levels, the results of the assessment show that neither the district stores nor the facility levels meet minimum stock levels and most fall significantly below minimum levels.

Figure 24. Months of stock on hand for TB commodities on the day of visit (by product)



RECOMMENDATIONS FOR TB COMMODITIES

Recommendations for the TB system include the following:

- *Ensure availability of recording tools.* Stock card availability was low across all facilities, with the exception of the district stores. Without adequate stock card availability, the management of malaria commodities for procurement and reporting becomes compromised. Availability of appropriate tools, combined with intensified training efforts, may help address the poor months of stock on hand results, which currently fall below minimum levels established for the TB system.
- *Augment training for staff regarding the correct completion of recording and reporting tools.* Although the majority of respondents reporting they learned how to complete logistics forms and records at a logistics workshop or through on-the-job training was quite high, the updating of stock cards, accuracy of balance entries, and use of CDRR reports remains low throughout the system. Intensified efforts, including training through logistics workshops and on-the-job training opportunities, to ensure adequate training in how to complete related forms and records is needed to address this gap.
- *Improve the quality of supportive supervision visits.* Although a substantially high proportion of TB commodity managers reported receiving a supervision visit in the last 1-3 months, continuous improvement of structured supervision can help proactively identify and address any system weaknesses or problem areas.
- *Clarify transportation responsibilities.* The findings show a lack of clarity regarding who is responsible for transporting TB commodities throughout the system. Currently, between 39 and 76 percent of health facility staff continue to collect TB commodities from higher levels. This practice often leaves facilities understaffed. A system for PTLC and DTLC deliveries and vehicle use needs to be tracked at the central level. Roles and responsibilities regarding the transport need to be clarified at all levels throughout the system.
- *Improve facility storage condition.* There are still a significant proportion of facilities that fall within the unacceptable storage condition range, particularly with respect to cleanliness, organization, sufficient space, and availability of fire equipment. Ensuring adequate storage conditions and addressing areas of weaknesses could be addressed and reinforced through regular and structured supervision visits.
- *Intensify advocacy efforts for TB commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous TB commodity availability.

FINDINGS FOR REPRODUCTIVE HEALTH COMMODITIES

Eight family planning (FP) commodities were measured in the 2006 assessment: COCP (Chagulang and Microgyno); POP (Microlut); Injectables (Depo Provera and Megestron); IUCD (Copper T); implants (Jadelle); ECP (Postinor 2); male condoms (MOH and Sure brands); and female condoms.

Family planning commodities can be found at all four tiers of the health care system. All district stores visited reported they manage FP commodities. In addition, management was very high among hospitals and health centers (91 and 92 percent respectively), and high at dispensaries (78 percent).

Table 10. Percent of facilities that manage FP commodities

Facility	Manage Family Planning Commodities
Dispensary	77.5
Health Centers	91.7
Hospitals	90.6
District Stores	100.0

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

An overwhelming majority of district stores (93 percent) and hospitals (55 percent) reported use of stock cards to manage FP commodities. However, utilization of stock cards was low at both health centers and dispensaries (39 and 30 percent respectively). Where stock cards were available, they were also largely updated, especially at district stores for all FP commodities (over 70 percent) and for COCP, POP and injectables at all health facilities and district stores (over 62 percent). Some providers at dispensaries and health centers reported that they do not use stock cards and prefer to use the daily activity register due to the low volume of contraceptive stock managed. Additionally, staff at health centers and dispensaries also reported inadequate distribution efforts of blank stock cards from the district stores to health facilities as a reason for low stock card availability.

Table 11. Percent of facilities where stock cards are available and updated for use in managing FP commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	Available	Updated	Available	Updated	Available	Updated	Available	Updated
COCP	30.2	80.0	43.7	71.1	64.3	77.8	95.3	78.0
POP (Microlut)	28.2	70.0	42.4	62.1	62.3	72.7	97.6	75.0
Injectable	25.5	64.3	45.5	82.1	63.2	75.0	93.0	82.5
IUCDs (Copper T)	53.8	14.3	53.6	63.3	61.8	69.7	95.3	73.2
Implants (Jadelle)	0.0	-	28.6	50.0	54.7	64.3	92.9	73.0
ECP (Postinor 2)	23.1	66.7	42.1	62.5	57.1	53.6	90.5	71.1
Male Condoms	22.4	36.4	37.3	56.3	53.7	55.2	95.2	85.0

Female Condoms	21.9	71.4	26.8	60.0	44.2	52.2	95.2	77.5
----------------	------	------	------	------	------	------	------	------

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

In general, dispensaries and health centers had the highest percentages of facilities with accurate stock card balances for most FP commodities. For dispensaries, there were no discrepancies between stock card balances and the physical inventory count for POP, IUCDs, and ECP (Postinor2) in more than 60 percent of the facilities. This was also the case at health centers for POP, ECP (Postinor2) and implants. District stores and hospitals however maintained very low levels of accuracy between stock card balances and physical inventory count for all commodities, with only implants showing more than 50 percent of the facilities recording no discrepancy.

Both dispensaries and health centers demonstrated the highest percentages of facilities with near accurate stock card balances for most commodities as compared with district stores and hospitals. However, when compared with the no discrepancy indicator (accurate), more than 50 percent of facilities record less than 10% discrepancy at district stores and hospitals. In general, male condoms, COCP and injectables have the lowest rates of accuracy.

Table 12. Percentage of facilities that had accurate balance entries on stock cards for FP commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
COCP	33.3	41.7	22.6	40.0	16.1	32.3	14.7	35.3
POP (Microlut)	71.4	85.7	88.2	88.2	48.0	60.0	37.5	43.8
Injectable	20.0	40.0	37.5	53.1	43.3	50.0	23.5	52.9
IUCDs (Copper T)	100.0	100.0	52.6	63.2	35.7	50.0	25.0	65.6
Implants (Jadelle)	-	-	75.0	100.0	39.1	47.8	59.4	62.5
ECP (Postinor 2)	100.0	100.0	63.6	63.6	28.6	42.9	36.7	60.0
Male Condoms	0.0	0.0	15.8	21.1	14.3	23.8	29.4	41.2
Female Condoms	16.7	16.7	33.3	44.4	5.9	23.5	29.4	38.2

DETERMINING RE-SUPPLY QUANTITIES

Facilities were asked if they used a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level to assess how re-supply quantities were determined. More than one-third of all facility levels are using blank S-11 or S-12 forms to order re-supply quantities. This could be an indication of rationing of FP commodities by the district stores.

UTILIZATION OF LMIS REPORTS

Within the system for family planning commodities in Kenya, health facilities submit their reports to the DPHN/DRHC, who in turn submits an aggregated district report to the central level. There is widespread availability of Consumption Data Report and Request (CDRRs) reports at all facility levels (88 percent or greater). Approximately 4 percent of health facilities were found to be using improvised CDRRs, which could be as a result of the non-availability of the standard CDRRs.

PERSONNEL

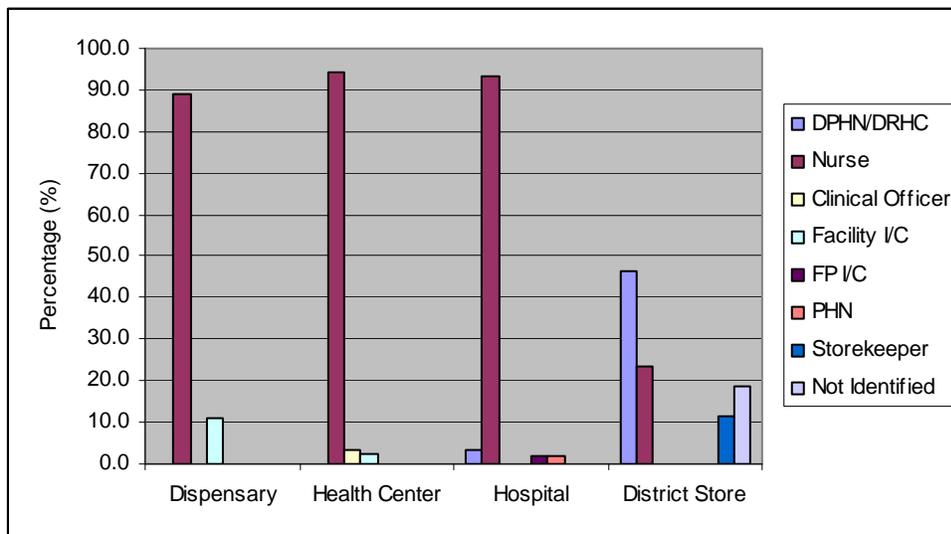
COMMODITY MANAGEMENT

The roles and responsibilities for the FP commodities system are well-defined and structured. At the district store, the DPHN or DRHC, together with the district storekeeper, are responsible for monitoring

stock status and storage of FP commodities, reviewing orders, issuing FP commodities to health facilities, submitting the quarterly district CDRR, and supervision of the health facilities on FP logistics issues. At the health facility level, the facility in-charge or other assigned staff is responsible for monitoring the stock status and storage of FP commodities, recording all receipts and dispensed FP commodities, and submitting of facility CDRR to the district in order to be supplied with FP commodities.

Assessment findings demonstrate that the DPHN/DRHC is responsible for managing FP commodities in only approximately 58 percent of district stores. At the health facility levels, where the facility in-charge should be the primary person responsible, this was found to be the case in less than 10 percent of facilities. Nurses form the overwhelming percentage of facility personnel managing FP commodities at all three health facility levels. However, within this context, it is also important to remember that duties in most health facilities are performed on a rotational basis due to shortage of staff and it may not be feasible to dedicate one health provider as the family planning in-charge.

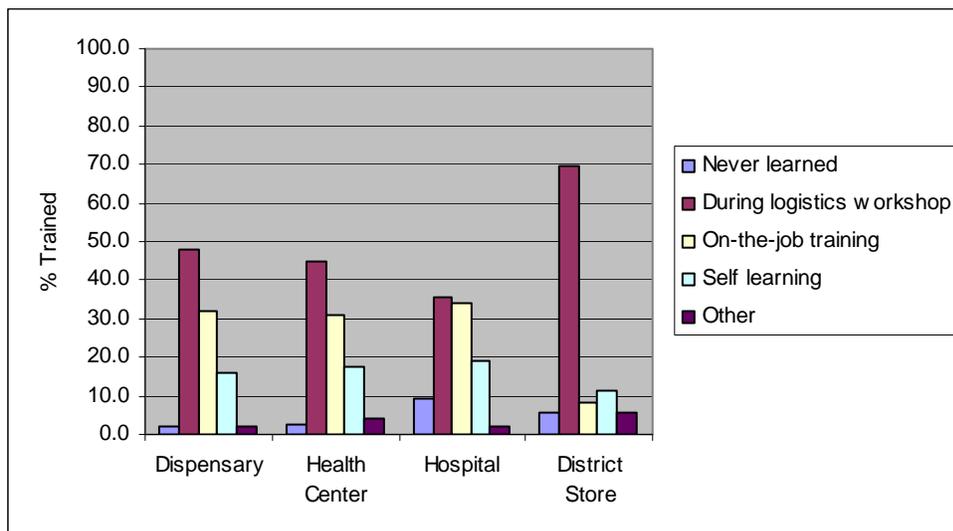
Figure 25. Percent of facility personnel managing FP commodities



TRAINING

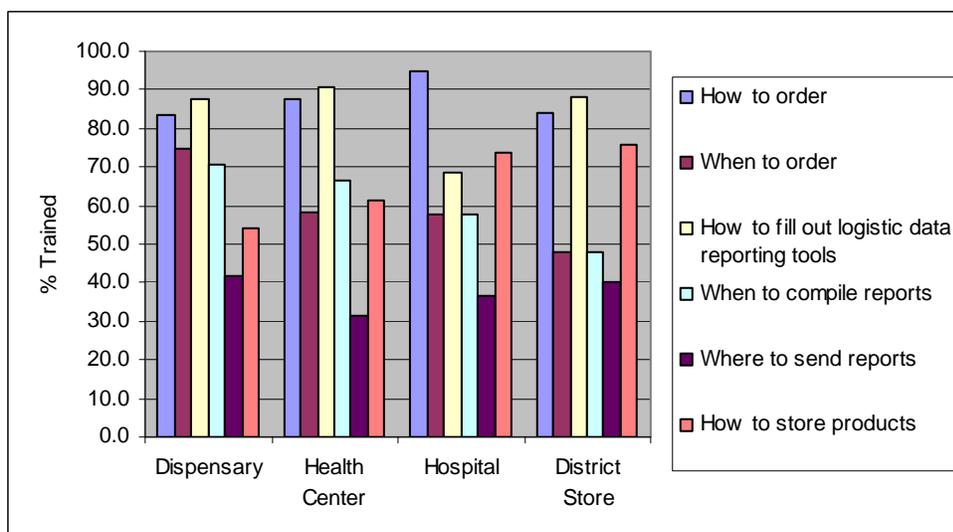
District stores have the largest percentage of commodity managers (69 percent) trained in logistics through workshops. At the health facility levels, the percentage of commodity managers trained in workshops ranges from a high of 48 percent at dispensaries to a low of 36 percent at hospitals. As logistics training through workshops can prove to be ineffective in a health system with high personnel turn-over, on-the-job training can often be an important vehicle to impart skills. Assessment findings show that more than 70 percent of commodity managers at all facility levels were trained either through workshops or on-the-job training.

Figure 26. Type of training received by FP commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. The majority of health workers managing FP commodities at all levels mentioned that they were trained on “how to order”, “how to fill out logistic data reporting tools”, and “how to store FP commodities”. Only a few managers of FP commodities were however able to mention “where to send reports” as one of the tasks they learned during a logistics training workshop. Equally worrying is that commodity managers at district stores also scored low on mentioning “when to order” commodities (48 percent) and “when to compile reports” (48 percent).

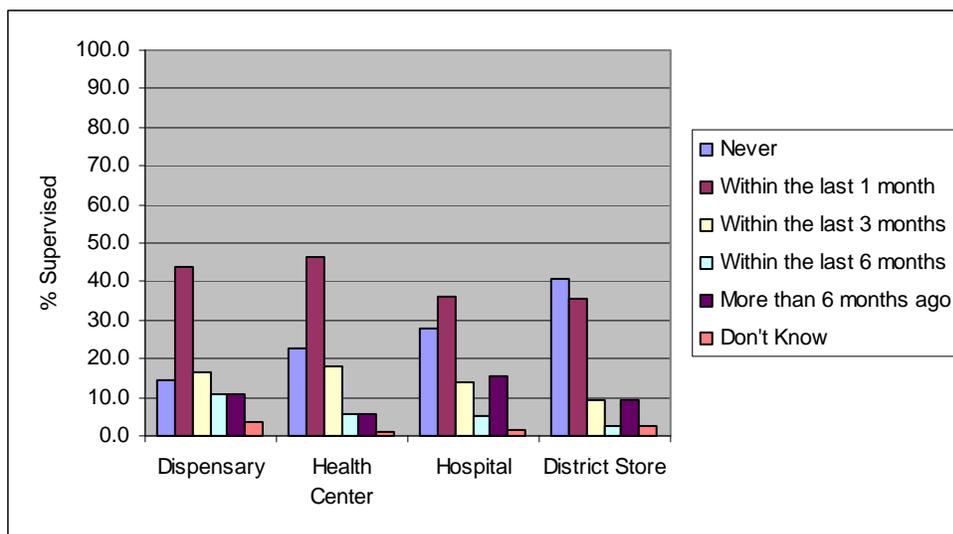
Figure 27. Main logistics tasks FP commodity managers trained on



SUPERVISION

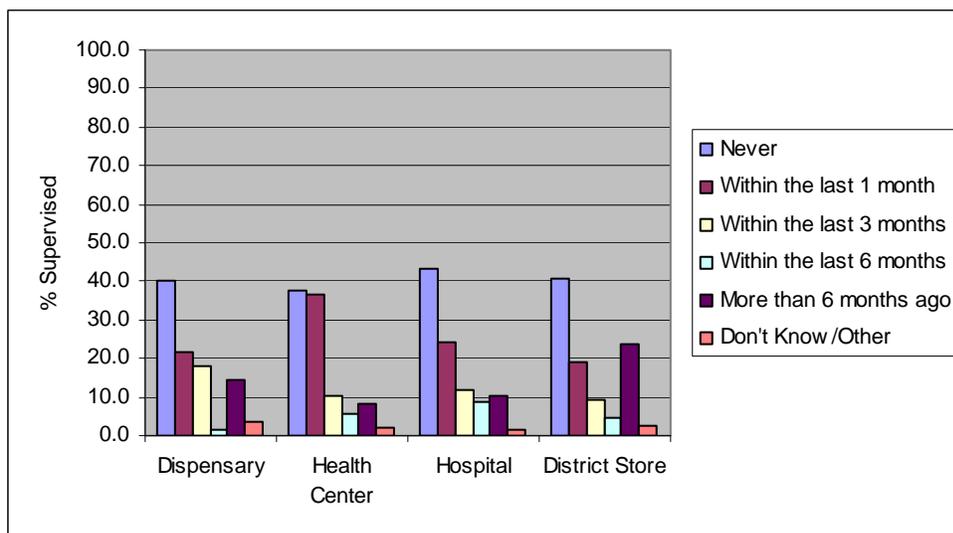
In general, facility staff reported minimal supervision either from central or district level. About 40 percent of district stores and health facilities have never received any type of supervision, as shown in Figure 28 below.

Figure 28. Percent of facilities who received a supervision visit for FP commodities



Only about 40 percent and 30 percent of health workers managing FP commodities at health facilities and district stores respectively have received a supervision visit that included commodity management in the last 3 months

Figure 29. Percent of facilities who received a supervision visit that included commodity management

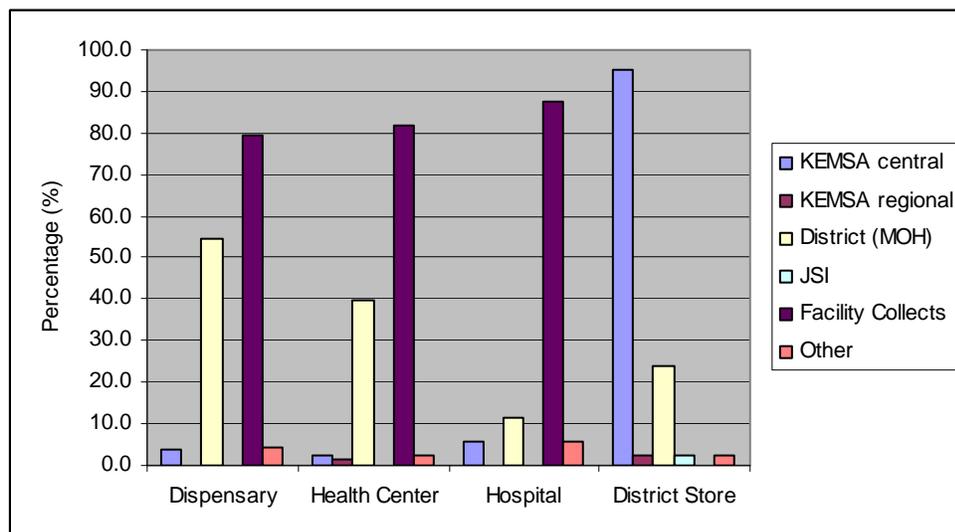


TRANSPORTATION

For the FP logistics system in Kenya, the responsibility of transporting FP commodities to district stores rests with KEMSA at the national level. Health facilities on the other hand are supposed to receive their supplies from district stores. As Figure 30 (below) illustrates, approximately 80 percent of health workers managing FP commodities at health facilities report that the responsibility for transporting FP commodities rests with the facility to collect from the district stores. However about 55 percent and 40 percent of health workers managing FP commodities at the dispensary and health center levels report that it is the district store's responsibility to transport commodities to facilities. This could indicate a potential problem as increasingly district stores do not have the capacity to transport commodities to the facilities. This also suggests a lack of clarity regarding who is responsible for transporting commodities to the facilities.

At district stores, the overwhelming majority (95 percent) of FP commodity managers cite it is the responsibility of KEMSA central to transport FP commodities. However, approximately 24 percent of these managers also report that it is the facility's responsibility to collect supplies from KEMSA.

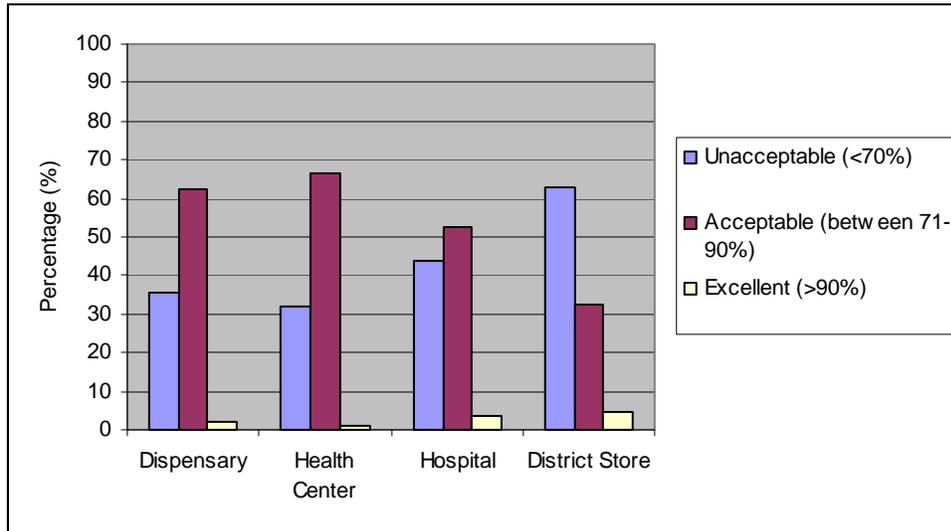
Figure 30. Responsible for transporting FP commodities to the facility



STORAGE CONDITIONS

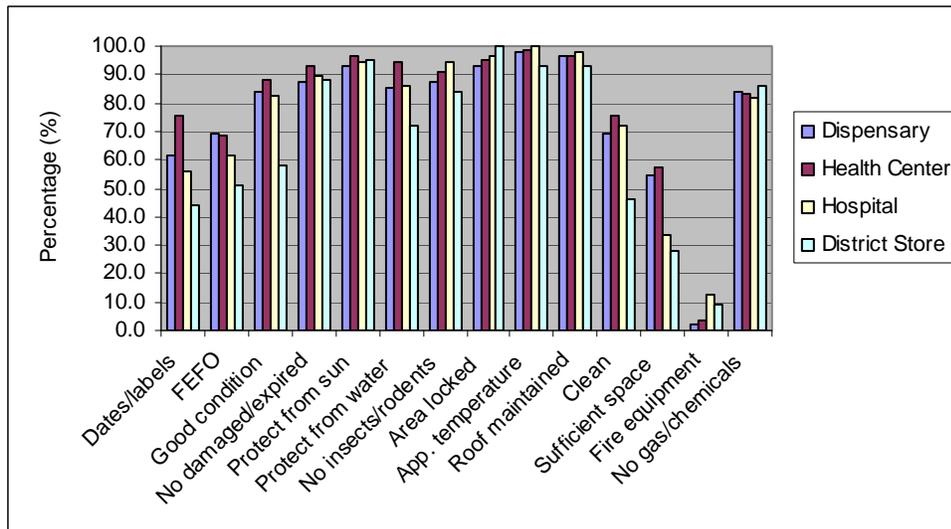
The majority of health facilities met acceptable storage conditions, at 62 percent for dispensaries, 68 percent for health centers, and 53 percent for hospitals. However, this is not the case for district stores, where the majority fell into the unacceptable storage condition range on the day of visit, at over 60 percent.

Figure 31. Percent of facilities meeting acceptable storage conditions for FP commodities



The main issue affecting storage conditions in district stores and to some extent hospitals is insufficient space, as only about 28 percent of district stores reported having sufficient space to store FP commodities. In addition, the majority of health facilities no longer store FP commodities in the facility store, and instead have created departmental stores within approximately 80 percent of dispensaries, 56 percent of health centers, and 50 percent of hospitals.

Figure 32. Percent of facilities meeting specific storage conditions for FP commodities



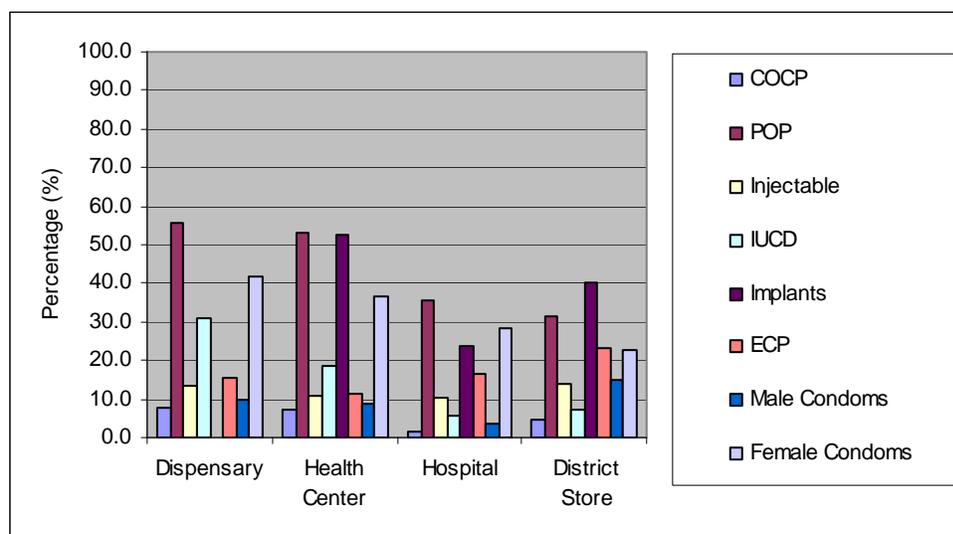
FP STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

Less than 8 percent of health facilities and district stores experienced a stockout of COCP on the day of the visit. At hospitals and district stores, the stockout rate for COCP was less than 5 percent. Similarly, low stockout rates were recorded for male condoms and injectables at 4 percent (health facilities) and 15 percent (district stores).

ECP, which was introduced to health facilities in 2004, was not available in 11 to 16 percent of health facilities and in about 23 percent of district stores. IUCD non-availability was recorded in less than 10 percent of district stores and hospitals, but higher stockout rates were recorded at health centers (19 percent) and dispensaries (31 percent). For POP and female condoms, assessment results show stockout rates between 32 and 57 percent at health facilities and between 23 and 42 percent at district stores.

Figure 33. Stockouts of FP commodities on the day of the visit (by product)

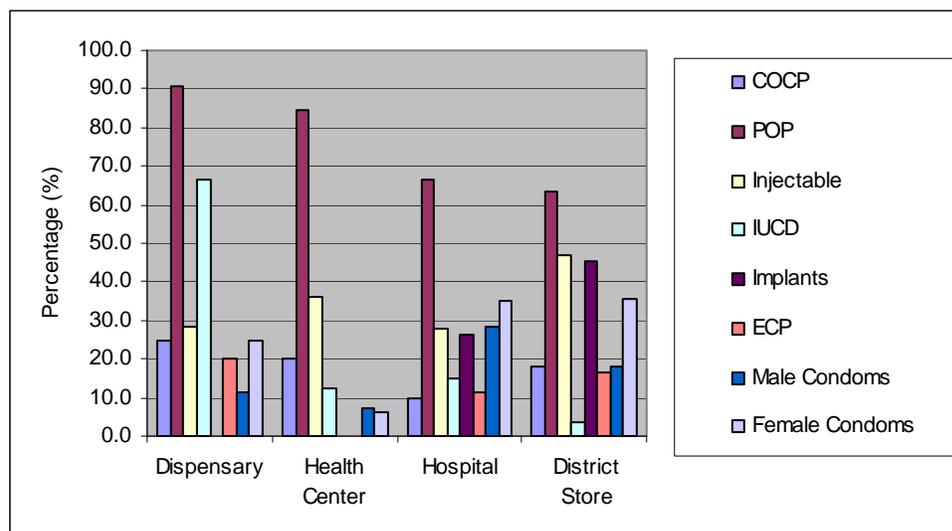


STOCKOUTS WITHIN LAST SIX MONTHS

Results of the assessment show that COCP, male condoms and ECP had the lowest stockout rates, ranging from 0 percent at health facilities (for ECP) to 29 percent at hospitals (for male condoms).

The supply of FP commodities in the country has been at best intermittent for several years. The pipeline has been experiencing shortages of POP, injectables, implants and female condoms. Therefore as expected, POP, injectables and female condoms were recorded as the methods with the highest rate of stockouts within the last six months. More than 60 percent of all facilities and district stores had experienced a stockout of POP in the last six months. This rate was even higher in health centers and dispensaries (85 percent and 91 percent respectively). About 45 percent of district stores have experienced a stockout of implants and about 68 percent of dispensaries have experienced a stockout of IUCDs in the last six months.

Figure 34. Stockouts of FP commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of FP commodities, stockouts occurred on average slightly more frequently at the district store level, at approximately 1.5 times in the six months prior to the assessment. Injectables averaged the greatest frequency of stockouts across all four facility levels.

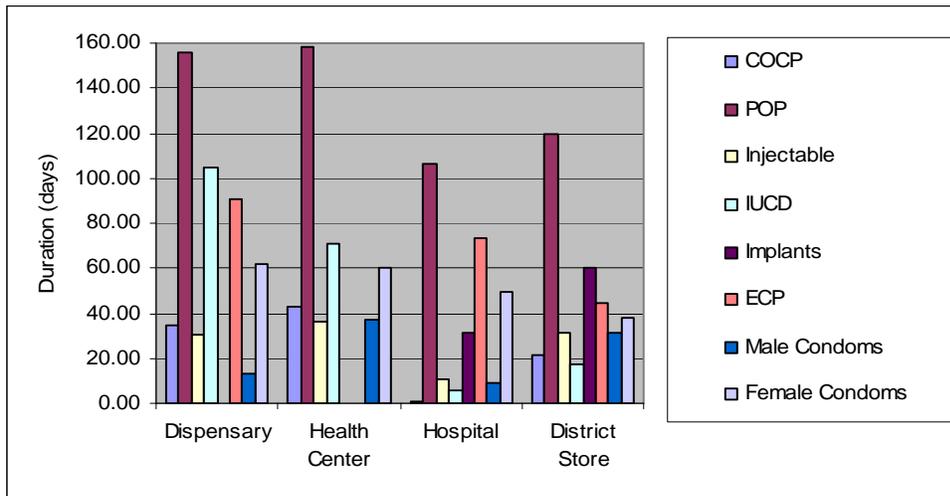
Table 13. Frequency of stockouts for FP commodities within the last six months (by product)

Product	Dispensaries	Health Centers	Hospitals	District Stores
COCP	1.25	1.00	1.00	1.17
POP (Microlut)	1.00	1.00	1.06	1.05
Injectable	2.75	1.38	2.38	2.88
IUCDs (Copper T)	1.00	1.00	1.00	2.00
Implants (Jadelle)	-	-	1.67	1.21
ECP (Postinor 2)	1.00	-	1.00	1.20
Male Condoms	1.00	1.00	1.00	1.00
Female Condoms	1.00	1.00	1.33	1.18

DURATION OF STOCKOUTS

Both district stores and service delivery points have experienced the least average number of days stocked out for male condoms (13 to 37 days), injectables (10 to 36 days) and COCP (1 to 43 days). In terms of levels in the supply chain, dispensaries and health centers have experienced higher duration of stock outs than hospitals and district stores. In addition, POP has been out of stock for an average of about 4 months at all levels. The most affected are dispensaries and health centers where they have been out of stock for five out of the last six months.

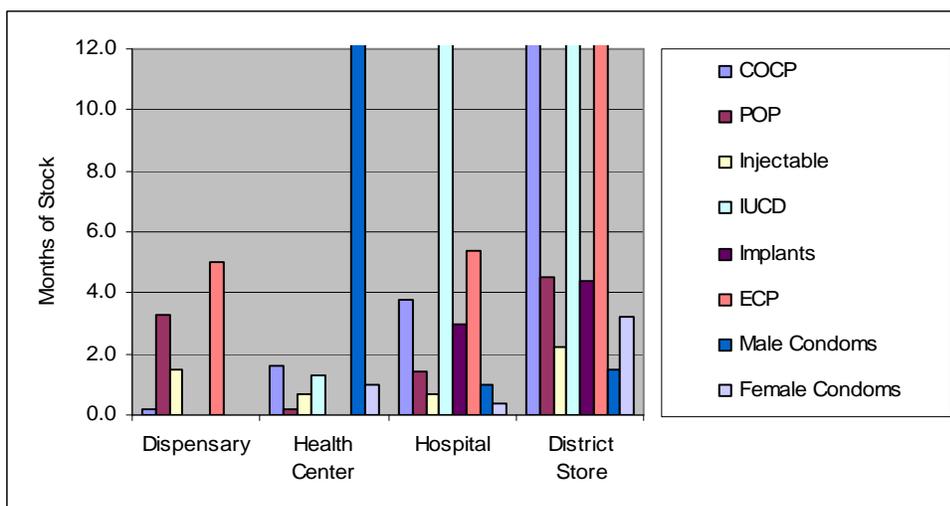
Figure 35. Average duration in days of FP commodity stockouts (by product)



MONTHS OF STOCK ON HAND

For the FP logistics system in Kenya, the minimum and maximum months of stock at all facility types is 3 and 6 months of stock respectively. For health facilities and district stores with 6 months of records, only POP and ECP are within minimum and maximum supply levels. All other commodities are either stocked out or below minimum months of stock. At health centers, male condoms are overstocked at 20 months of stock, while all others are below minimum stock levels. At hospitals, COCP, implants and ECP are within minimum and maximum stock levels. IUCDs are overstocked at 19 months of stock, while all other commodities are below minimum stock levels. At district stores, female condoms, implants and POP are within minimum and maximum stock levels. Three commodities are on average overstocked: COCP at 16 months of stock; IUCDs at 34 months of stock; and ECP at 14 months of stock. Only two commodities, injectables and male condoms, are below minimum stock levels at about 2 months of stock.

Figure 36. Months of stock on hand for FP commodities on the day of visit (by product)



RECOMMENDATIONS FOR FP COMMODITIES

Recommendations for FP commodities include the following:

- *Ensure availability of recording tools.* Stock card availability was low across all facilities, with the exception of district stores. Without adequate stock card availability, the management of FP commodities for procurement and reporting becomes compromised.
- *Improve the quality of supportive supervision visits.* Approximately 40 percent of health facilities have never received supervision; even less for supervision that included commodities management. Increased frequency and quality of structured supervision can help proactively identify and address any system weaknesses or problem areas.
- *Improve facility storage condition.* There are still a significant proportion of facilities that fall within the unacceptable storage condition range, particularly at the district level. Insufficient space is an issue that needs to be addressed across all facility levels.
- *Intensify advocacy efforts for FP commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous FP commodity availability.

FINDINGS FOR CONDOMS FOR HIV PREVENTION

As the six-month pilot began just prior to data collection, this analysis only focuses on male condoms (referred to as “condoms”). Division of Environmental Health (DEH) staff were usually based at health facilities and organized by administrative boundaries, thus the analysis for this system was based on location, division and district stores. Out of 233 facilities visited, 72 facilities were implementing the condoms for HIV prevention logistics system. Many staff at the facility level did not keep separate inventory management records for FP condoms versus condoms for HIV prevention, and should be taken into consideration when reviewing these results.

Fifty-six percent of those interviewed at the facility level were implementing the system at division stores while 44 percent were responsible for location stores and lower levels. Sixty-eight percent of the district stores were found to be implementing the system.

Table 14. Percent of facilities that manage condom commodities

Facility	Manage Condom Commodities
Location Stores	44.0
Division Stores	56.0
District Stores	68.0

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

Generally, there is poor availability of stock cards at all levels for condoms (between 29 percent at location stores and 33 percent at district stores). However, results also show that at location and division stores where stock cards are available the chances of them being updated are high. This is not the case at the district stores

Table 15. Percent of facilities where stock cards are available and updated for use in managing condom commodities

Product	Location Stores		Division Stores		District Stores	
	Available	Updated	Available	Updated	Available	Updated
Male condoms	29.0	80.0	31.0	56.0	33.3	28.6

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

The accuracy of stock card balances is very poor. At no level did the number of stores with zero discrepancy exceed 35 percent. Even after adjusting the indicator to include stores with less than 10 percent discrepancy, only at location stores did the results show about 40 percent of the stores maintaining accurate balances on the stock card.

Table 16. Percentage of facilities that had accurate or near accurate balance entries on stock cards for condom commodities

Product	Location Stores		Division Stores		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
Male condoms	20.0	40.0	0.0	33.0	33.0	33.0

DETERMINING RE-SUPPLY QUANTITIES

Facilities were asked if they use a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level to assess how re-supply quantities are determined. At location stores, about 40 percent of health workers managing condom commodities reported that when ordering, they carry blank S-11 or S-12 forms which are filled in after inquiring on the availability of condoms. This could be an indication of health worker's inability to calculate their orders based on consumption or rationing at the higher level store. Ordering based on availability is seen at all levels.

UTILIZATION OF LMIS REPORTS

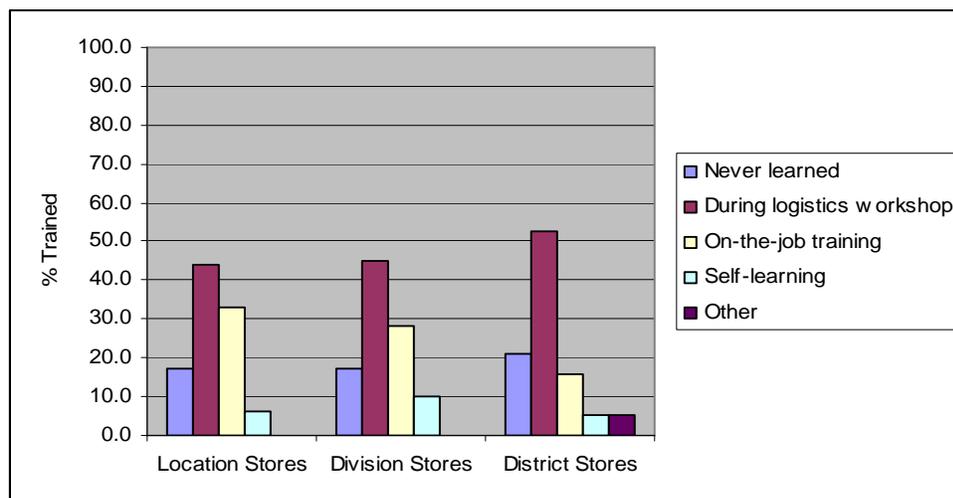
For condom commodities, Public Health Technicians (PHTs) at the location level submit their reports to Public Health Officers (PHOs) at the division level, who then prepare a division report for submission to the Deputy Public Health Officer (DPHO) at the district level. The DPHO then submits a district report to the central level. Results of the assessment indicate that the percentage of stores at all levels utilizing CDRRs is low. At the division and location levels, the percentage of stores utilizing CDRRs for condoms is less than 30 percent. Results of the assessment also show that improvised CDRRs are also used for condoms, though to a lesser extent.

PERSONNEL

TRAINING

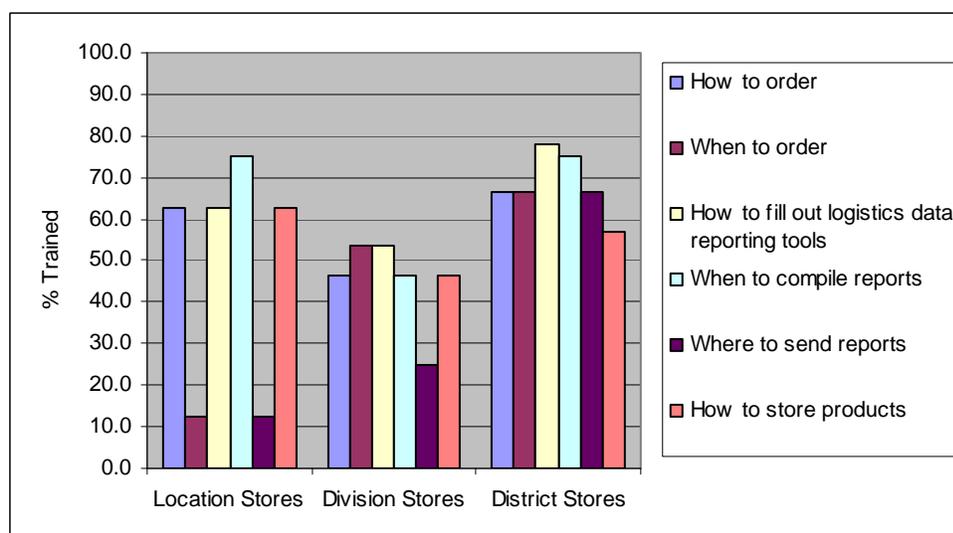
District stores have the largest percentage of commodity managers (53 percent) trained in logistics through workshops, but also the highest number who have never had any training. For the lower level stores, the percentages of commodity managers trained in workshops ranges from a high of 45 percent in division stores. Assessment findings also show that about 30 percent of commodity managers in both division and location stores have had on-the-job training. At the district stores however the percentage of providers who have had on-job-training is only about 16 percent.

Figure 37. Type of training received by condom commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks covered in the training. The majority of health workers managing condoms for HIV prevention at district stores mentioned all major tasks included in the logistics training. However, assessment results show that few were able to mention the tasks “where to send reports” (about 13 percent at location stores and 25 percent at division stores). Equally concerning is that more than half of health workers trained in logistics at the division level did not mention the following key logistics tasks: “how to order”, “when to compile reports”, “where to send reports”, and “how to store products”.

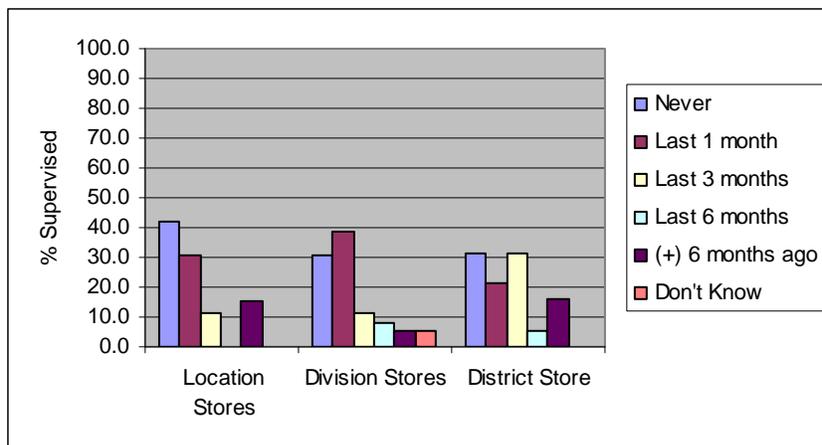
Figure 38. Main logistics tasks condom commodity managers trained on



SUPERVISION

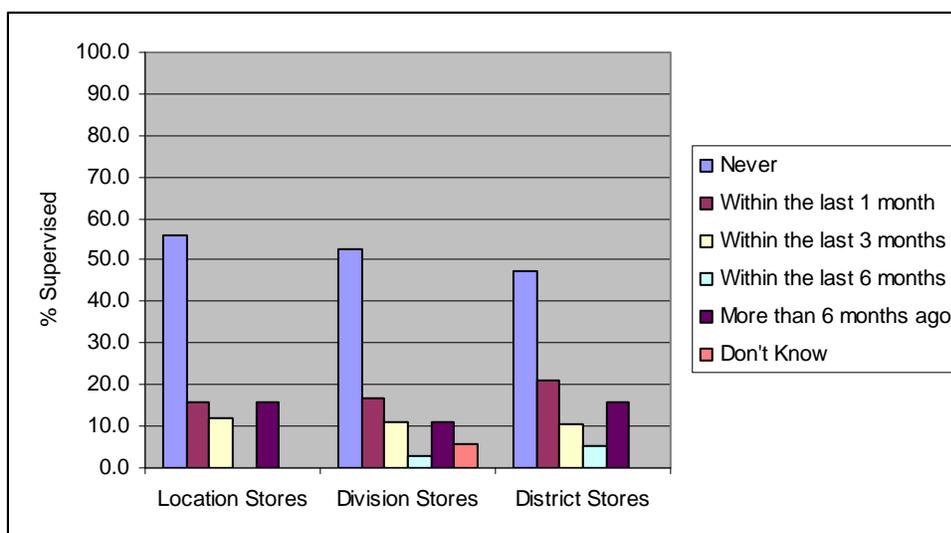
To ensure the proper functioning of the condoms for HIV prevention logistics system, the central level should make regular supervisory visits to the district stores while the DPHO should make similar visits to the division and location stores they supply with condoms. Health providers generally reported minimal supervision either from central or district level in the last 1 month (30 percent at location stores, 40 percent at division stores and 20 percent at district stores). About 30 percent of all stores have never received any supervision.

Figure 39. Percent of facilities who received a supervision visit for condom commodities



Approximately 50 percent of health workers managing condoms for HIV prevention have never received commodities management supervision.

Figure 40. Percent of facilities who received a supervision visit that included commodity management

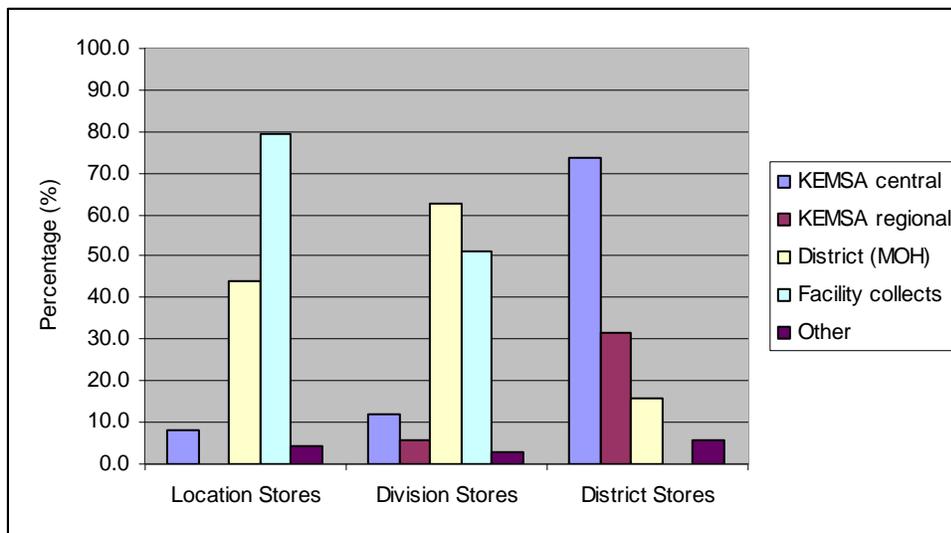


TRANSPORTATION

For the condom commodity system, the responsibility of transporting the condoms to district stores rests with KEMSA at the national level. Location and division stores on the other hand are supposed to receive their supplies from district stores. Health workers managing condoms for HIV prevention were asked who they think is responsible for transporting commodities to their facilities.

Results of the assessment show that there is confusion at all levels of the distribution system regarding who is responsible for transporting condoms for HIV prevention. Contrary to the established distribution system, a substantial number of managers at the location (79 percent) and division (51 percent) stores mentioned that it is the responsibility of their store to collect condoms from the higher level stores. At the district stores, however, receiving condoms from the central level was the most mentioned response, as stipulated by the established distribution system. Approximately 16 percent of the managers mentioned the district store was responsible for transporting condoms from the central level to their districts.

Figure 41. Responsible for transporting condom commodities to the facility



STORAGE CONDITIONS

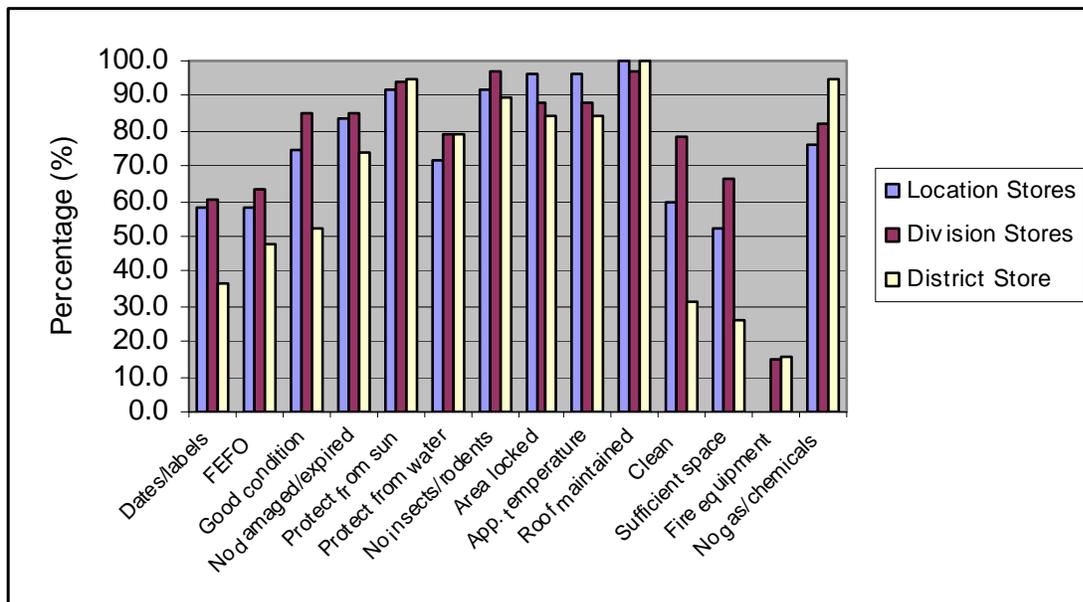
Results of the assessment revealed that district stores scored lower than other levels of stores in fulfilling acceptable storage conditions. Storage conditions in about 70 percent of district stores are unacceptable. Over half of the storage facilities fell within the acceptable range for both location and division stores. Almost half of the location stores and over 30 percent of division stores however fell within the unacceptable range.

Figure 42. Percent of facilities meeting acceptable storage conditions for condom commodities



Some of the reasons behind poor storage conditions at the district stores include: insufficient space, lack of available fire equipment, lack of storeroom cleanliness, failure to arrange products per distribution readiness, and failure to store and organize condoms in a manner accessible for First-Expiry-First-Out. For all stores the most unfulfilled condition was the availability of fire equipment.

Figure 43. Percent of facilities meeting specific storage conditions for condom commodities

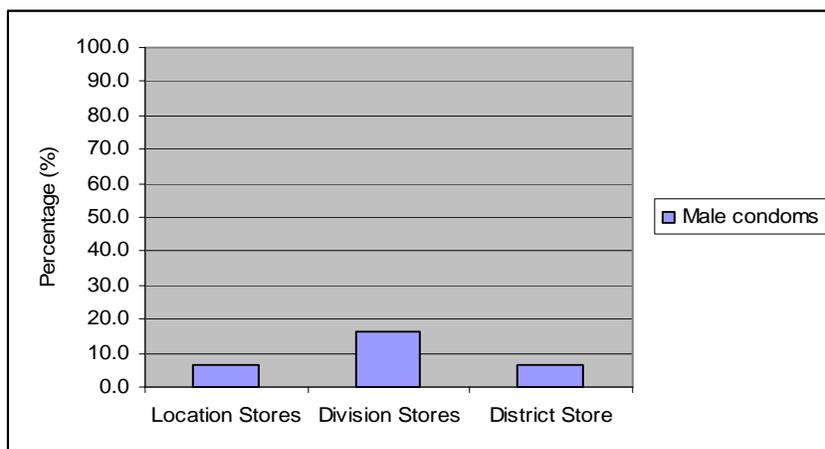


CONDOMS FOR HIV PREVENTION STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

To assess availability of condoms, care was taken to avoid counting condoms meant for family planning. Results of the assessment show that on the day of visit, condoms were available in the majority of the stores. Division stores reported the highest rate of stockouts of male condoms at 15 percent.

Figure 44. Stockouts of condom commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

Results of the assessment show all levels of stores experienced a stock out of condoms in the last six months. District stores were most affected with 50 percent experiencing a stockout. About 30 percent of location stores also experienced a stockout. This could be attributed to irregular availability of condoms at the central level and incomplete distribution as a result of inadequate information at the national level.

Figure 45. Stockouts of condom commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of male condoms, there was no difference between location, division, and district stores with regard to frequency of stockouts (1.00 each).

Table 17. Frequency of stockouts for condom commodities within the last six months (by product)

Product	Location Stores	Division Stores	District Stores
Male condoms	1.00	1.00	1.00

DURATION OF STOCKOUTS

The duration of stockouts varied according to the type of store. On average, stockout at location stores lasted for an average of 30 days, at division store for 2 days and at the district store for about 21 days.

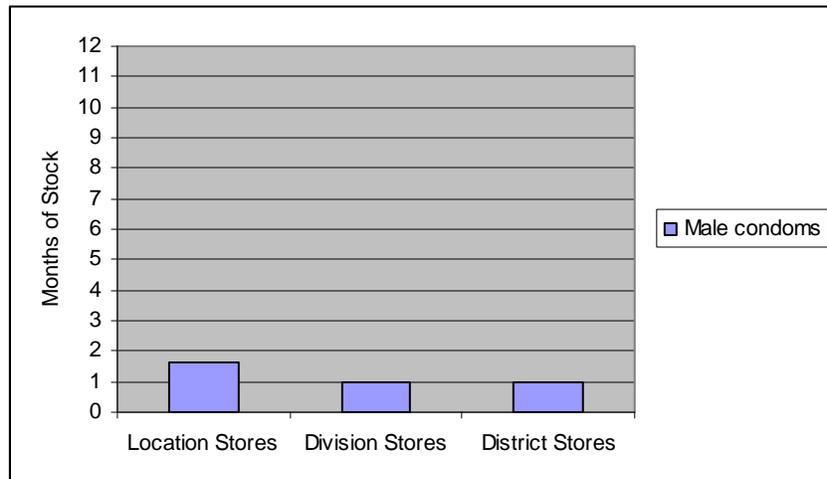
Figure 46. Average duration in days of condom commodity stockouts (by product)



MONTHS OF STOCK ON HAND

For the condoms for HIV prevention logistic system in Kenya, the minimum and maximum months of stock at the district stores are 3 and 6 months of stock respectively, while at division and location stores the minimum and maximum are 2 and 4 months respectively. As Figure 47 (below) illustrates, for all store levels, none fell within the established minimum and maximum supply levels.

Figure 47. Months of stock on hand for condom commodities on the day of visit (by product)



RECOMMENDATIONS FOR CONDOMS FOR HIV PREVENTION

Prior to the six-month pilot study, condoms were distributed in a vertical program separate from the other commodity types assessed in this report. If the MOH intention is to integrate condom distribution with other commodity types, similar recommendations outlined in other sections of this report apply. These include:

- Ensure availability of recording tools.
- Augment training for staff regarding the correct completion of recording and reporting tools.
- Improve the quality of supportive supervision visits.
- Clarify transportation responsibilities.
- Review capacity for improved facility storage condition.
- Intensify advocacy efforts for condom commodity security.

FINDINGS FOR STI/OI COMMODITIES

The 2006 assessment measured four commodities for Sexually Transmitted Infections and Opportunistic Infections (STI/OI): Benzathine Penicillin (2.4 mg); Doxycycline (100 mg); Metronidazole (200mg); and Clotrimazole (100 mg).

STI/OI commodities are managed throughout the four tiers of the health care system. Of those facilities included in the survey, 66 percent of dispensaries, 90 percent of health centers, 86 percent of hospitals, and 78 percent of district stores managed STI/OI commodities, as indicated in Table 18 (below).

Table 18. Percent of facilities that manage STI/OI commodities

Facility	Manage Malaria Commodities
Dispensary	65.7
Health Centers	90.4
Hospitals	86.2
District Stores	77.8

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

Availability of stock cards for STI/OI commodities was extremely low for all facility levels, with the exception of district stores, whose availability averaged approximately 60 percent or higher. Though updates of stock cards for all facilities averaged between 50 and 90 percent, this must be weighed against the relative low availability of stock cards throughout the system. In general, dispensaries had the lowest percentage of stock cards available and updated across all facilities. In addition, no single STI/OI commodity stands out significantly as having a higher or lower average of stock card availability than others.

At the dispensary level, stock card availability ranged from approximately 13 percent to 17 percent for all commodities; stock cards updated ranged from approximately 50 percent to 67 percent. At the health center level, stock card availability ranged from approximately 22 percent to 24 percent; stock cards updated ranged from approximately 79 percent to 90 percent. At the hospital level, stock card availability was at approximately 15 percent for all commodities, with stock cards updated at a range of approximately 75 percent to 88 percent. At the district store, stock card availability was at 62 percent for all commodities, with stock cards updated within a range of approximately 83 percent to 87 percent. The relative consistency at both the hospital and district store levels for stock card availability/updating may in part be attributable to the package of STI/OI commodities, which are packaged as kits and include a set number of all four commodities within each kit. STI/OI commodities sent to the lower levels would often be sent as separate commodities as opposed to entire kits.

The following table illustrates the current situation for stock cards available versus updated for each STI/OI commodity separately for each facility. The data represented is based on facilities that manage the product and had stock cards available and updated.

Table 19. Percent of facilities where stock cards are available and updated for use in managing STI/OI commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	Available	Updated	Available	Updated	Available	Updated	Available	Updated
Benzathine Penicillin	15.2	57.1	23.5	90.0	15.1	87.5	62.2	82.6
Doxycycline	17.4	50.0	23.8	80.0	15.1	75.0	62.2	87.0
Metronidazole	17.4	57.1	23.8	81.0	15.1	87.5	62.2	87.0
Clotrimazole	13.0	66.7	22.4	78.9	15.1	87.5	62.2	87.0

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

In general, district stores and dispensaries demonstrated the highest percentages of facilities with accurate stock card balances across all commodities. However there was no discernable trend among facility levels in terms of accuracy or near accuracy.

In the case of dispensaries, between 50 and 60 percent had accurate stock card balances. As the near accurate balance for all commodities was the same as the accurate balances indicates that the remainder of stock card balances is greater than the 10% margin. At health centers, accurate stock card balances were slightly lower, ranging from approximately 20 to 56 percent for all commodities. Near accurate balances for all commodities increased the range to between 31 and 72 percent for all commodities. For hospitals, the range of accurate stock card balances ranged from approximately 38 percent to 67 percent; near accurate balances increased to a range of 43 to 67 percent for all commodities. At the district store level, there was a greater differential between accurate and near accurate balances. Accurate stock card balances were at approximately 68 percent for all commodities and near accurate balances increased to approximately 73 percent for all commodities.

Table 20. Percentage of facilities that had accurate or near accurate balance entries on stock cards for STI/OI commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
Benzathine Penicillin	60	60	55.6	72.2	37.5	50	68.2	72.7
Doxycycline	60	60	38.9	44.4	66.7	66.7	68.2	72.7
Metronidazole	60	60	44.4	50	42.9	42.9	68.2	72.7
Clotrimazole	50	50	18.8	31.3	57.1	57.1	68.2	72.7

DETERMINING RE-SUPPLY QUANTITIES

Facilities were asked if they used a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level to assess how re-supply quantities are determined. Approximately 26 percent of dispensaries, 47 percent of health centers, and 27 percent of hospitals ordered re-supplies utilizing blank S-11 and S-12 forms.

UTILIZATION OF LMIS REPORTS

Logistics data and information for STI/OI commodities is not effectively moving up through the health system through the use of either the CDRR or improvised reports. Utilization of the CDRR is only at 52

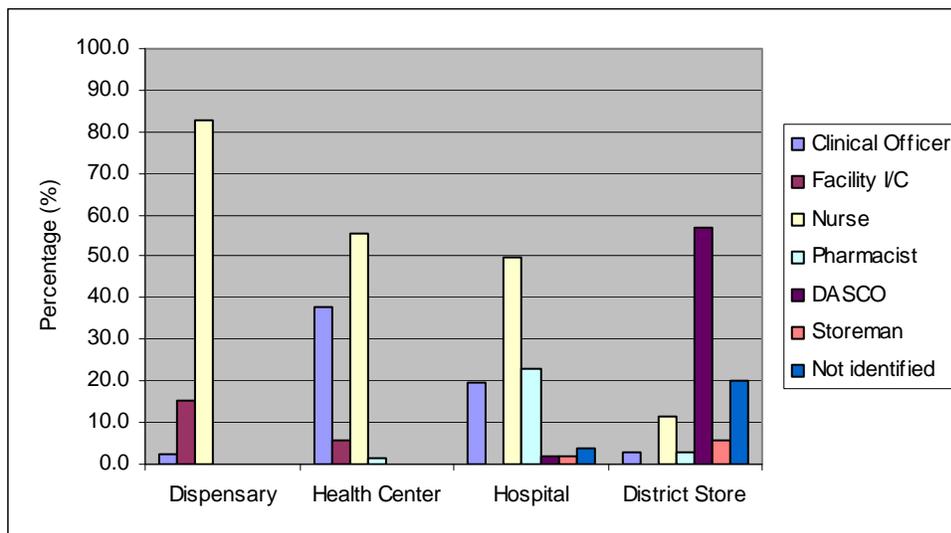
percent for districts stores, dropping to 29 percent at hospitals, 25 percent at health centers, and 24 percent at dispensaries.

PERSONNEL

COMMODITY MANAGEMENT

At the facility level, STI/OI commodities are primarily managed by nurses: 83 percent at dispensaries, 55 percent at health centers, and 50 percent at hospitals. Clinical officers at health centers and pharmacists at hospitals are the next highest percentage of personnel managing these commodities (38 percent and 23 percent respectively). At the district store level, the majority of personnel managing STI/OI commodities are DASCO's, at 57 percent.

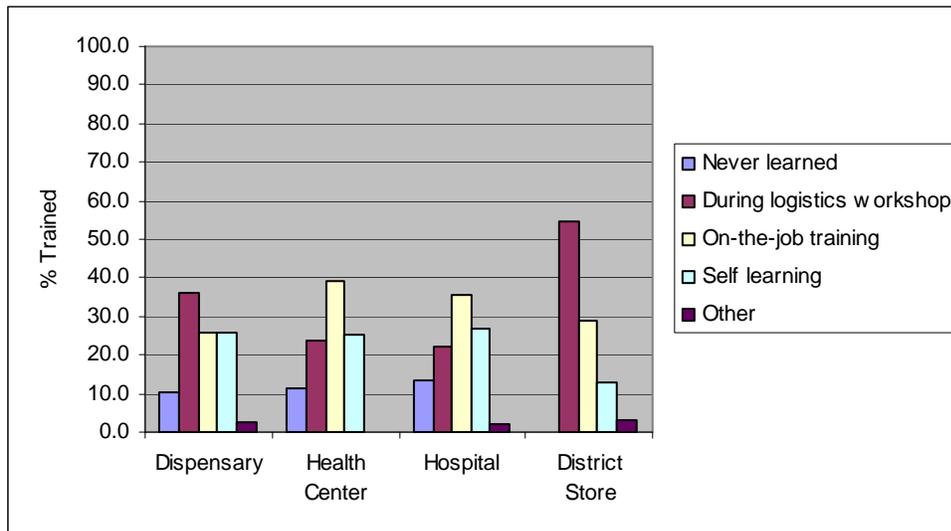
Figure 48. Percent of facility personnel managing STI/OI commodities



TRAINING

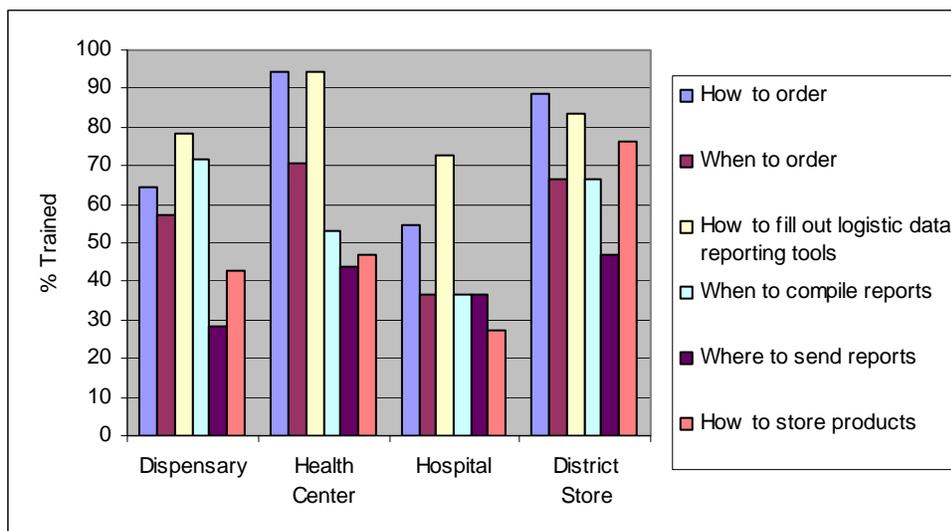
There exists a mix regarding training between facility levels. Only between 10 and 13 percent of commodity managers reported that they had never learned how to complete the forms and records. Among the facility levels, most commodity managers at dispensaries learned during a logistics workshop (36 percent), whereas commodity managers at health centers learned primarily through on-the-job training (39 percent). For commodity managers at hospitals, again the majority learned through on-the-job training (36 percent), and at district stores, the majority learned primarily during a logistics workshop (55 percent).

Figure 49. Type of training received by STI/OI commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. For dispensaries, “how to fill out logistics data reporting” was the most mentioned task (79 percent), with “where to send reports” the least mentioned task (29 percent). For health centers, both “how to fill out logistics data reporting” and “how to order received” (94 percent), with “where to send reports” also the least mentioned task (44 percent). For hospitals, “how to fill out logistics data reporting” was the most mentioned task, receiving 73 percent, with “how to store products” the least mentioned task (27 percent). For district stores, “how to order” was the most mentioned task, at 89 percent, with “where to send reports” the least mentioned task (47 percent).

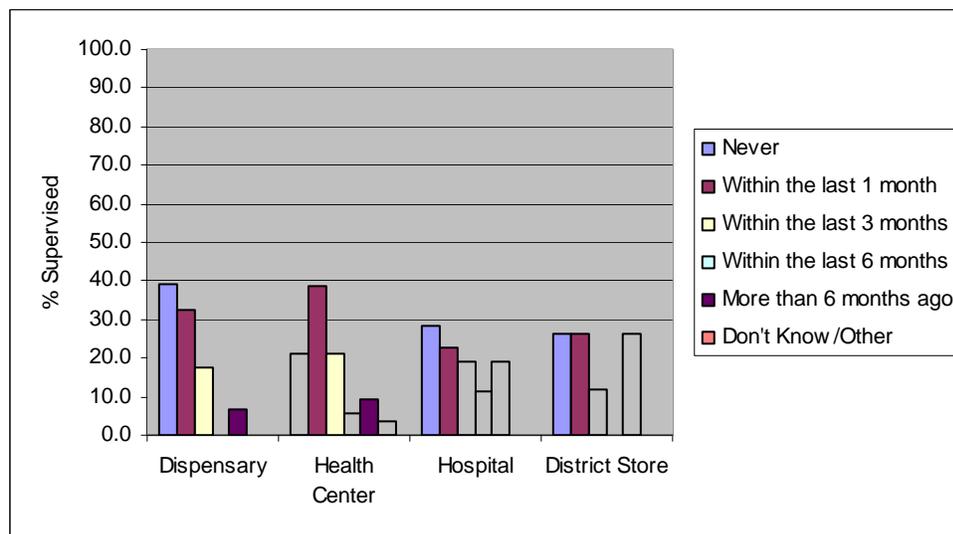
Figure 50. Main logistics tasks STI/OI commodity managers trained on



SUPERVISION

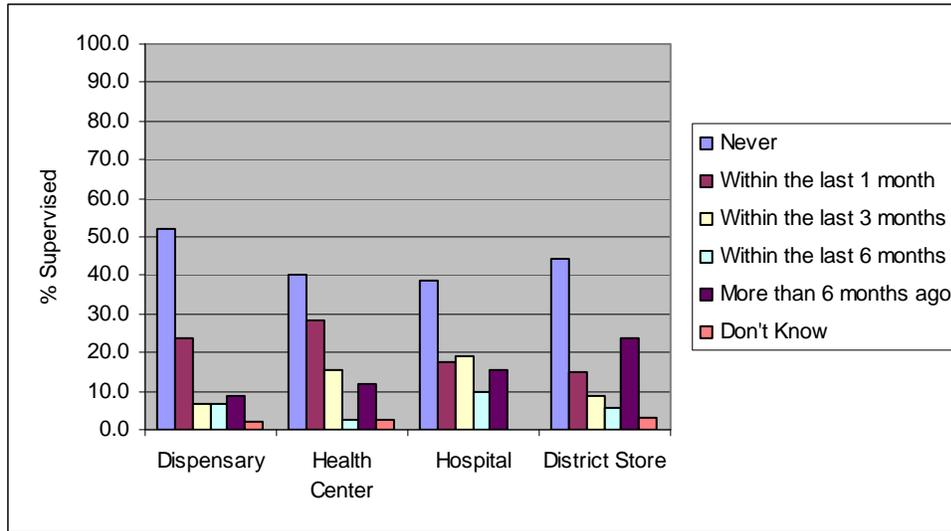
A substantial proportion of facilities have never received a supervision visit, with dispensaries the highest (39 percent). However, the majority of facilities have received a supervision visit within the last 1 to 3 months (60 percent of health centers, 50 percent of dispensaries, 42 percent of hospitals, and 38 percent of district stores).

Figure 51. Percent of facilities who received a supervision visit for STI/OI commodities



The situation regarding supervision that included commodities management however is of slightly greater concern. An even greater number of facilities reported never having received supervision that included commodities management, at over 50 percent of dispensaries, 44 percent of district stores, 40 percent of health centers, and 39 percent of hospitals. In addition, facilities that have received supervision that included commodities management also drops significantly within the most recent 1 to 3 month timeframe, at 44 percent for health centers, 30 percent for dispensaries, 37 percent for hospitals, and 24 percent for district stores.

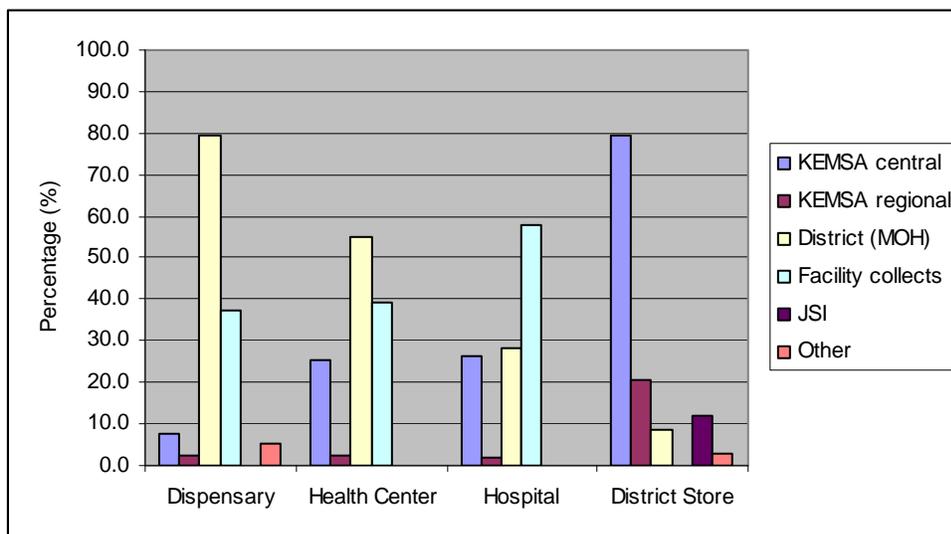
Figure 52. Percent of facilities who received a supervision visit that include commodity management



TRANSPORTATION

STI/OI commodity managers at the dispensary level report that they perceive the responsibility of transporting STI/OI commodities rests with the district (MOH) (80 percent), followed by the facility itself collecting (38 percent). At health centers, again the perception of respondents was the responsibility for transport rests primarily with the district and the facility collection, at 55 percent and 39 percent respectively. In contrast, at the hospital level, the majority of respondents indicated that primary responsibility for commodity transport lies with the facility collecting (58 percent). For the district store, KEMSA central and KEMSA regional both constitute the largest proportion of commodity transport responsibility according to respondents, at 79 percent and 21 percent respectively.

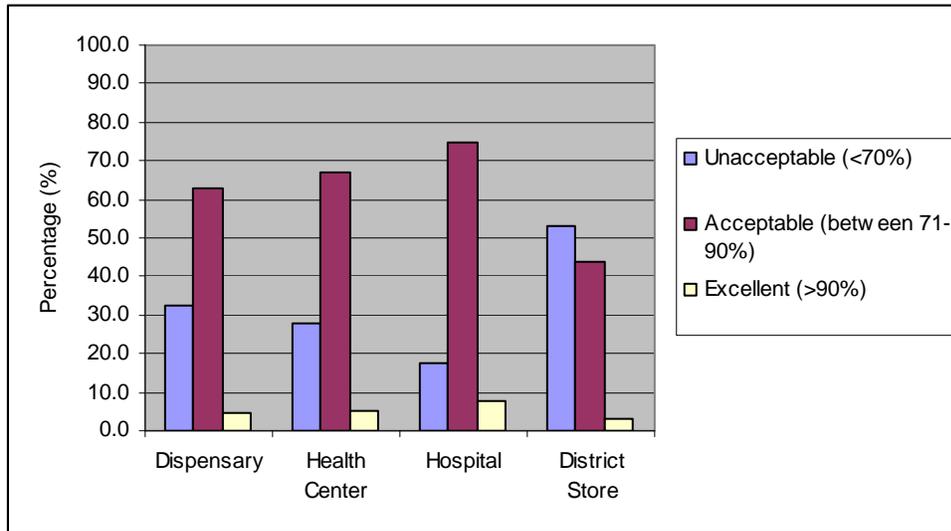
Figure 53. Responsible for transporting STI/OI commodities to the facility



STORAGE CONDITIONS

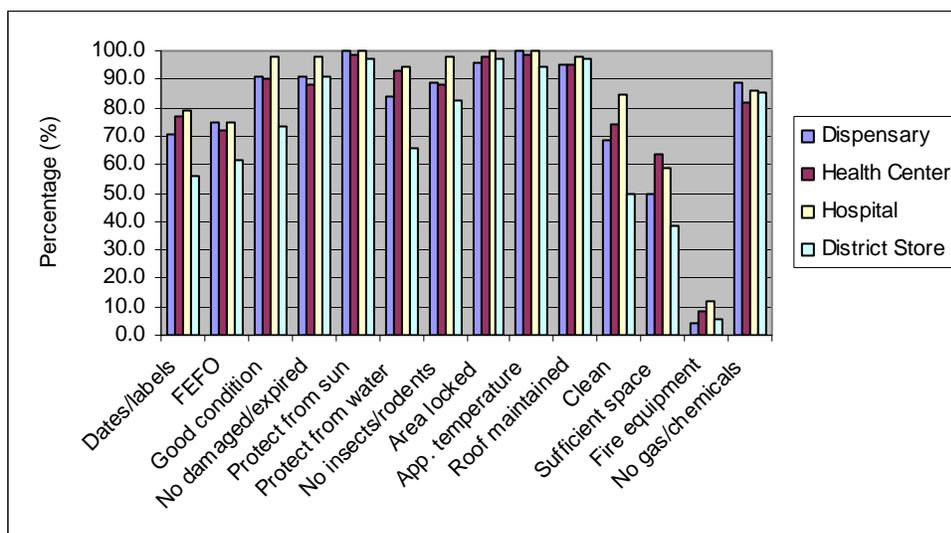
At three of the four facility types visited, the majority met acceptable standards, at 63 percent for dispensaries, 67 percent for health centers, and 75 percent for hospitals. The majority of district stores, however, fell into the unacceptable range, at 53 percent.

Figure 54. Percent of facilities meeting acceptable storage conditions for STI/OI commodities



The top three conditions most satisfied by all facilities included protection from sunlight, appropriate room temperature, and a locked storage area. All four types of facilities shared the same least satisfied conditions, which included lack of product date and label visibility, lack of available fire equipment, insufficient space, lack of storeroom cleanliness, and lack of organization by First-Expiry-First-Out.

Figure 55. Percent of facilities meeting specific storage conditions for STI/OI commodities

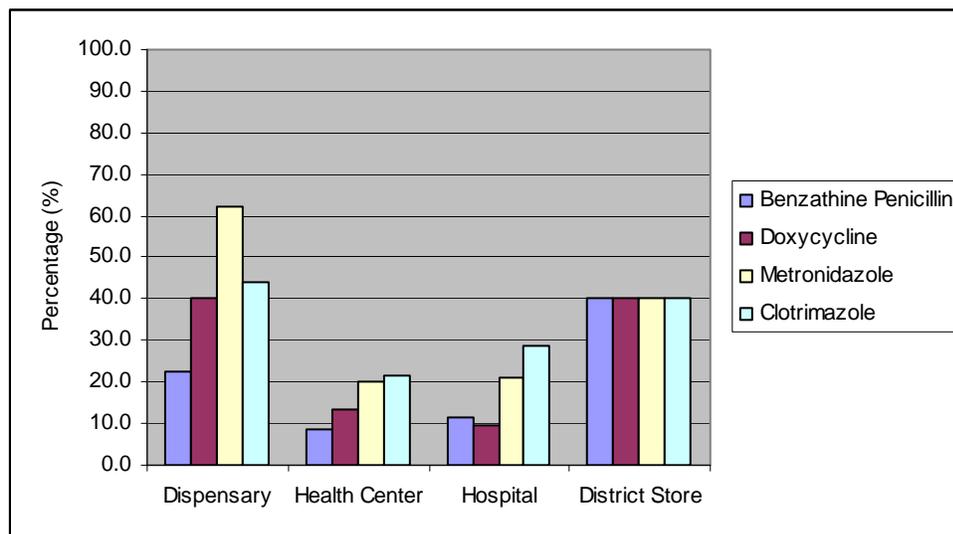


ST/OI STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

There were a greater number of stockouts at dispensaries, followed by district stores. District stores experienced a 40 percent stockout of all commodities on the day of visit. Among all facilities, Metronidazole experienced the highest level of stockouts, at 62 percent at dispensaries, 20 percent at health centers, and 21 percent at hospitals. This was followed by Clotrimazole, with 44 percent stockouts at dispensaries, and 21 percent at health centers. Benzathine penicillin and Doxycycline, the most common and most used antibiotic treatments, experienced the highest level of stockouts at the dispensary level, at 23 percent and 40 percent respectively.

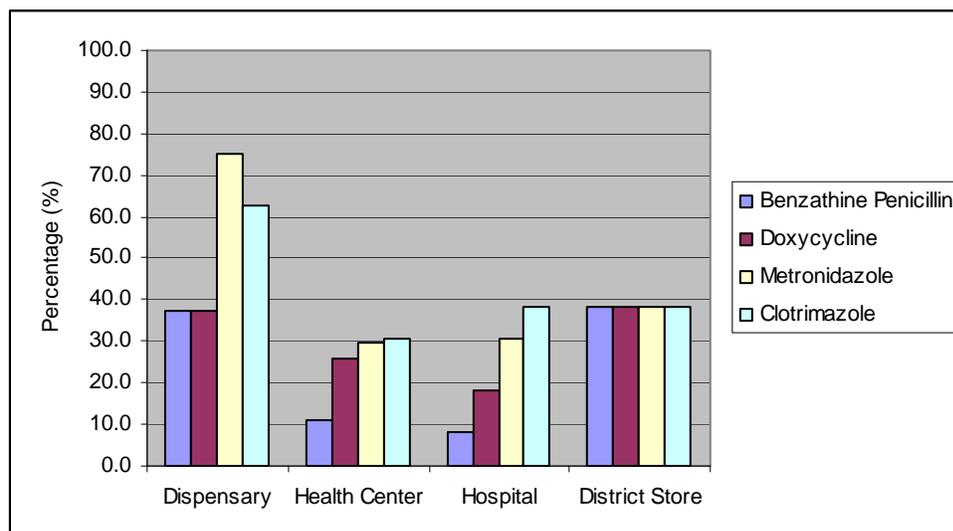
Figure 56. Stockouts of ST/OI commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

During the last six months, dispensaries and district stores experienced the highest level of stockouts. Metronidazole and Clotrimazole were stocked out at most dispensaries and higher level facilities (75 percent and 63 percent respectively). District stores experienced 38 percent of all commodities stocked out. There was also on average higher levels of stockouts during the last six months for Benzathine penicillin and Doxycycline at all facilities.

Figure 57. Stockouts of STI/OI commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of STI/OI commodities, stockouts occurred on average slightly more frequently at the health center and district store levels.

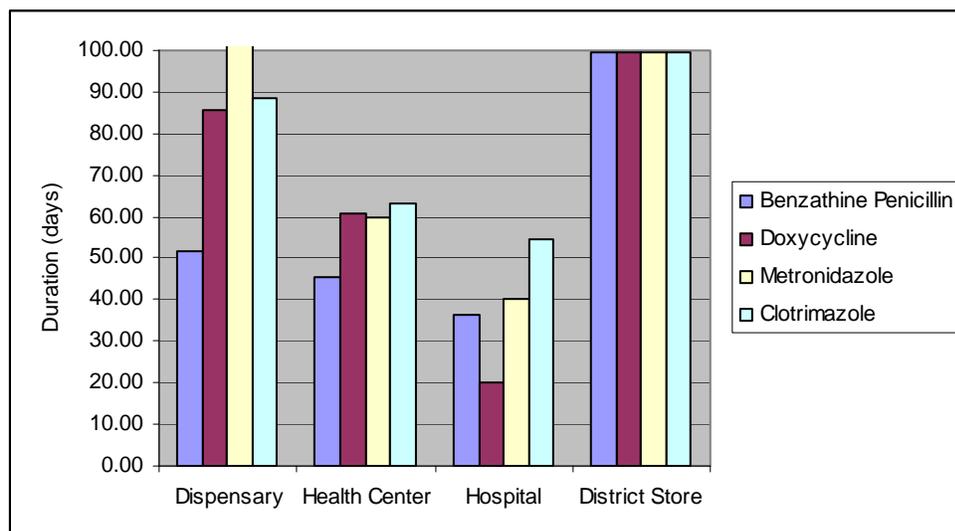
Table 21. Frequency of stockouts for STI/OI commodities within the last six months (by product)

Product	Dispensaries	Health Centers	Hospitals	District Stores
Benzathine Penicillin	1.00	1.00	1.00	1.13
Doxycycline	1.00	1.14	1.00	1.13
Metronidazole	1.00	1.25	1.00	1.13
Clotrimazole	1.00	1.13	1.20	1.13

DURATION OF STOCKOUTS

The average duration of stockout of STI/OI commodities was again found to be highest at the district store level, at an average of 100 days for all commodities. This was followed by dispensaries (82 days); health centers (57 days); and hospitals (39 days). Again, Metronidazole and Clotrimazole in general had a slightly higher average duration of days of stockouts among all four types of STI/OI commodities.

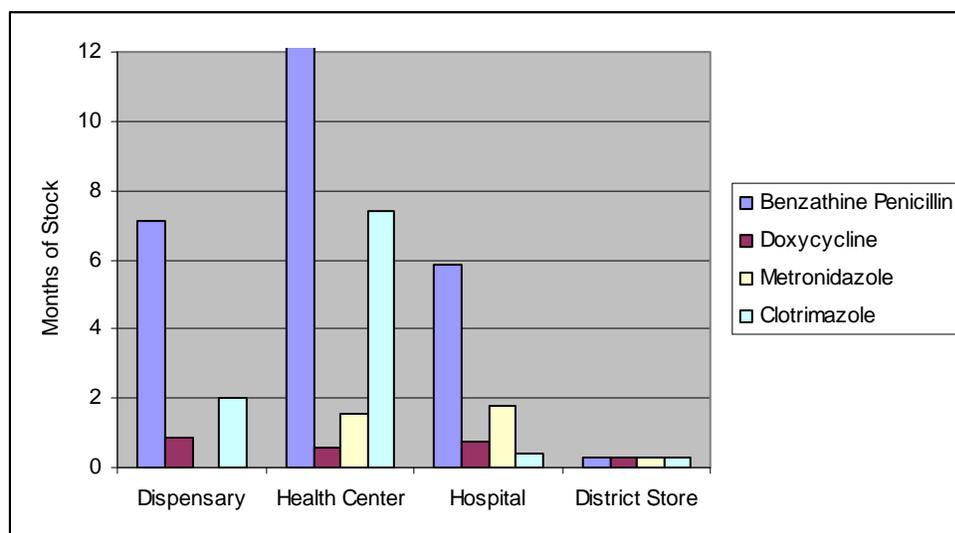
Figure 58. Average duration in days of STI/OI commodity stockouts (by product)



MONTHS OF STOCK ON HAND

In the case of STI/OI commodities in the Kenyan system, minimum stock levels for facilities are 1 month and maximum stock levels are 2 months. For district stores, minimum stock levels are 3 months and maximum stock levels are 4 months. None of the commodities at the district store level achieved minimum levels of stock, with the exception of Clotrimazole at the dispensary level. In addition, Benzathine Penicillin at the health center level is grossly overstocked, with approximately 65 months of stock on hand.

Figure 59. Months of stock on hand for STI/OI commodities on the day of visit (by product)



RECOMMENDATIONS FOR STI/OI COMMODITIES

Recommendations for the STI/OI system include the following:

- *Ensure availability of recording tools.* Stock card availability was extremely low across all facilities. This in part may be attributable to receiving STI/OI re-supply quantities in kits. Without adequate stock card availability, the management of STI/OI commodities for procurement and reporting becomes compromised.
- *Augment training for staff regarding the correct completion of recording and reporting tools.* Although the majority of respondents reporting they learned how to complete logistics forms and records at a logistics workshop or through on-the-job training, the updating of stock cards, accuracy of balance entries, and use of CDRR reports remains low throughout the system. Intensified efforts, including training through logistics workshops and on-the-job training, on how to complete related forms and records is needed to address this gap.
- *Improve the quality of supportive supervision visits.* Although a substantially high proportion of STI/OI commodity managers reported receiving a supervision visit in the last 1-3 months, continuous improvement of structured supervision can help proactively identify and address any system weaknesses or problem areas.
- *Clarify transportation responsibilities.* The findings show a lack of clarity regarding who is responsible for transporting TB commodities throughout the system. Currently, between 39 and 76 percent of health facility staff continue to collect TB commodities from higher levels. This practice often leaves facilities understaffed. A system for PTLC and DTLC deliveries and vehicle use needs to be tracked at the central level. Roles and responsibilities regarding the transport need to be clarified at all levels throughout the system.
- *Improve facility storage condition.* Although the majority of health facilities achieved acceptable storage condition levels, improvements need to be made at the district stores in particular.
- *Intensify advocacy efforts for STI/OI commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous STI/OI commodity availability.

FINDINGS FOR HIV TEST KITS AND BLOOD SAFETY COMMODITIES

Eight HIV test kit and blood safety commodities were measured in the 2006 assessment: Determine, SD Bioline, Uni-Gold, RPR, Hepatitis B, Hepatitis C, Vironistika, and CD4/CD8.

All levels of the system manage HIV test kit commodities, though less at the dispensary level (36 percent), than at the health center (78 percent), hospital and district store level (both at 98 percent).

Table 22. Percent of facilities that manage HIV test kit commodities

Facility	Manage HIV Test Kit Commodities
Dispensary	35.7
Health Centers	78.1
Hospitals	98.5
District Stores	97.7

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

Stock cards are available for Determine, SD Bioline, Uni-Gold, and RPR at all four levels, but substantially lower at the dispensary level (between 13 and 35 percent) and highest at the district store level (between 71 and 91 percent). Where stock cards are available, stock cards were updated at an average of 5 percent or higher across all facility levels, with district stores again the highest levels of updating (between 80 and 90 percent).

Four commodities (Hepatitis B, Hepatitis C, Vironistika, and CD4/CD8) are available only at the hospital and district store level. Stock card availability is less consistent, with availability at hospitals quite poor (between 11 and 30 percent), and higher at district stores. Where stock cards are available, a substantial portion of stock cards were updated at both levels.

Table 23. Percent of facilities where stock cards are available and updated for use in managing HIV test kit commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	Available	Updated	Available	Updated	Available	Updated	Available	Updated
Determine	24.0	60.0	38.7	65.5	65.6	70.7	90.5	89.5
SD Bioline	35.0	50.0	37.1	69.2	66.1	76.2	90.5	89.5
Uni-Gold	21.4	50.0	32.3	57.1	62.3	69.2	83.3	80.0
RPR	12.5	100.0	8.6	66.7	30.0	60.0	71.1	81.5
Hepatitis B	-	-	-	-	11.4	50.0	37.5	88.9
Hepatitis C	-	-	-	-	14.3	100.0	40.0	100.0
Vironistika	-	-	-	-	20.0	100.0	50.0	75.0
CD4/CD8	-	-	-	-	17.6	100.0	27.3	100.0

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

Accurate and near accurate balances where commodities are available were relatively low across all facility levels. There were no accurate balances or near accurate balances at the dispensary level, with the exception of Uni-Gold, which had 100 percent accuracy. Uni-Gold had the highest level of accuracy across the remaining facilities as well. Accurate balances were particularly low at the hospital and district store levels.

Table 24. Percentage of facilities that had accurate or near accurate balance entries on stock cards for HIV test kit commodities

Product	Dispensaries		Health Centers		Hospitals		District Stores	
	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%	0%	w/in 10%
Determine	0.0	0.0	45.5	45.5	18.8	21.9	26.5	35.3
SD Bioline	0.0	0.0	40.9	45.5	26.5	38.2	20.6	38.2
Uni-Gold	100.0	100.0	57.1	57.1	67.9	67.9	75.4	82.8
RPR	0.0	0.0	66.7	66.7	27.3	27.3	36.4	40.9
Hepatitis B	-	-	-	-	-	-	66.7	66.7
Hepatitis C	-	-	-	-	-	-	75.0	75.0
Vironistika	-	-	-	-	-	-	66.7	66.7
CD4/CD8	-	-	-	-	-	-	33.3	33.3

DETERMINING RE-SUPPLY QUANTITIES

Facilities were asked if they used a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level to assess how re-supply quantities are determined. One hundred percent of hospitals utilized blank S-11 and S-12 forms.

UTILIZATION OF LMIS REPORTS

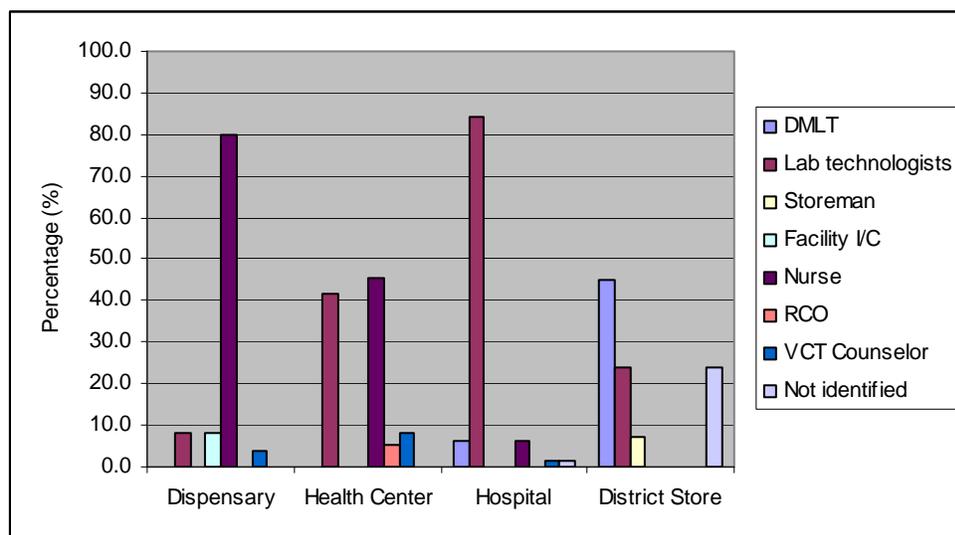
Logistics data and information for HIV test kits, through the use of either the CDRR or improvised reports, is effectively moving up through the health system. Utilization of the CDRR is highest at the hospital and district levels, at 91 percent and 90 percent respectively, with usage at health centers (75 percent) also high. No improvised reports are utilized in the HIV test kit commodity system.

PERSONNEL

COMMODITY MANAGEMENT

At the dispensary and health center levels, HIV test kits are managed primarily by nurses (80 percent and 45 percent respectively). At the hospital level, primary management switches to lab technologists (at almost 85 percent), and the DMLT at the district store level (almost 45 percent).

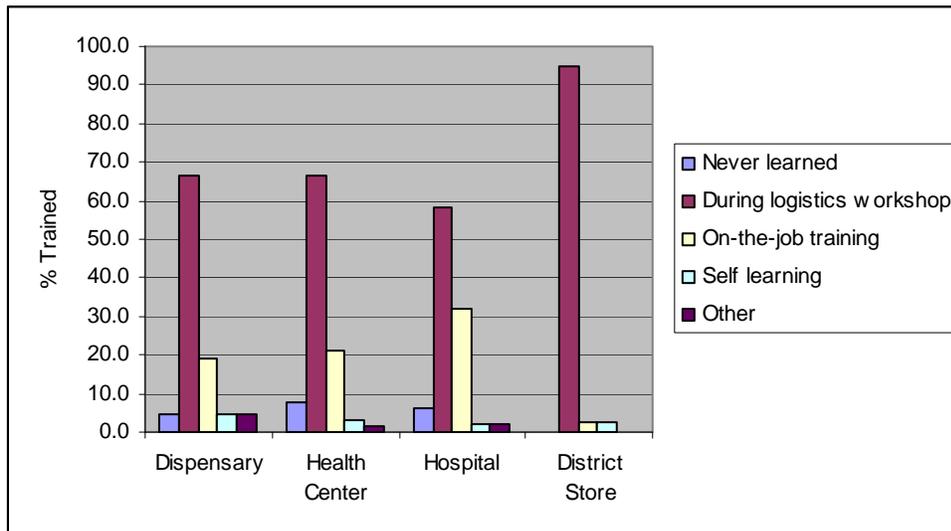
Figure 60. Percent of facility personnel managing HIV test kit commodities



TRAINING

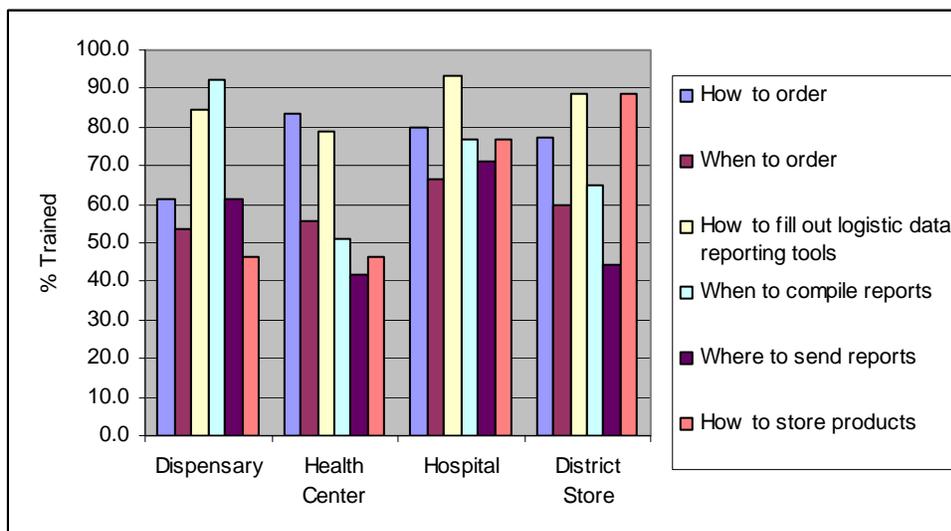
The majority of HIV test kit managers reported they learned how to complete logistics forms and reports during a logistics training workshop (from over 58 to over 95 percent at all levels). A significant remaining proportion at the dispensary, health center, and hospital levels report they learned how to complete the forms through on-the-job training.

Figure 61. Type of training received by HIV test kit commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. All tasks were mentioned by a significant proportion of respondents. For dispensaries, “how to store the product” was the least mentioned task (46 percent) and “how to fill out logistics forms and reports” the most mentioned task (85 percent). For health centers, “where to send reports” was the least mentioned (42 percent) and “how to order” the most mentioned task (84 percent). For hospitals, “when to order” was the least mentioned task (67 percent), and “how to fill out logistics forms and reports” the most mentioned (93 percent). At the district store, the least mentioned was “where to send reports” (44 percent) and the most mentioned were “how to fill out logistics forms and reports” and “how to store products” (both at 89 percent)

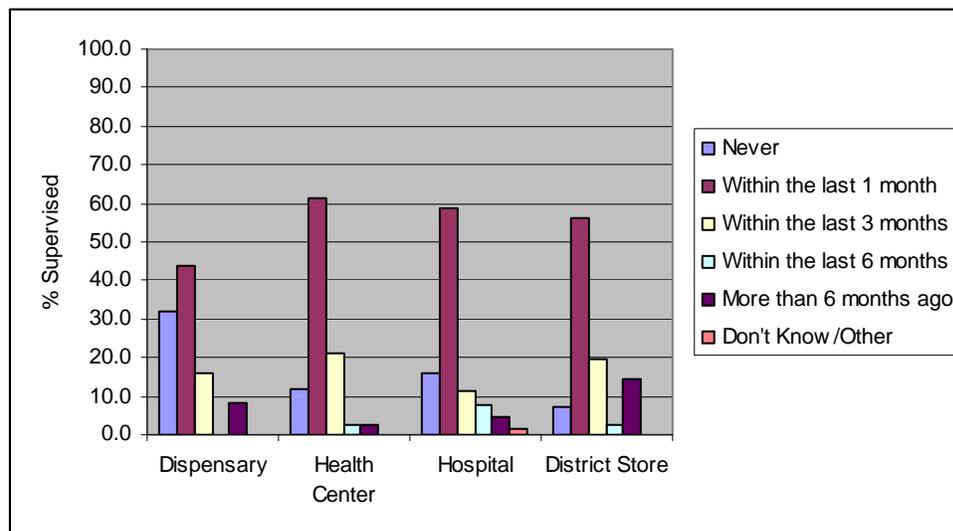
Figure 62. Main logistics tasks HIV test kit managers trained on



SUPERVISION

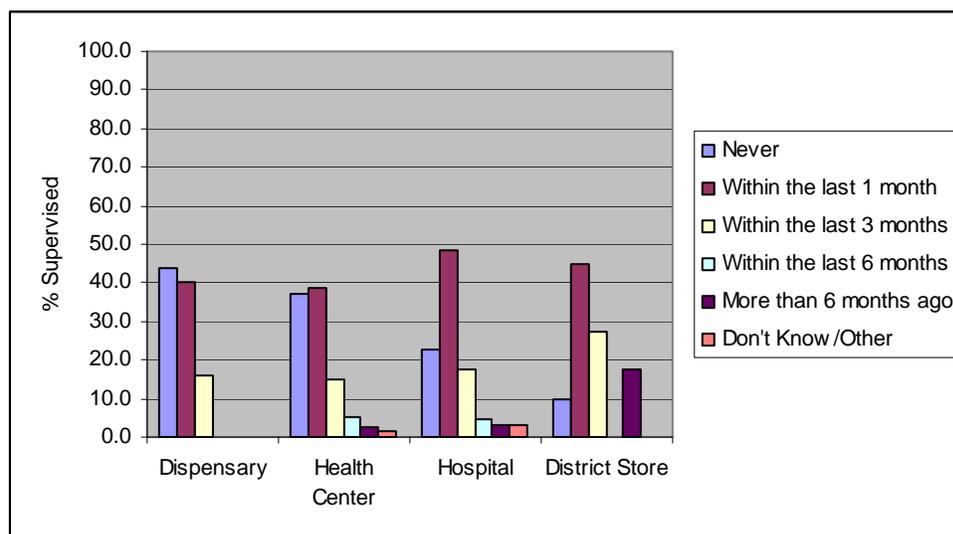
The assessment revealed that the majority of respondents received a supervision visit within the last month. A significant proportion of respondents at the dispensary level however did respond they have never received a supervision visit (32 percent).

Figure 63. Percent of facilities who received a supervision visit for HIV test kit commodities



Respondents who received commodities management supervision visit drops somewhat, though a significant proportion of respondents at all levels still report having received this type of visit within the last 1 month. However, a significant proportion of respondents, especially at the dispensary and health center level, also report having never received a commodities management supervision visit.

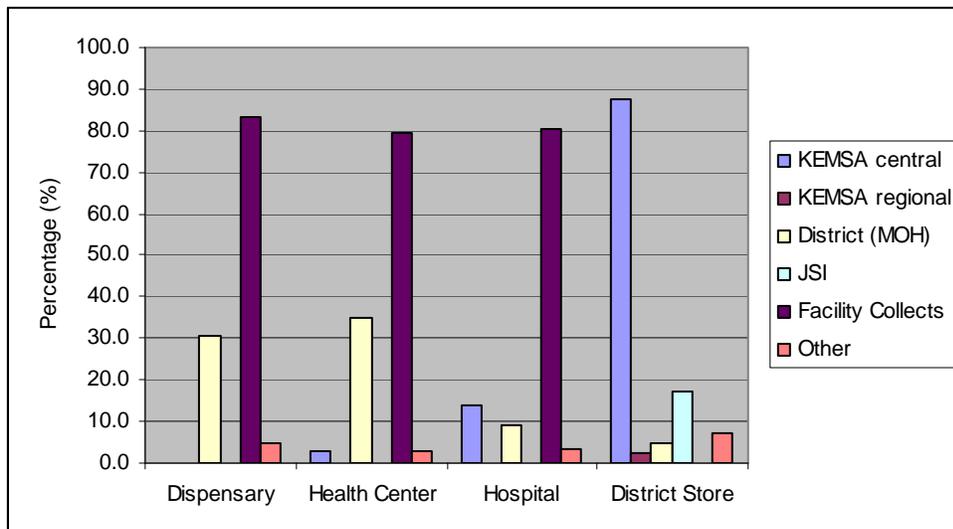
Figure 64. Percent of facilities who received a supervision visit that included commodity management



TRANSPORTATION

At health facilities, 80 percent or higher report that the facility is responsible for collecting test kits. At district stores, respondents indicate that primary responsibility rests with KEMSA central.

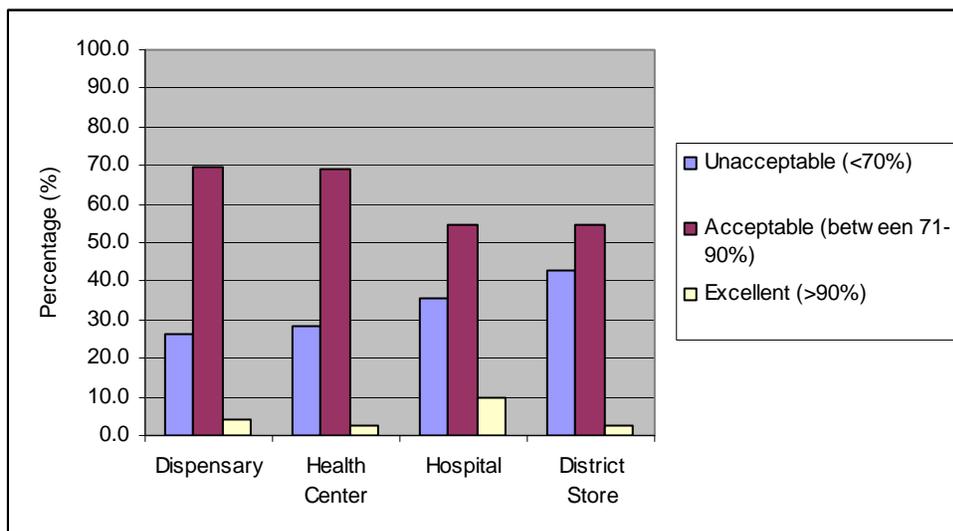
Figure 65. Responsible for transporting HIV test kit commodities to the facility



STORAGE CONDITIONS

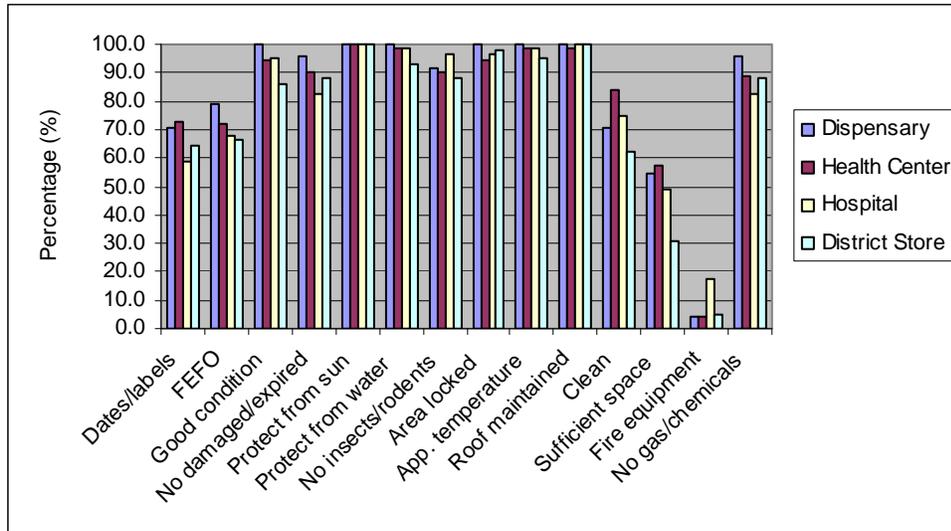
The majority of facilities fell within the acceptable range of storage conditions (55 to 70 percent), though a substantial proportion also fell within the unacceptable range (between 26 and 43 percent).

Figure 66. Percent of facilities meeting acceptable storage conditions for HIV test kit commodities



The highest rated storage conditions met for all facility levels included protection from sunlight, roof maintained, and appropriate room temperature. All four facility levels rated lowest on availability of fire equipment and sufficient space.

Figure 67. Percent of facilities meeting specific storage conditions for HIV test kit commodities

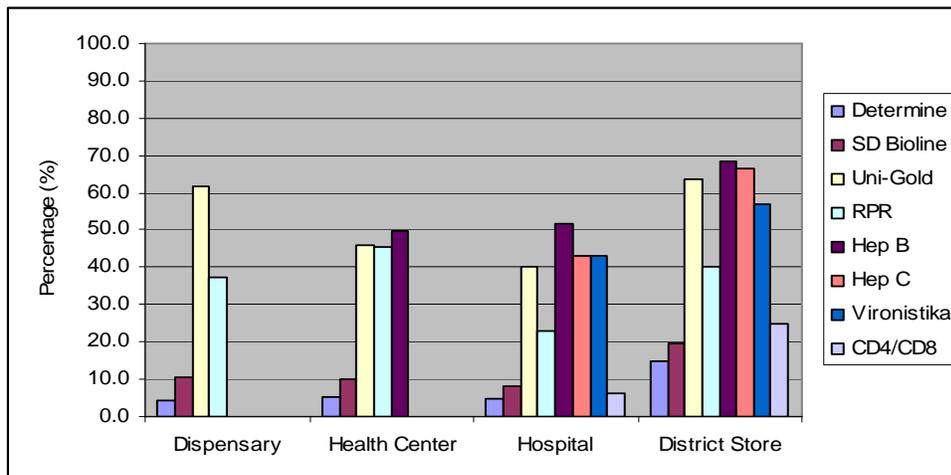


HIV TEST KIT STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

In general, stockouts on the day of visit were highest at district stores, and at the hospital level, with Uni-Gold the most stocked out among all four facilities. Stockouts were also high for Hepatitis B and C, Vironistika, and CD4/CD8 at the hospital and district stores.

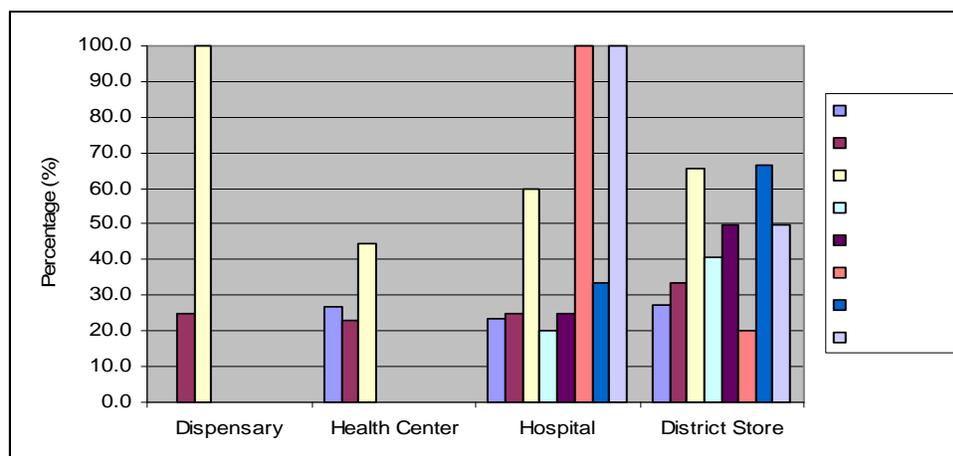
Figure 68. Stockouts of HIV test kit commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

During the six-month period prior to the assessment, there were stockouts at all levels. At dispensaries, Uni-Gold was stocked out at 100 percent. Stockouts in the last six months were most significant at hospitals and district stores.

Figure 69. Stockouts of HIV test kit commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of HIV test kit commodities, the frequency of stockouts was in general highest at the hospital level (approximately 2 times for most commodities). The frequency of stockouts was lowest at the dispensary level.

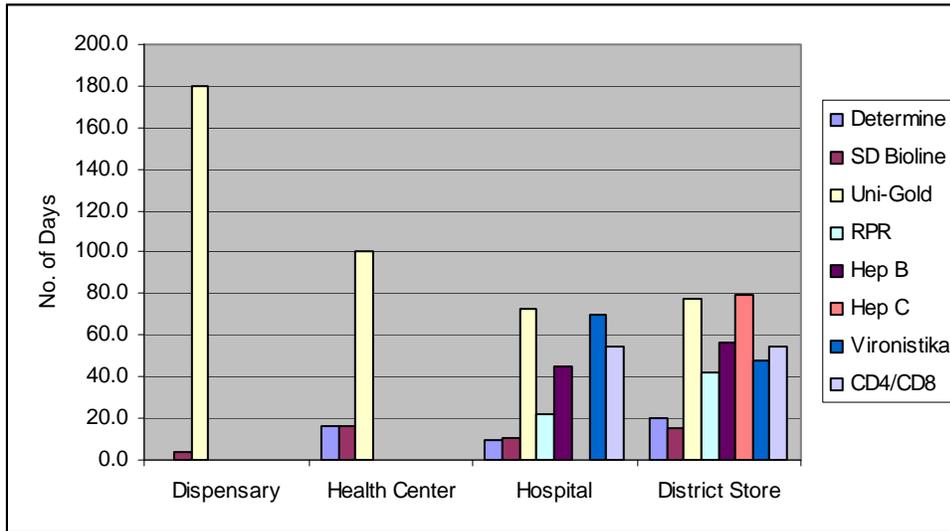
Table 25. Frequency of stockouts for HIV test kit commodities within the last six months (by product)

Product	Dispensaries	Health Centers	Hospitals	District Stores
Determine	-	1.86	2.00	1.44
SD Bioline	1.00	1.17	1.56	1.18
Uni-Gold	1.00	1.25	1.72	1.47
RPR	-	-	2.50	1.75
Hepatitis B	-	-	1.00	1.00
Hepatitis C	-	-	2.00	1.00
Vironistika	-	-	2.00	1.25
CD4/CD8	-	-	2.25	-

DURATION OF STOCKOUTS

The average duration of stockout was highest for Uni-Gold at all levels (180 days at dispensaries, 100 days at health centers, 72 days at hospitals, and 78 days at district stores).

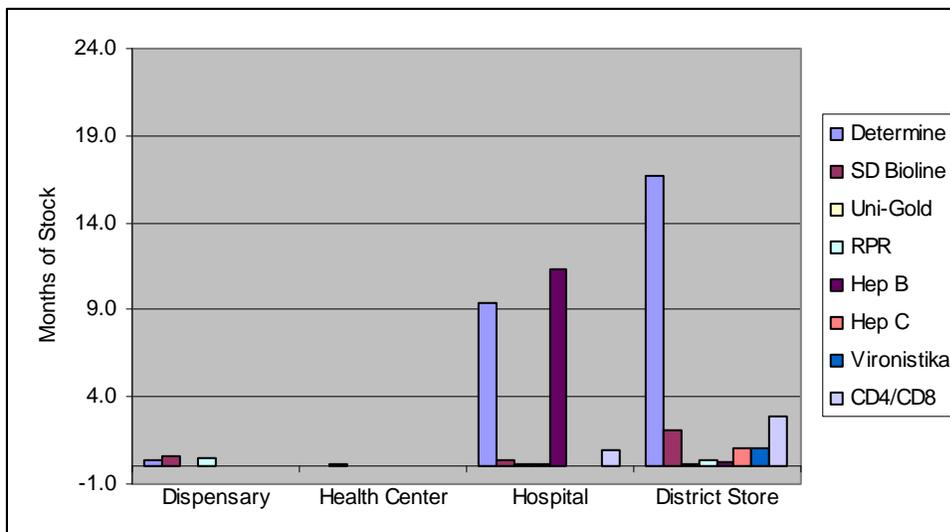
Figure 70. Average duration in days of HIV test kit commodity stockouts (by product)



MONTHS OF STOCK ON HAND

In the case of HIV test kit commodities, the minimum stock level for district stores is 2 months and the maximum stock level is 4 months. For health facilities, the minimum stock level is 1 month and the maximum is 2 months. No commodities at the dispensary or health center level fell within this range. Only CD4/CD8 at the hospital level fell in this range and only SD Bioline and CD4/CD8 fell within the appropriate range at the district store level. Most commodities were understocked at all levels.

Figure 71. Months of stock on hand for HIV test kit commodities on the day of visit (by product)



RECOMMENDATIONS FOR HIV TEST KITS

Recommendations for the HIV test kit system include the following:

- *Ensure availability of recording tools.* Stock card availability was relatively low across most levels, with the exception of district stores. Without adequate stock card availability, the management of test kit commodities for procurement and reporting becomes compromised.
- *Increase the frequency of supervision visits that include inventory management at all levels of the system.* Though a relatively high number of respondents receive supervision, this percentage drops when considering supervision that includes commodities management. Supervision visits provide a key opportunity for logistics concepts to be reinforced, to strengthen the skills of service providers, and address problems within the system. Increased structured supervision will help address this gap.
- *Improve storage conditions.* Though the majority of facilities had acceptable storage conditions, all facilities fell short with respect to sufficient space and availability of fire equipment. Addressing these particular areas of weaknesses could be managed through regular and structured supervision visits.
- *Intensify advocacy efforts for HIV test kit commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous HIV test kit commodity availability.

FINDINGS FOR ARV COMMODITIES

ARV commodities measured in the 2006 survey include: Diflucan (200 mg), d4T/3TC/NVP (30/150/200 mg), d4T/3TC/NVP (40/150/200 mg), d4T/3TC (30/150 mg), d4T/3TC (40/150 mg), d4T (15 mg), Nevirapine suspension (20ml).

ARV commodities can be found only at health centers and hospitals. As ARVs are distributed directly from the central level, they do not pass through the district stores, and as such, the results in this section will consider ARV commodities at these two levels only. Of those facilities included in the survey, approximately 4 percent of health centers and almost 77 percent of hospitals manage ARV commodities.

Table 26. Percent of facilities that manage ARV commodities

Facility	Manage ARV Commodities
Dispensary	0.0
Health Centers	4.4
Hospitals	76.6

LOGISTICS MANAGEMENT PRACTICES

STOCK CARDS AVAILABLE AND UPDATED

The situation for stock card availability and updating at the health center and hospital levels was very good. At health centers, 75 percent of all commodities had stock cards available, and 100 percent of those stock cards were updated. At hospitals, most commodities had stock cards available (between 71 and 77 percent), with the exception of Diflucan (at 48 percent) and Nevirapine Suspension (at 25 percent). Updated stock cards were generally high for all ARVs (between 81 to 90 percent), again with the exception of Nevirapine Suspension (at 50 percent) and Diflucan (at 70 percent)

Table 27. Percent of facilities where stock cards are available and updated for use in managing ARV commodities

Product	Health Centers		Hospitals	
	Available	Updated	Available	Updated
Diflucan	0.0	-	47.6	70.0
d4T/3TC/NVP 30/150/200	75.0	100.0	73.5	80.6
d4T/3TC/NVP 40/150/200	75.0	100.0	73.5	80.6
d4T/3TC 30/150	75.0	100.0	71.4	82.9
d4T/3TC 40/150	75.0	100.0	71.4	85.7
d4T 15	0.0	-	76.9	90.0
Nevirapine Suspension	0.0	-	25.0	50.0

ACCURATE AND NEAR ACCURATE BALANCES ON STOCK CARDS

At the health center level, none of the stock cards had accurate balances; however, between 17 and 60 percent of stock cards did fall within an acceptable range of 10%. For hospitals, four commodities had accurate balance entries for stock cards, ranging from 22 to 100 percent. A significant total proportion did also have near accurate balance entries for stock cards, ranging from 33 to 100 percent.

Table 28. Percentage of health centers that had accurate or near accurate balance entries on stock cards for ARV commodities

Product	Health Centers		Hospitals	
	0%	w/in 10%	0%	w/in 10%
Diflucan	-	-	22.2	33.3
d4T/3TC/NVP 30/150/200	0.0	25.7	66.7	45.7
d4T/3TC/NVP 40/150/200	0.0	17.1	33.3	37.1
d4T/3TC 30/150	0.0	37.5	33.3	46.9
d4T/3TC 40/150	0.0	45.5	0.0	54.5
d4T 15	0.0	60	0.0	80
Nevirapine Suspension	-	-	100	100

DETERMINING RE-SUPPLY QUANTITIES

Facilities were asked if they used a blank S-11 or S-12 form to fill out order quantities based on product availability at a higher level in order to assess how re-supply quantities are determined. One hundred percent of hospitals utilized the blank S-11 and blank S-12 forms, while 0 percent of health centers did. The fact that no health centers utilized blank S-11 and S-12 forms is consistent within the vertical system for ARVs, as commodities are pushed from the central level to health centers based on patient load, making requests for commodities unnecessary.

UTILIZATION OF LMIS REPORTS

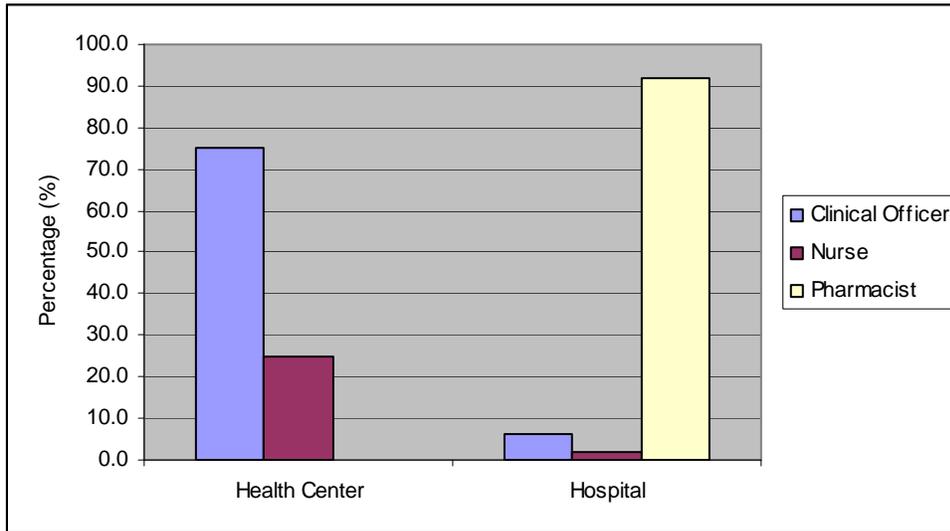
Logistics data and information for ARV commodities appears to be moving up through the system fairly effectively through the use of the CDRR reports. Utilization of the CDRR is at 75 percent at the health center level and almost 94 percent at the hospital level. Neither health centers nor hospitals utilize improvised forms.

PERSONNEL

COMMODITY MANAGEMENT

At health centers, ARV commodities are primarily managed by clinical officers (75 percent), with some management by nurses (25 percent). At the hospital level, pharmacists are by far the primary managers for ARV commodities at almost 92 percent.

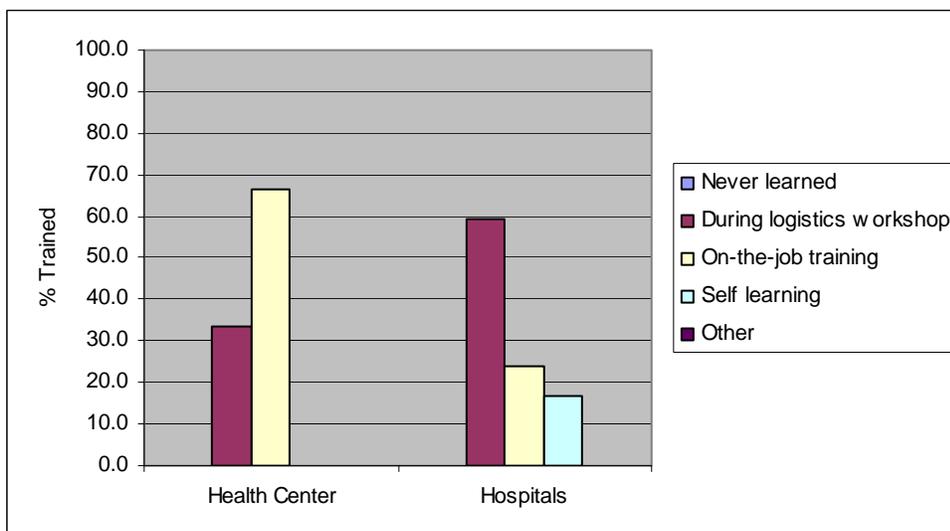
Figure 72. Percent of facility personnel managing ARV commodities



TRAINING

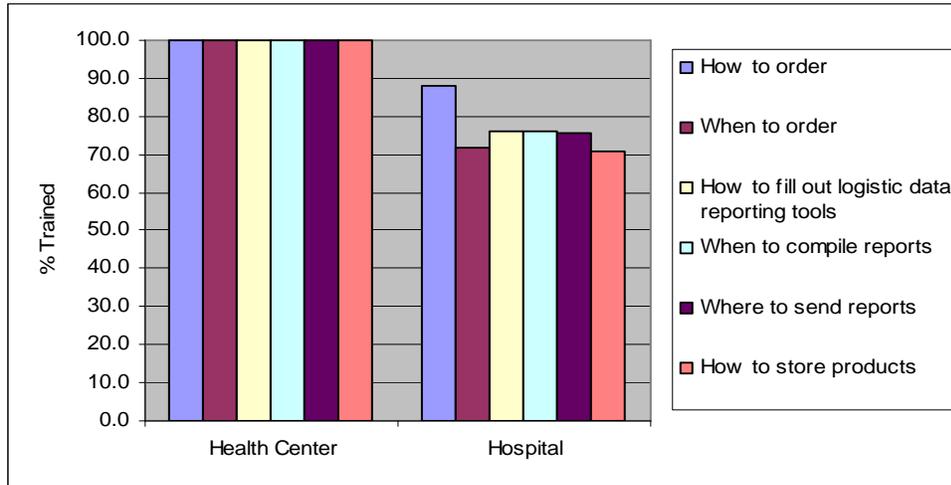
Both facility types received training at either a logistics workshop or through on-the-job training. However, the majority of health center personnel learned through on-the-job training (67 percent) and then through a logistics training workshop (33 percent). The reverse is true for hospital level staff, which learned primarily through a logistics training workshop (60 percent) and then on-the-job training (17 percent). Though a small percentage of hospital level staff reported they learned through self-learning (17 percent), one very positive result is that neither health center or hospital level staff reported they had never learned.

Figure 73. Type of training received by ARV commodity managers



Commodity managers trained in logistics through workshops were also assessed on their ability to mention the various tasks that they were taught during the training. Results were fairly consistent for both health center and hospital level staff. An average of around 75 percent of hospital personnel reported they had been trained on all six tasks covered in the survey. In the case of health center staff, 100 percent of trained staff mentioned they had been trained on all six tasks.

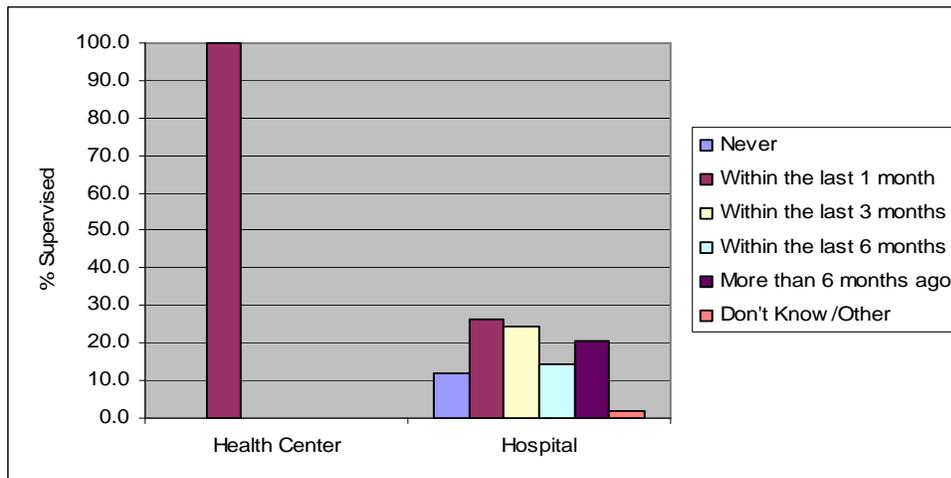
Figure 74. Main logistics tasks ARV commodity managers trained on



SUPERVISION

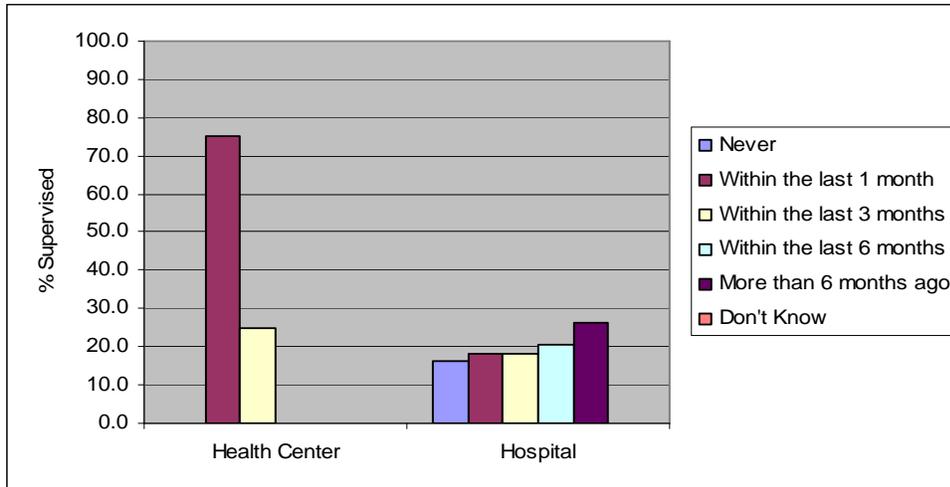
At health centers, 100 percent of personnel reported having received a supervision visit within the last month. However the situation at the hospital level is markedly different. While the majority report having received supervision within the last month (51 percent), over 20 percent report having received a supervision visit over 6 months ago and 12 percent report having never received a supervision visit.

Figure 75. Percent of facilities who received a supervision visit for ARV commodities



In the case of commodities management supervision, the situation is somewhat similar. A high percentage of health centers reported receiving commodities management supervision within the last month (75 percent), with approximately 25 percent having received this type of visit within the last 3 months. At the hospital level, the majority of facilities report having received commodities management supervision visit 6 or more months ago (50 percent), followed by within the last 1 to 3 months (37 percent). In addition 16 percent report never having received a supervision visit that included commodities management.

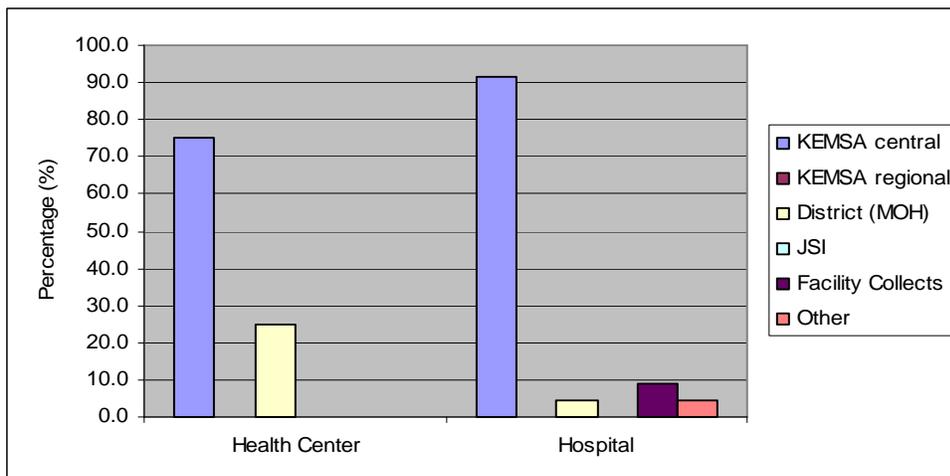
Figure 76. Percent of facilities who received a supervision visit that included commodity management



TRANSPORTATION

The majority of hospitals and health centers reported receiving ARV commodities directly from KEMSA central (92 and 75 percent respectively).

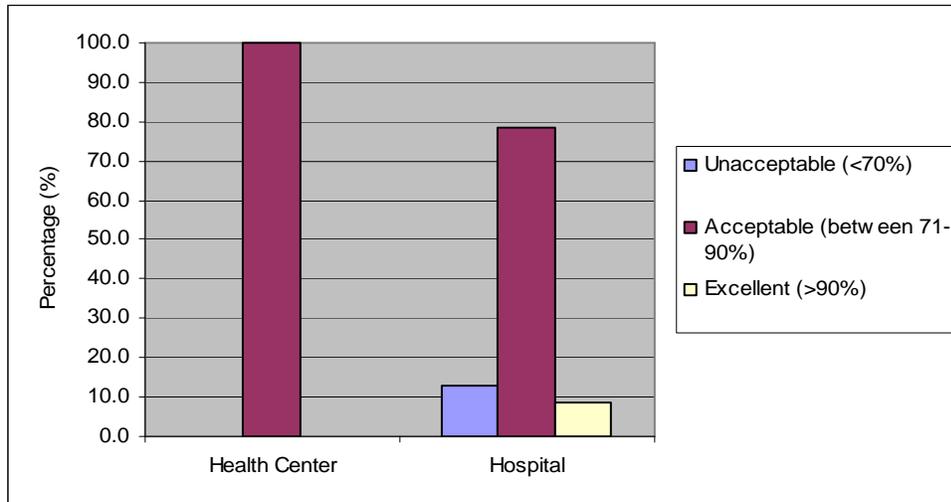
Figure 77. Responsible for transporting ARV commodities to the facility



STORAGE CONDITIONS

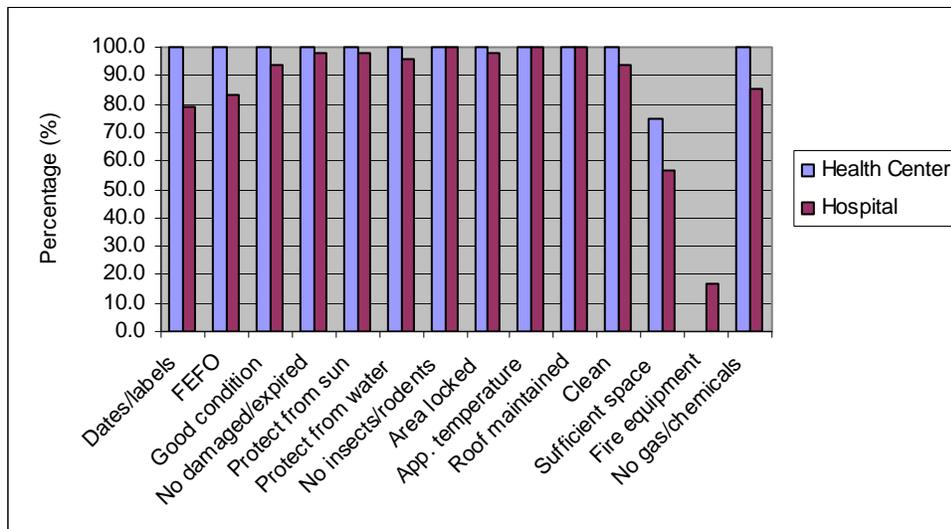
The vast majority of both health centers and hospitals met acceptable storage conditions (100 percent and 79 percent respectively). The percent of hospitals with unacceptable conditions was small (13 percent).

Figure 78. Percent of facilities meeting acceptable storage conditions for ARV commodities



The top three conditions most satisfied by both facilities included no harmful insects/bats/rodents, appropriate room temperature, and roof maintained. The only conditions not met by health centers included sufficient space and fire equipment available. The lowest three conditions reported for hospitals included fire equipment available, sufficient space, and dates/labels visible.

Figure 79. Percent of facilities meeting specific storage conditions for ARV commodities

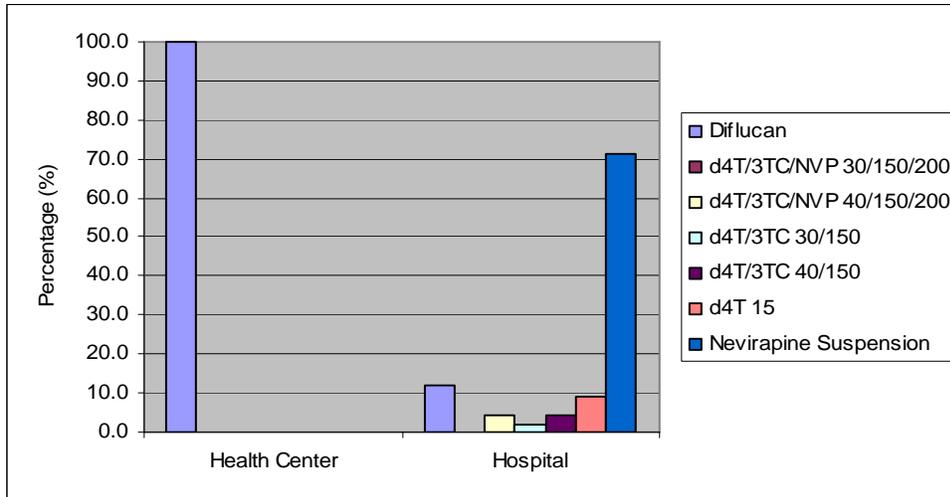


ARV STOCK AVAILABILITY

STOCKOUTS ON DAY OF VISIT

At the health center level, Diflucan was the only ARV commodity stocked out (at 100 percent). At the hospital level, there were no stock outs of d4T/3TC/NVP (30/150/200), and small stockouts of the remaining commodities, with the exception of Nevirapine Suspension, which was stocked out in 71 percent of hospital sites.

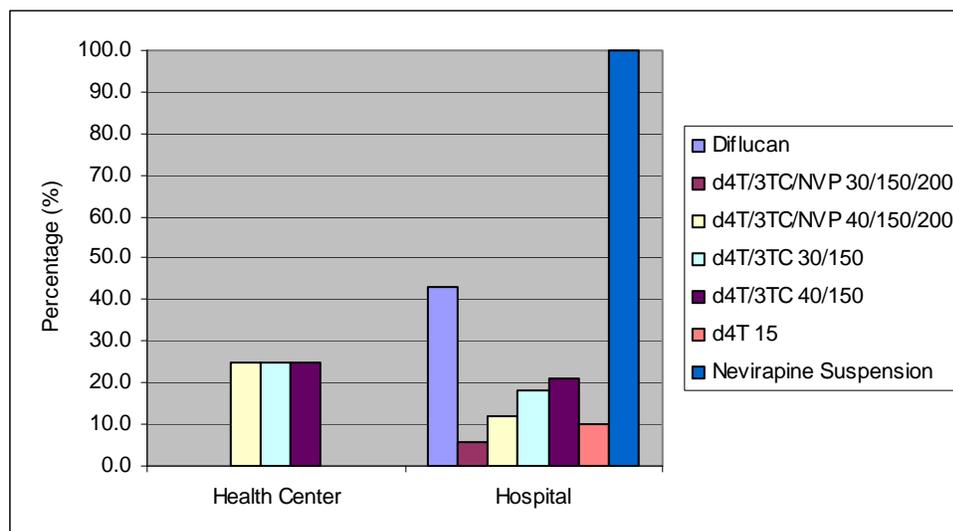
Figure 80. Stockouts of ARV commodities on the day of visit (by product)



STOCKOUTS WITHIN LAST SIX MONTHS

In the previous six months, both health centers and hospitals experienced stockouts of several commodities. Stock outs for d4T/3TC/NVP (40/150/200), d4T/3TC (30/150), and d4T/3TC (40/150) were found at 25 percent of the health centers. One hundred percent of hospitals had stockouts of Nevirapine Suspension within the prior six month period, and 43 percent were stocked out of Diflucan during that same period.

Figure 81. Stockouts of ARV commodities within the last six months (by product)



FREQUENCY OF STOCKOUTS

In the case of ARV commodities, stockouts occurred on average slightly more frequently at hospitals than health centers, with d4T/3TC 30/150 the commodity most frequently stocked out at health centers and d4T/3TC/NVP 40/150/200 at hospitals.

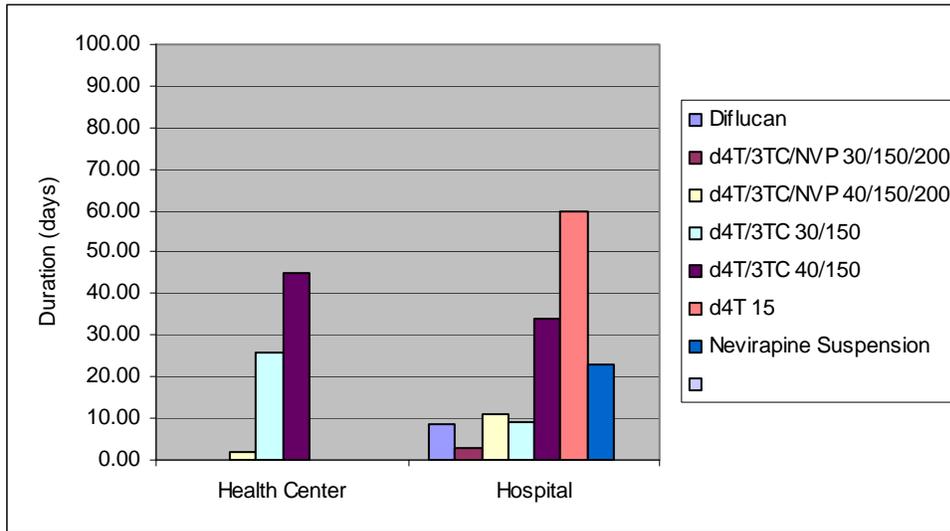
Table 29. Frequency of stockouts for ARV commodities within the last six months (by product)

Product	Health Centers	Hospitals
Diflucan	-	1.00
d4T/3TC/NVP 30/150/200	-	1.00
d4T/3TC/NVP 40/150/200	1.00	1.25
d4T/3TC 30/150	2.00	1.17
d4T/3TC 40/150	1.00	1.14
d4T 15	-	1.00
Nevirapine Suspension	-	1.00

DURATION OF STOCKOUTS

The average duration of stockouts of ARV commodities was found to be slightly higher at the health center level, with an average of 24 days for all commodities, as opposed to 21 days at hospitals. However the number of days stocked out for a single commodity was higher at the hospital level (60 days), than at the health center level (45 days).

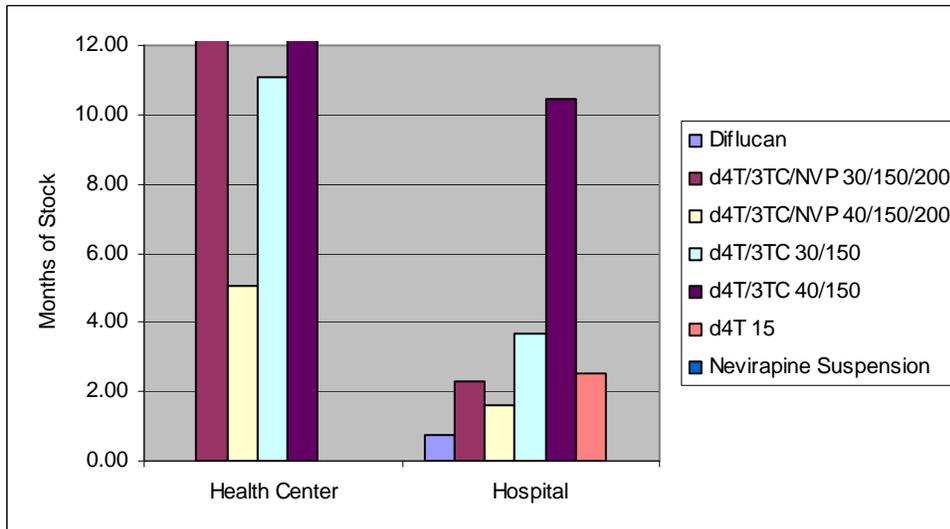
Figure 82. Average duration in days of ARV commodity stockouts (by product)



MONTHS OF STOCK ON HAND

In the case of ARV commodities, minimum stock levels for health centers hospitals are set at 2 months, with maximum stock levels set at 3 months. At the hospital level, two commodities fell within this acceptable range, with most commodities at both levels grossly overstocked.

Figure 83. Months of stock on hand for ARV commodities on the day of visit (by product)



RECOMMENDATIONS FOR ARV COMMODITIES

Recommendations for the ARV system include the following:

- *Reinforce skills to correctly fill out stock cards.* Although stock card availability is high, there are still weaknesses, particularly at health centers with regard to accurate or near accurate balances on stock cards. These skills can be reinforced either through additional on-the-job training or supervision visits.
- *Increase the frequency of supervision visits that include inventory management for the hospital level in particular.* General supervision and commodities management supervision is quite high for the health center level, but extremely low at the hospital level. Supervision visits provide a key opportunity for logistics concepts to be reinforced, strengthen the skills of service providers, and address problems within the system. Increased structured supervision will become increasingly important throughout continued roll-out.
- *Intensify advocacy efforts for ARV commodity security.* Sensitizing senior Ministry health officials will support efforts to ensure continuous ARV commodity availability.

REFERENCES

Aronovich, Dana and Steve Kinzett. 2001. *Kenya: Assessment of the Health Commodity Supply Chain and the Role of KEMSA*. Arlington, Va: DELIVER, for the U.S. Agency for International Development.

Kinzett, Steve. 2004. *Management of the Supply Chain in Kenya: Assessment and Description of Logistics Systems*. Arlington, Va: DELIVER, for the U.S. Agency for International Development.

APPENDIX 1: DATA COLLECTION AND DATA ENTRY TEAMS

Team Designation	Name	Designation	Organization
Team 1 (Central I)	Amanda Ombeva	HIV/AIDS Project Officer	JSI/DELIVER
	Joseph Wesonga	Physio/CHO	Kisumu District Hospital
Team 2 (Central II)	Jayne Waweru	Senior Project Officer	JSI/DELIVER
	Sophie Mwanyumba	Lab Technologist	JSI/DELIVER
	Paul Malusi	M&E Officer	NLTP
Team 3 (Eastern I)	Victor Sumbi	Pharmacist	Nyeri PGH
	Diane Kamar	Programme Officer	DRH
Team 4 (Coast)	John Gichuhi	Project Officer, RH	JSI/DELIVER
	Robert Wahome	DMLT	District Headquarters (Kariokor)
Team 5 (Eastern II)	Augustine Bahati	Logistics Advisor	JSI/DELIVER
	Josephine Muiruri	Pharmacist	Kiambu District Hospital
	Caleb Ikutu	DHRIO	Nandi Hills District Hospital
Team 6 (Eastern III)	Eunice Kamanthe	Programme Officer	DRH
	Catherine Mugane	Clerical Officer	DRH/KEMSA
Team 7 (Nyanza I)	Christine Andalo	Senior Nursing Officer	Nandi Hills District Hospital
	Hellen Mbugua	Pharmacist	Kangundo SDH
Team 8 (Nyanza II)	Ruth Wayua	Programme Officer	DRH
	James Sekento	PHO	DOMC/MOH
Team 9 (Rift Valley I)	Assumpta Matekwa	Senior Nursing Officer	Kakamega PGH
	Livingstone Mwambela	MLT	NPHLS
	Dickson Kigwenay	DASCO	Transmara District Hospital
Team 10 (Rift Valley II)	Kiogora Gatimbu	Pharmacist	Isiolo District Hospital
	Helgar Mutua	Clinical Officer	Mbagathi District Hospital
Team 11 (Rift Valley III)	Eunice Kinywa	DASCO	Siaya District Hospital
	Kenneth Katui	Programme Officer	DRH
Team 12 (Western)	James Karanja	Lecturer	KMTC/Lodwar
	Jane Mwangi	Public Health Officer	MOH/KEMSA

Data Entry Team

NAME	POSITION/ORGANIZATION
VINCENT VIGENDI	DELIVER/JSI
MARTIN NYAMU GITAH	STUDENT
LILIAN ADHIAMBO ABALLA	STUDENT
JULIAMA AKINYI OTIENO	STUDENT

APPENDIX 2: SAMPLED FACILITIES

Province	District	Facility Name	Facility Type	Operating Agency
Central	DAGORETI	DAGORETI DISTRICT STORE	District store	MOH
Central	KIAMBU	NGECHA ORTH. DISPENSARY	Dispensary	Mission
Central	KIAMBU	ST. PAUL THEO. MEDICAL CLINIC	Hospital	Mission
Central	KIAMBU	HOLY CROSS DISPENSING THIGIO	Dispensary	Mission
Central	KIAMBU	KIAMBU DISTRICT HOSPITAL	District hospital	MOH
Central	KIAMBU	GITHUNGURI HEALTH CENTRE	Health Centre	MOH
Central	KIAMBU	KIGUMO HEALTH CENTRE	Health Centre	MOH
Central	KIAMBU	NYATHUNA HEALTH CENTRE	Health Centre	MOH
Central	KIAMBU	CIANDA DISPENSARY	Dispensary	MOH
Central	KIAMBU	KIAMBU DISTRICT STORE	District store	MOH
Central	KIRINYAGA	KERUGOYA DISTRICT HOSPITAL	District hospital	MOH
Central	KIRINYAGA	GATUGURA DISPENSARY	Dispensary	MOH
Central	KIRINYAGA	KERU GOYA DISTRICT STORE	District store	MOH
Central	MARAGUA	DON BOSCO MAKUYU DISPENSARY	Dispensary	Mission
Central	MARAGUA	MARAGUA DISTRICT HOSPITAL	District hospital	MOH
Central	MARAGUA	KIGUMO HEALTH CENTRE	Health Centre	MOH
Central	MARAGUA	KAMAHUHA DISPENSARY	Dispensary	MOH
Central	MARAGUA	KARIUA DISPENSARY	Dispensary	MOH
Central	MARAGUA	KAMBITI DISPENSARY	Dispensary	MOH
Central	MARAGUA	GK PRISON MARANJAU DISPENSARY	Dispensary	MOH
Central	MARAGUA	MARAGUA DISTRICT STORE	District store	MOH
Central	MURANGA	MUGOIRI DISPENSARY	Dispensary	Mission
Central	MURANGA	MURANG'A DISTRICT HOSPITAL	District hospital	MOH
Central	MURANGA	GK PRISON DISPENSARY	Dispensary	MOH
Central	MURANGA	KIRIA DISPENSARY	Dispensary	MOH
Central	MURANGA	WETHAGA DISPENSARY	Dispensary	MOH

Central	MURANGA	MURANG'A DISTRICT STORE	District store	MOH
Central	NYERI	GIKONDI M. D.	Dispensary	Mission
Central	NYERI	TUMU TUMU HOSPITAL	Hospital	Mission
Central	NYERI	KARATINA DISTRICT HOSPITAL	District hospital	MOH
Central	NYERI	GICHIRA HEALTH CENTRE	Health Centre	MOH
Central	NYERI	KAMOKO HEALTH CENTRE	Health Centre	MOH
Central	NYERI	ICHAMARA DISPENSARY	Dispensary	MOH
Central	NYERI	KABATI DISPENSARY	Dispensary	MOH
Central	NYERI	IHURURU DISPENSARY	Dispensary	MOH
Central	NYERI	NDIMAINI DISPENSARY	Dispensary	MOH
Central	NYERI	TAMBAYA DISPENSARY	Dispensary	MOH
Central	NYERI	NYERI DISTRICT STORE	District store	MOH
Central	THIKA	THIKA DISTRICT HOSPITAL	District hospital	MOH
Central	THIKA	KARATU HEALTH CENTRE	Health Centre	MOH
Central	THIKA	THIKA DISTRICT STORE	District store	MOH
Coast	KILIFI	ST. LUKES	Dispensary	Mission
Coast	KILIFI	KILIFI DISTRICT HOSPITAL	District hospital	MOH
Coast	KILIFI	BAMBA HEALTH CENTRE	Health Centre	MOH
Coast	KILIFI	MARIAKANI SUBDISTRICT HOSPITAL	Sub district hospital	MOH
Coast	KILIFI	MURYACHAKE DISPENSARY	Dispensary	MOH
Coast	KILIFI	KILIFI DISTRICT STORE	District store	MOH
Coast	KWALE	MSAMBWENI DISTRICT HOSPITAL	District hospital	MOH
Coast	KWALE	SHIMBA HILLS	Health Centre	MOH
Coast	KWALE	MKWIRO DISPENSARY	Dispensary	MOH
Coast	KWALE	BOFU HEALTH CENTER	Dispensary	MOH
Coast	KWALE	KWALE DISTRICT STORE	District store	MOH
Coast	MALINDI	TAWFIQ HOSPITAL	Hospital	Mission
Coast	MALINDI	MALINDI DISTRICT HOSPITAL	District hospital	MOH
Coast	MALINDI	CHAKAMA DISPENSARY	Dispensary	MOH
Coast	MALINDI	MARERENI DISPENSARY	Dispensary	MOH

Coast	MALINDI	MALINDI DISTRICT STORE	District store	MOH
Coast	MOMBASA	COAST PROVINCIAL GENERAL HOSPITAL	Provincial hospital	MOH
Coast	MOMBASA	PORT REITZ DISTRICT HOSPITAL	District hospital	MOH
Coast	MOMBASA	MOMBASA DISTRICT STORE	District store	MOH
Coast	TAITA TAVETA	MOI HOSPITAL VOI	District hospital	MOH
Coast	TAITA TAVETA	KASIGAU HEALTH CENTRE	Health Centre	MOH
Coast	TAITA TAVETA	MPINZINI HEALTH CENTRE	Health Centre	MOH
Coast	TAITA TAVETA	MWATATE HEALTH CENTRE	Health Centre	MOH
Coast	TAITA TAVETA	SAGALLA HEALTH CENTRE	Health Centre	MOH
Coast	TAITA TAVETA	MUSAU DISPENSARY	Dispensary	MOH
Coast	TAITA TAVETA	TAITA TAVETA DISTRICT STORE	District store	MOH
Eastern	EMBU	EMBU PROVINCIAL GENERAL HOSPITAL	Provincial hospital	MOH
Eastern	EMBU	KIANJOKOMA HEALTH CENTRE	Health Centre	MOH
Eastern	EMBU	EMBU DISTRICT STORE	District store	MOH
Eastern	KITUI	MUTHALE MISSION HOSPITAL	Hospital	Mission
Eastern	KITUI	MUTOMO MISSION HOSPITAL	Hospital	Mission
Eastern	KITUI	KITUI DISTRICT HOSPITAL	District hospital	MOH
Eastern	KITUI	IKUTHA HEALTH CENTRE	Health Centre	MOH
Eastern	KITUI	IKANGA HEALTH CENTER	Health Centre	MOH
Eastern	KITUI	KAUWI HEALTH CENTRE	Health Centre	MOH
Eastern	KITUI	KATUTU DISPENSARY	Dispensary	MOH
Eastern	KITUI	KITUI DISTRICT STORE	District store	MOH
Eastern	MACHAKOS	ATHI RIVER HEALTH CENTRE	Health Centre	MOH
Eastern	MACHAKOS	KANGUNDO S.D.H.	Sub district hospital	MOH
Eastern	MACHAKOS	KATHIANI SUB DISTRICT HOSPITAL	Sub district hospital	MOH
Eastern	MACHAKOS	MACHAKOS GENERAL HOSPITAL	District Hospital	MOH
Eastern	MACHAKOS	MATUU SUB-DISTRICT HOSPITAL	Sub district hospital	MOH
Eastern	MACHAKOS	KAVIANI HEALTH CENTRE	Health Centre	MOH
Eastern	MACHAKOS	MASII HEALTH CENTRE	Health Centre	MOH
Eastern	MACHAKOS	MASINGA HEALTH CENTRE	Health Centre	MOH

Eastern	MACHAKOS	ITHAENI DISPENSARY	Dispensary	MOH
Eastern	MACHAKOS	MATILIKU HEALTH CENTRE	Health Centre	MOH
Eastern	MACHAKOS	MUUMANDU DISPENSARY	Dispensary	MOH
Eastern	MACHAKOS	MACHAKOS DISTRICT STORE	District store	MOH
Eastern	MAKUENI	AIC MUMO HEALTH CENTRE	Health Centre	Mission
Eastern	MAKUENI	MAKINDU SUB DISTRICT HOSPITAL	Sub district hospital	MOH
Eastern	MAKUENI	MAKUENI DISTRICT HOSPITAL	District hospital	MOH
Eastern	MAKUENI	KALAWA HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	KIKUMINI HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	MASONGELENI HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	MAVINDINI HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	MUKUYUNI HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	SULTAN HAMUD HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	MWANYANI DISPENSARY	Dispensary	MOH
Eastern	MAKUENI	NZEVENI DISPENSARY	Dispensary	MOH
Eastern	MAKUENI	KIBWEZI HEALTH CENTRE	Health Centre	MOH
Eastern	MAKUENI	NGWATA DISPENSARY	Dispensary	MOH
Eastern	MAKUENI	MAKUENI DISTRICT STORE	District store	MOH
Eastern	MBEERE	ISHIARA SUB DISTRICT HOSPITAL	Sub district hospital	MOH
Eastern	MBEERE	MBEERE DISTRICT HOSPITAL	District Hospital	MOH
Eastern	MBEERE	GATEGI HEALTH CENTRE	Health Centre	MOH
Eastern	MBEERE	KIRITI HEALTH CENTRE	Health Centre	MOH
Eastern	MBEERE	GACHURIRI DISPENSARY	Dispensary	MOH
Eastern	MBEERE	KAMUMU DISPENSARY	Dispensary	MOH
Eastern	MBEERE	MBEERE DISTRICT STORE	District store	MOH
Eastern	MERU	NKUBU HOSPITAL	Hospital	Mission
Eastern	MERU	COTTOLENGO MISSION HOSPITAL	Hospital	Mission
Eastern	MERU	GAITU P.C.E.A. DISPENSARY	Dispensary	Mission
Eastern	MERU	MERU DISTRICT HOSPITAL	District hospital	MOH
Eastern	MERU	TIMAU HEALTH CENTRE	Health Centre	MOH

Eastern	MERU	MERU CENTRAL DISTRICT STORE	District store	MOH
Eastern	MERU SOUTH	CHUKA DISTRICT HOSPITAL	Hospital	MOH
Eastern	MERU SOUTH	MUTINDWA DISPENSARY	Dispensary	Mission
Eastern	MERU SOUTH	MERU SOUTH DISTRICT STORE	District store	MOH
Eastern	MERU SOUTH	CHOGORIA HOSPITAL	Hospital	Mission
Eastern	MERU SOUTH	KAJUKI HEALTH CENTRE	Health Centre	MOH
Eastern	MERU SOUTH	MPUKONI HEALTH CENTRE	Health Centre	MOH
Eastern	MERU SOUTH	MUTHAMBI HEALTH CENTRE	Health Centre	MOH
Eastern	MWINGI	CURRAN DISPENSARY	Dispensary	MOH
Eastern	MWINGI	MWINGI DISTRICT HOSPITAL	District hospital	MOH
Eastern	MWINGI	NGOMENI HEALTH CENTRE	Health Centre	MOH
Eastern	MWINGI	KANYUNGA DISPENSARY	Dispensary	MOH
Eastern	MWINGI	TWIMIWA DISPENSARY	Dispensary	MOH
Eastern	MWINGI	NGUNI HEALTH CENTER	Health Centre	MOH
Eastern	MWINGI	MWINGI DISTRICT STORE	District store	MOH
Eastern	THARAKA NITHI	SR ORSOLA MISSION HOSPITAL	Hospital	Mission
Eastern	THARAKA NITHI	MARIMANTI DISTRICT HOSPITAL	District hospital	MOH
Eastern	THARAKA NITHI	THARAKANITHI DISTRICT STORE	District store	MOH
Nairobi	DAGORETI	CHANDARIA HEALTH CENTRE	Health Centre	MOH
Nairobi	DAGORETI	RIRUTA HEALTH CENTER	Health Centre	MOH
Nairobi	DAGORETI	DAGORETI CHILDREN'S HOME	Dispensary	Private
Nairobi	DAGORETI	MBAGATHI DISTRICT HOSPITAL	District hospital	MOH
Nyanza	GUCHA	MONIANKU HEALTH CENTRE	Health Centre	Mission
Nyanza	GUCHA	GUCHA DISTRICT HOSPITAL	District hospital	MOH
Nyanza	GUCHA	NYACHEKI DISPENSARY	Health Centre	MOH
Nyanza	GUCHA	GUCHA DISTRICT STORE	District store	MOH
Nyanza	HOMABAY	ST. PAUL'S HEALTH CENTRE	Health Centre	Mission
Nyanza	HOMABAY	MANYATTA SDA DISPENSARY	Dispensary	Mission
Nyanza	HOMABAY	HOMABAY DISTRICT HOSPITAL	District hospital	MOH
Nyanza	HOMABAY	NYAGORO HEALTH CENTRE	Health Centre	MOH

Nyanza	HOMABAY	HOMABAY DISTRICT STORE	District store	MOH
Nyanza	KISII	NYABURURU DISPENSARY	Dispensary	Mission
Nyanza	KISII	KISII DISTRICT HOSPITAL	District hospital	MOH
Nyanza	KISII	MARANI RHDC	Health Centre	MOH
Nyanza	KISII	MASIMBA HEALTH CENTRE	Sub district hospital	MOH
Nyanza	KISII	KISII DISTRICT STORE	District store	MOH
Nyanza	KISUMU	AIRPORT DISPENSARY	Dispensary	Local authority
Nyanza	KISUMU	KISUMU DISTRICT HOSPITAL	District hospital	MOH
Nyanza	KISUMU	NYANZA PROVINCIAL GENERAL HOSPITAL	Provincial hospital	MOH
Nyanza	KISUMU	CHULAIMBO PROVINCIAL RURAL TRAINING CENTRE	Health Centre	MOH
Nyanza	KISUMU	KISUMU DISTRICT STORE	District store	MOH
Nyanza	NYAMIRA	GEKANO HEALTH CENTRE	Health Centre	Mission
Nyanza	NYAMIRA	ITIBO HEALTH CENTRE	Health Centre	Mission
Nyanza	NYAMIRA	MATONGO HEALTH CENTRE	Health Centre	Mission
Nyanza	NYAMIRA	NYAMIRA DISTRICT HOSPITAL	District hospital	MOH
Nyanza	NYAMIRA	CHEP NGOMBE HEALTH CENTRE	Health Centre	MOH
Nyanza	NYAMIRA	BOSIANGU DISPENSARY	Dispensary	MOH
Nyanza	NYAMIRA	NYAMIRA DISTRICT STORE	District store	MOH
Nyanza	NYANDO	PAP ONDITI DISTRICT HOSPITAL	District hospital	MOH
Nyanza	NYANDO	KATITO HEALTH CENTRE	Health Centre	MOH
Nyanza	NYANDO	MASOGO HEALTH CENTRE	Health Centre	MOH
Nyanza	NYANDO	NYANDO DISTRICT STORE	District store	MOH
Nyanza	SIAYA	SIAYA DISTRICT HOSPITAL	District hospital	MOH
Nyanza	SIAYA	RAMULA HEALTH CENTRE	Health Centre	MOH
Nyanza	SIAYA	RATUORO KADENGE HEALTH CENTRE	Health Centre	MOH
Nyanza	SIAYA	HAWINGA DISPENSARY	Dispensary	MOH
Nyanza	SIAYA	SIAYA DISTRICT STORE	District store	MOH
Nyanza	SUBA	ROWO CATHOLIC CLINIC	Dispensary	Mission
Nyanza	SUBA	TONGA HEALTH CENTRE	Health Centre	Mission
Nyanza	SUBA	SUBA DISTRICT HOSPITAL	District hospital	MOH

Nyanza	SUBA	MBITA HEALTH CENTRE	Health Centre	MOH
Nyanza	SUBA	KITARE HEALTH CENTER	Health Centre	MOH
Nyanza	SUBA	OGONGO HEALTH CENTRE	Health Centre	MOH
Nyanza	SUBA	KIGWA DISPENSARY	Dispensary	MOH
Nyanza	SUBA	PONGE DISPENSARY	Dispensary	MOH
Nyanza	SUBA	SUBA DISTRICT STORE	District store	MOH
Rift Valley	BARINGO	CHURO HEALTH CENTRE	Health Centre	Mission
Rift Valley	BARINGO	KIPSARAMAN MISSION DISPENSARY	Dispensary	Mission
Rift Valley	BARINGO	KOSITEI DISPENSARY	Dispensary	Mission
Rift Valley	BARINGO	KABARNET DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	BARINGO	BARWESA HEALTH CENTRE	Health Centre	MOH
Rift Valley	BARINGO	KIPTAGICH HEALTH CENTRE	Health Centre	MOH
Rift Valley	BARINGO	SALAWA HEALTH CENTRE	Health Centre	MOH
Rift Valley	BARINGO	TENGESHEALTH CENTRE	Health Centre	MOH
Rift Valley	BARINGO	LOBOI DISPENSARY	Dispensary	MOH
Rift Valley	BARINGO	MARON DISPENSARY	Dispensary	MOH
Rift Valley	BARINGO	TIRIMOININ DISPENSARY	Dispensary	MOH
Rift Valley	BARINGO	KOKWO HIGHLAND DISPENSARY	Dispensary	MOH
Rift Valley	BARINGO	BARINGO DISTRICT STORE	District store	MOH
Rift Valley	BOMET	LONGISA DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	BOMET	GELEGELE DISPENSARY	Dispensary	MOH
Rift Valley	BOMET	TEGAT HEALTH CENTRE	Health Centre	MOH
Rift Valley	BOMET	KANUSIN DISPENSARY	Dispensary	MOH
Rift Valley	BOMET	KAPKIMOLWA DISPENSARY	Dispensary	MOH
Rift Valley	BOMET	BOMET DISTRICT STORE	District store	MOH
Rift Valley	KAJIADO	KISERIAN HEALTH CENTRE	Health Centre	Mission
Rift Valley	KAJIADO	AIC KAJIADO DISPENSARY	Dispensary	Mission
Rift Valley	KAJIADO	KAJIADO DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	KAJIADO	ENKORIKA HEALTH CENTRE	Health Centre	MOH
Rift Valley	KAJIADO	KIMANA HEALTH CENTRE	Health Centre	MOH

Rift Valley	KAJIADO	MASHURU HEALTH CENTRE	Health Centre	MOH
Rift Valley	KAJIADO	MILE 46 HEALTH CENTRE	Health Centre	MOH
Rift Valley	KAJIADO	AMBOSELI DISPENSARY	Dispensary	MOH
Rift Valley	KAJIADO	ISINYA HEALTH CENTER	Health Centre	MOH
Rift Valley	KAJIADO	OLGULULUI DISPENSARY	Dispensary	MOH
Rift Valley	KAJIADO	KAJIADO DISTRICT STORE	District store	MOH
Rift Valley	KEIYO	ITEN DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	KEIYO	KAPTEREN HEALTH CENTRE	Health Centre	MOH
Rift Valley	KEIYO	KAPTAGAT DISPENSARY	Dispensary	MOH
Rift Valley	KEIYO	KEIYO DISTRICT STORE	District store	MOH
Rift Valley	LAIKIPIA	NANYUKI DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	LAIKIPIA	NG'ARUA HEALTH CENTRE	Health Centre	MOH
Rift Valley	LAIKIPIA	ILPOLEI DISPENSARY	Dispensary	MOH
Rift Valley	LAIKIPIA	OL MORAN DISPENSARY	Dispensary	MOH
Rift Valley	LAIKIPIA	KIMANJO DISPENSARY	Dispensary	MOH
Rift Valley	LAIKIPIA	LAIKIPIA DISTRICT STORE	District store	MOH
Rift Valley	LAIKIPIA	OLJOGI DISPENSARY	Dispensary	Private
Rift Valley	MARAKWET	ARROR HEALTH CENTRE	Health Centre	Mission
Rift Valley	MARAKWET	CHESOI HEALTH CENTRE	Health Centre	Mission
Rift Valley	MARAKWET	CHEBIEMIT DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	MARAKWET	KAPCHEROP HEALTH CENTRE	Health Centre	MOH
Rift Valley	MARAKWET	CHEPTONGEI DISPENSARY	Dispensary	MOH
Rift Valley	MARAKWET	MARAKWET DISTRICT STORE	District store	MOH
Rift Valley	NANDI NORTH	KAIGAT HEALTH CENTRE	Health Centre	Mission
Rift Valley	NANDI NORTH	NDALAT HEALTH CENTRE	Health Centre	Mission
Rift Valley	NANDI NORTH	ST. BONIFACE DISPENSARY	Dispensary	Mission
Rift Valley	NANDI NORTH	KAPSABET DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	NANDI NORTH	CHEPKEMEL HEALTH CENTRE	Health Centre	MOH
Rift Valley	NANDI NORTH	KAPKANGANI HEALTH CENTRE	Health Centre	MOH
Rift Valley	NANDI NORTH	KILIBWONI HEALTH CENTRE	Health Centre	MOH

Rift Valley	NANDI NORTH	MOSORIOT RHTC HEALTH CENTRE	Health Centre	MOH
Rift Valley	NANDI NORTH	NANDI NORTH DISTRICT STORE	District store	MOH
Rift Valley	NAROK	ENTASEKERA HEALTH CENTRE	Health Centre	Community
Rift Valley	NAROK	NAIKARRA DISTRICT HOSPITAL	Hospital	Mission
Rift Valley	NAROK	NAROK DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	NAROK	ENABEL BEL HEALTH CENTRE	Health Centre	MOH
Rift Valley	NAROK	NAROSURA HEALTH CENTRE	Health Centre	MOH
Rift Valley	NAROK	NAROK DISTRICT STORE	District store	MOH
Rift Valley	NAROK	ILKERINE DISPENSARY	Dispensary	NGO
Rift Valley	TRANS NZOIA	KITALE DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	TRANS NZOIA	KWANZA HEALTH CENTRE	Health Centre	MOH
Rift Valley	TRANS NZOIA	CHERANGANI DISPENSARY	Dispensary	MOH
Rift Valley	TRANS NZOIA	KAISAGAT DISPENSARY	Dispensary	MOH
Rift Valley	TRANS NZOIA	TRANS NZOIA DISTRICT STORE	District store	MOH
Rift Valley	TRANSMARA	KILGORIS DISTRICT HOSPITAL	District hospital	MOH
Rift Valley	TRANSMARA	ENOOSAEN HEALTH CENTRE	Health Centre	MOH
Rift Valley	TRANSMARA	KURANGURIK DISPENSARY	Dispensary	MOH
Rift Valley	TRANSMARA	ANGATA HEALTH CENTER	Dispensary	MOH
Rift Valley	TRANSMARA	TRANSMARA DISTRICT STORE	District store	MOH
Western	BUNGOMA	KHASOKO HEALTH CENTRE	Health Centre	Mission
Western	BUNGOMA	KIBABII MISSION HEALTH CENTRE	Health Centre	Mission
Western	BUNGOMA	BUNGOMA DISTRICT HOSPITAL	District hospital	MOH
Western	BUNGOMA	BOKOLI HEALTH CENTRE	Health Centre	MOH
Western	BUNGOMA	CHWELE HEALTH CENTRE	Health Centre	MOH
Western	BUNGOMA	KABUCHAI HEALTH CENTRE	Health Centre	MOH
Western	BUNGOMA	SIRISIA HEALTH CENTRE	Sub district hospital	MOH
Western	BUNGOMA	TONGAREN HEALTH CENTRE	Health Centre	MOH
Western	BUNGOMA	WEBUYE HEALTH CENTRE	Sub district hospital	MOH
Western	BUNGOMA	NAITIRI HEALTH CENTER	Health Centre	MOH
Western	BUNGOMA	BUNGOMA DISTRICT STORE	District store	MOH

Western	BUSIA	BUSIA DISTRICT HOSPITAL	District hospital	MOH
Western	BUSIA	NAMBALE HEALTH CENTRE	Health Centre	MOH
Western	BUSIA	GK PRISON DISPENSARY	Dispensary	MOH
Western	BUSIA	BUSIA DISTRICT STORE	District store	MOH
Western	LUGARI	LUGARI DISTRICT HOSPITAL	District hospital	MOH
Western	LUGARI	MAUTUMA HEALTH CENTRE	Health Centre	MOH
Western	LUGARI	SOYSAMBU DISPENSARY	Dispensary	MOH
Western	LUGARI	LUGARI DISTRICT STORE	District store	MOH
Western	TESO	KOCHOLIA DISTRICT HOSPITAL	District hospital	MOH
Western	TESO	TESO DISTRICT STORE	District store	MOH

APPENDIX 3: ASSESSMENT TOOL

Logistics Systems Assessment Endline Survey - SDP

Facility Identification Instructions <ul style="list-style-type: none"> Record the name of the facility and location. Assigned codes to be placed in the responses boxes on the right. 	
Facility Location Name of the facility _____ Location (Town) _____ Province _____ District _____ Facility Identification Code _____ Working Facility Telephone Number _____ Alternate In-Charge Telephone Number _____ Team Code _____	Codes [][] [][] [][][][][]
Introduction <ul style="list-style-type: none"> Introduce team members and ask facility representative to introduce themselves. Explain the objectives of this survey <p><i>Good day. My name is _____. I am representing the Ministry of Health. We are conducting a survey regarding the health commodities logistic system. We are looking at the availability of selected commodities and information about how you order and receive these products. This is not a supervision visit. We are visiting selected facilities in the country and this facility was randomly selected to be in the survey. The objectives of the survey are to collect current information on logistics system performance and stock status of key health products. The results will be analyzed by facility level and not by individual facility so the reported performance is not based on any single facility response.</i></p> <p><i>The results of this survey will provide information to make decisions and to promote improvements in the logistics system. The survey will be conducted again in future to measure changes in the logistic system practices and performance.</i></p> <p><i>We would like to ask you a few questions about the products and supplies available in this facility. In addition we would like to actually count selected products you have in stock today and observe the general storage conditions. Do you have any questions?</i></p>	
Start Time (24 hour clock) [][]:[][]	

Section 1: Facility Type

No	Questions and Filters	Coding categories	Responses (circle)
101	What type of health facility is this?	National teaching and referral hospital Provincial hospital District hospital Health centre Dispensary Clinic Hospital (NGO, Mission) Sub district hospital Other Specify..... ...	01 02 03 04 05 06 07 08 88
102	Who is the operating agency of this facility?	Government NGO Private Faith-based Community Other Specify..... ...	01 02 03 04 05 88
103	Is there a tarmac road to the facility?	No Yes	0 1
104	Is there operational electricity on the day of the visit at this facility (source can be electrical line, solar or generator, but electricity must be observed during visit)	No Yes	0 1
105	Operational water in this facility on		

	the day of visit within facility compound?	No	0
		Yes	1
106	Operational telephone or radio communication on day of visit at the facility (paid for by the facility)	No	0
		Yes	1

Section 2: Services Offered and Training

No	Questions and Filters	Coding categories	Responses																								
201	<p>Do you offer the following services using commodities received from GOK/MOH/KEMSA/JSI</p> <p>For any logistic system ask subsequent program specific questions only if the answer to this question is YES. If NO to all discontinue interview</p>	<table border="1"> <tr><td> </td></tr> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>		a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1"> <tr> <th>No</th> <th>Yes</th> </tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> </table>	No	Yes	0	1	0	1	0	1	0	1	0	1	0	1	0	1
a) Condoms for HIV prevention (PHO)																											
b) Family planning commodities																											
c) TB drugs																											
d) HIV test kits and blood safety commodities																											
e) ART																											
f) STI drugs																											
g) Malaria commodities																											
No	Yes																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
202	<p>What is the title of the principal person responsible for managing (ordering, receiving supplies, storing supplies, inventory management) the following commodities in this facility</p> <p>(Condoms for HIV prevention: Condoms that go through the public health department)</p>	<table border="1"> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>	a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1"> <tr><td> </td></tr> </table>																	
a) Condoms for HIV prevention (PHO)																											
b) Family planning commodities																											
c) TB drugs																											
d) HIV test kits and blood safety commodities																											
e) ART																											
f) STI drugs																											
g) Malaria commodities																											
203	<p><u>Instructions to interviewer: Get the person named above to be your respondent for the rest of the instrument. Circle YES if you get the person and NO if you fail to get the person.</u></p> <p><u>Are they available today?</u></p> <p>If NO, skip to Section 3</p>	<table border="1"> <tr><td> </td></tr> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>		a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1"> <tr> <th>No</th> <th>Yes</th> </tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>0</td><td>1</td></tr> </table> <p>If NO, skip to Section 3</p>	No	Yes	0	1	0	1	0	1	0	1	0	1	0	1	0	1
a) Condoms for HIV prevention (PHO)																											
b) Family planning commodities																											
c) TB drugs																											
d) HIV test kits and blood safety commodities																											
e) ART																											
f) STI drugs																											
g) Malaria commodities																											
No	Yes																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
0	1																										
204	<p>Number of years and months (to the nearest month) the person has been managing these commodities</p>	<table border="1"> <tr><td> </td></tr> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>		a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1"> <tr> <th>Years</th> <th>Months</th> </tr> <tr><td> </td><td> </td></tr> </table>	Years	Months														
a) Condoms for HIV prevention (PHO)																											
b) Family planning commodities																											
c) TB drugs																											
d) HIV test kits and blood safety commodities																											
e) ART																											
f) STI drugs																											
g) Malaria commodities																											
Years	Months																										

No	Questions and Filters	Coding categories	Responses																																																																																																																
205	<p>Which is the main way you learned how to fill/complete logistics forms/records and reports</p> <p>Workshops:</p> <ul style="list-style-type: none"> - Commodity Management - NASCOP ART Training - RH/FP Management - Logistics Management - IS Logistics Management - ACT Training 	<p>01 = Never Learned →</p> <p>02 = During Logistic training workshop →</p> <p>03 = On-the-job training →</p> <p>04 = On-the-job (self learning) →</p> <p>05 = Other (specify) →</p> <table border="1"> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>	a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<p>Skip to Section 3</p> <p>Skip to Section 3</p> <p>Skip to Section 3</p> <p>Skip to Section 3</p> <table border="1"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>																																																																																																									
a) Condoms for HIV prevention (PHO)																																																																																																																			
b) Family planning commodities																																																																																																																			
c) TB drugs																																																																																																																			
d) HIV test kits and blood safety commodities																																																																																																																			
e) ART																																																																																																																			
f) STI drugs																																																																																																																			
g) Malaria commodities																																																																																																																			
206	In what year and month did you attend the logistics training workshop	<table border="1"> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>g) Malaria commodities</td></tr> </table>	a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1"> <tr> <th>Month</th> <th>Year</th> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Month	Year																																																																																																							
a) Condoms for HIV prevention (PHO)																																																																																																																			
b) Family planning commodities																																																																																																																			
c) TB drugs																																																																																																																			
d) HIV test kits and blood safety commodities																																																																																																																			
e) ART																																																																																																																			
f) STI drugs																																																																																																																			
g) Malaria commodities																																																																																																																			
Month	Year																																																																																																																		
207	<p>What logistics tasks were you trained on?</p> <p>Do NOT read out answers. Note: There should be no empty cells.</p>	<table border="1"> <thead> <tr> <th></th> <th>Con- doms</th> <th>FP</th> <th>TB</th> <th>Test Kits</th> <th>ART</th> <th>STI</th> <th>Malari a</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="7">Not Mentioned = 0</td> </tr> <tr> <td></td> <td colspan="7">Mentioned = 1</td> </tr> <tr> <td></td> <td colspan="7">(Multiple responses possible. After respondent answers, probe by asking for any others)</td> </tr> <tr> <td>a) How to order</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td></td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> <tr> <td>b) When to order</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td></td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> <tr> <td>c) How to fill logistic data reporting tools</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td></td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> <tr> <td>d) When to compile the reports</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td></td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> <tr> <td>e) Where to send the reports</td> <td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td></td> <td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td> </tr> </tbody> </table>		Con- doms	FP	TB	Test Kits	ART	STI	Malari a		Not Mentioned = 0								Mentioned = 1								(Multiple responses possible. After respondent answers, probe by asking for any others)							a) How to order	0	0	0	0	0	0	0		1	1	1	1	1	1	1	b) When to order	0	0	0	0	0	0	0		1	1	1	1	1	1	1	c) How to fill logistic data reporting tools	0	0	0	0	0	0	0		1	1	1	1	1	1	1	d) When to compile the reports	0	0	0	0	0	0	0		1	1	1	1	1	1	1	e) Where to send the reports	0	0	0	0	0	0	0		1	1	1	1	1	1	1	
	Con- doms	FP	TB	Test Kits	ART	STI	Malari a																																																																																																												
	Not Mentioned = 0																																																																																																																		
	Mentioned = 1																																																																																																																		
	(Multiple responses possible. After respondent answers, probe by asking for any others)																																																																																																																		
a) How to order	0	0	0	0	0	0	0																																																																																																												
	1	1	1	1	1	1	1																																																																																																												
b) When to order	0	0	0	0	0	0	0																																																																																																												
	1	1	1	1	1	1	1																																																																																																												
c) How to fill logistic data reporting tools	0	0	0	0	0	0	0																																																																																																												
	1	1	1	1	1	1	1																																																																																																												
d) When to compile the reports	0	0	0	0	0	0	0																																																																																																												
	1	1	1	1	1	1	1																																																																																																												
e) Where to send the reports	0	0	0	0	0	0	0																																																																																																												
	1	1	1	1	1	1	1																																																																																																												

	f) How to store products	0	0	0	0	0	0	0
		1	1	1	1	1	1	1
	g) Other	0	0	0	0	0	0	0
	(Specify)	1	1	1	1	1	1	1

208	How many of the staff working and managing these commodities in this facility have been formally trained (left their job site to attend the training) in logistics (ordering, receiving supplies, storing supplies, inventory management).		
		No. of Staff	No. with Formal Training
	a) Condoms for HIV prevention		
	b) Family planning commodities		
	c) TB drugs		
	d) HIV test kits and blood safety commodities		
	e) ARV drugs		
	f) STI drugs		
	g) Malaria commodities		

Notes/Comments:

Section 3: LMIS, Ordering, Transport

No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ART	STI	Malaria
301	Do you have a Stock Card to manage health products? If NO, Skip to Q304 If YES, Skip to Q303	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
		Imvised	2	2	2	2	2	2	2
302	Does the Stock Card contain the following categories?		Condoms	FP	TB	Test Kits	ART	STI	Malaria
	A. stock on hand	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	B. quantities dispensed	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	C. losses and/or adjustments	No	0	0	0	0	0	0	0
Yes		1	1	1	1	1	1	1	
303	Has the Stock Card been used during the last 30 days or to the last transaction?		Condoms	FP	TB	Test Kits	ART	STI	Malaria
		No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

NOTES/COMMENTS:

	Do you have a Daily Activity Register (DAR) to manage health products?		Condoms	FP	TB	Test Kits	ART	STI	Malaria
304	(A computerized or hard copy DAR is acceptable for YES) If NO, Skip to Q307 If YES, Skip to Q306	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
		Improvise d	2	2	2	2	2	2	2
305	Does the Daily Activity Register contain the following categories?		Condoms	FP	TB	Test Kits	ART	STI	Malaria
	A. stock on hand	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	B. quantities dispensed	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	C. losses and/or adjustments	No	0	0	0	0	0	0	0
Yes		1	1	1	1	1	1	1	
306	Has the Daily Activity Register been used during the last 30 days or to the last transaction?		Condoms	FP	TB	Test Kits	ART	STI	Malaria
	No	0	0	0	0	0	0	0	0
	Yes	1	1	1	1	1	1	1	1

NOTES/COMMENTS:

307	Do you have a Summary Consumption Data Report and Request form to manage health products?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
	If NO, Skip to Q313 If YES, Skip to Q309	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
		Improvise d	2	2	2	2	2	2	2
308	Does the Summary Consumption Data Report and Request for commodities contain the following categories?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
	A. stock on hand	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	B. quantities dispensed	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	C. losses and/or adjustments	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	D. quantities requested	No	0	0	0	0	0	0	0
Yes		1	1	1	1	1	1	1	
309	Has the Summary Consumption Data Report and Request been used during the last 30 days or to the last transaction?		Con dom s	FP	TB	Test Kits	ART	STI	Mala ria
	No		0	0	0	0	0	0	0
	Yes		1	1	1	1	1	1	1
310	How often are these CDRR reports sent to the higher level? Do NOT read out the answers. (Multiple responses possible. After respondent answers,	Not Mentioned = 0 Mentioned = 1							
			Con dom s	FP	TB	Test Kits	ART	STI	Malari a
		a) Monthly	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		b) Quarterly	0	0	0	0	0	0	0
1	1		1	1	1	1	1		
	Con dom s	FP	TB	Test Kits	ART	STI	Malari a		

	probe by asking for any others)	c) Every Two Months	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		e) Other	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		(Specify)							
		f) Don't Know	97	97	97	97	97	97	97
311	When was the last time you sent a CDRR for products at this facility?	a)Never	1	1	1	1	1	1	1
		b)This month	2	2	2	2	2	2	2
		c) Last month	3	3	3	3	3	3	3
		c) 2 months ago	4	4	4	4	4	4	4
		d) 3 months ago	5	5	5	5	5	5	5
		e) More than 3 months ago	6	6	6	6	6	6	6
		f) Don't Know	97	97	97	97	97	97	97
			Condoms	FP	TB	Test Kits	ART	STI	Malaria
312	How often are you supposed to send these CDRR reports to the higher level? Not Mentioned = 0 Mentioned = 1	a) Monthly	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		b) Every Two Months	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		c) Quarterly	0 1	0 1	0 1	0 1	0 1	0 1	0 1
			Condoms	FP	TB	Test Kits	ART	STI	Malaria

		d) Semi-annually	0 1						
		e) Annually	0 1						
		f) Other	0 1						
		(Specify)							
		g) Don't Know	97	97	97	97	97	97	97

NOTES/COMMENTS:

313			Con dom s	FP	TB	Test Kits	ART	STI	Malar ia
	How many emergency orders for the following products have you	None	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1

		2	2	2	2	2	2	2	2
		3	3	3	3	3	3	3	3
		4+	4	4	4	4	4	4	4
		Don't Know	97	97	97	97	97	97	97
314	Who determines this facility's re-supply quantities? (Multiple responses possible)	Not Mentioned = 0 Mentioned = 1							
		The facility itself	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		Higher-level facility	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
	Other	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	
	(Specify)								
315	How are the facility's re-supply quantities determined?	Formula	1	1	1	1	1	1	1
		(Specify Formula)							
		Other Means (Specify)	2	2	2	2	2	2	2
	Don't Know	97	97	97	97	97	97	97	
316	Do facility staff complete a blank S-11 or S-12 form based on higher level product availability	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
317	Who is responsible for transporting products to your facility?	Not Mentioned = 0 Mentioned = 1							
			Con dom s	FP	TB	Test Kits	ART	STI	Mala ria

		KEMSA central	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		KEMSA regional	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		District (MOH)	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		This facility collects	0 1	0 1	0 1	0 1	0 1	0 1	0 1
		Other (specify)	0 1	0 1	0 1	0 1	0 1	0 1	0 1
318	When was the last time you left the facility to collect supplies from the higher level?	a)Never	1	1	1	1	1	1	1
		b)This month	2	2	2	2	2	2	2
		c) Last Month	3	3	3	3	3	3	3
		c) 2 months ago	4	4	4	4	4	4	4
		d) 3 months ago	5	5	5	5	5	5	5
		e) More than 3 months ago	6	6	6	6	6	6	6
		f) None (commodities delivered by higher level)	7	7	7	7	7	7	7
		g) Don't Know	97	97	97	97	97	97	97
			Con dom	FP	TB	Test Kits	ART	STI	Malaria
319	What type of transportation is <u>most</u> often used by this facility to collect supplies? (only ONE response)	a) Facility Vehicles	1	1	1	1	1	1	1
		b) Public transportation	2	2	2	2	2	2	2
		c) Private vehicle	3	3	3	3	3	3	3
		d) Boat	4	4	4	4	4	4	4

		e) On foot	5	5	5	5	5	5	5
		f) None (commodities delivered by higher level)	6	6	6	6	6	6	6
		g) Other (Specify)	88	88	88	88	88	88	88
320	On average, approximately how long does it take between ordering and receiving products? If never ordered, circle 77	a) Never ordered	77	77	77	77	77	77	77
		b) Less than 2 weeks	1	1	1	1	1	1	1
		c) 2 weeks to 1 month	2	2	2	2	2	2	2
		d) Between 1 and 2 months	3	3	3	3	3	3	3
		e) More than 2 months	4	4	4	4	4	4	4
			Condoms	FP	TB	Test Kits	ART	STI	Malaria
321	When did you receive your most recent supervision visit? (Check visitors book if necessary)	Never received	1	1	1	1	1	1	1
		Within the last 1 month	2	2	2	2	2	2	2
		Within the last 3 months	3	3	3	3	3	3	3
		Within the last 6 months	4	4	4	4	4	4	4
		More than 6 months ago	5	5	5	5	5	5	5
		Other (specify)	9	9	9	9	9	9	9
322	When did you receive your last supervision visit that included commodities management (e.g., stock cards checked, reports checked, expired stock removed, supplies checked)?	Never received	1	1	1	1	1	1	1
		Within the last month	2	2	2	2	2	2	2
		Within the last 3 months	3	3	3	3	3	3	3
		Within the last 6 months	4	4	4	4	4	4	4
		More than 6 months ago	5	5	5	5	5	5	5

		Other	9	9	9	9	9	9	9
		(Specify)							
323	In the last six months, have you received On-Job training in Logistics?	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

Supervision by:

DPHO=Condom

DTLC=TB

DPHN=FP

DMLT=test kits

DASCO=STI

PARTO=ART

If the study team is studying a cold chain logistics system, answer questions 326–333. If not, go to next section

	Questions and filters	Coding categories	Responses	
324	Is there a functioning refrigerator available for the storage of ARVs and HIV test kits? ARVs	No	0	
		Yes	1	
	HIV test kits and blood safety commodities If no to ALL skip to Q401	No	0	
		Yes	1	
325	Are refrigerators located at least ½ meter away from the wall or cartons stacked higher than 1 meter? ARVs	No	0	
		Yes	1	
	HIV test kits and blood safety commodities	No	0	
		Yes	1	
326	Record the actual temperature ARVs	[_____]		
	HIV test kits and blood safety commodities	[_____]		
327	Do you maintain a temperature chart If NO skip to Q329	ARVs	No	0
			Yes	1
	HIV test kits and blood safety commodities	No	0	
		Yes	1	

328	Is the temperature chart up-to-date? (to be up-to-date, there must be an entry for the day before the visit).	ARVs	No	0
			Yes	1
		HIV test kits and blood safety commodities	No	0
			Yes	1
329	Is there a supply of paraffin or LPG, generator for cold chain purposes? Ask only if no functioning electricity. If there is Electricity code, select NOT APPLICABLE= 95	ARVs	No	0
			Yes	1
			NA	95
		HIV test kits and blood safety commodities	No	0
			Yes	1
			NA	95

NOTES/COMMENTS:

SECTION 4: Stock Status (1 January – 30 June)

Source: Ask respondent

Col 3: Whether or not the product is managed at this facility, answer 0 for No, 1 for Yes. (If No Skip to next commodity)

Source: Stock cards

Col. 4: Check if the stock card is available; answer 0 for No, 1 for Yes. **(If no Skip to column 10 and complete column 10-15)**

Col. 5: Check if there is a stock card entry within the last 30 days from the day of the visit. Answer 0 for No, 1 for Yes. Note: If the stock card was last updated with the balance of 0 and the facility has not received any re-supply, consider the stock card up-to-date. If stock card is not updated within the last 30 days (answered NO), SKIP to column 10.

Col. 6: Record the balance on the stock card, regardless of last update.

Col. 7: Record if the facility has had any stockout of the product during the most recent 6 full months before the survey (1 January – 30 June); answer 0 for NO, 1 for YES according to stock cards, if stock cards are not available, leave blank and **skip to column 10**.

Col. 8: Record how many times the product stocked out during the most recent full 6 months (1 January – 30 June) before the survey according to stock cards, if available. If stock cards are not available, leave blank and **skip to column 10**.

Col. 9: Record the total number of days the product was stocked out during the most recent full 6 months before the survey (1 January – 30 June).

Source: Summary Consumption Data Records and Requests (CDRR) or Daily Activity Register (DAR)

Col 10: Record the quantity of product dispensed during the most recent 6 months before the survey (1 January – 30 June).

Col 11: Record the number of months the issued/dispensed data represents (may be less than 6); record the months for which there is any data recorded, **including 0**.

Source: Direct observation

Col. 12: Record the quantity of **usable** product in the facility store.

Col. 13: Record the quantity of **usable** product in the facility dispensing area. If the tin is open and not yet expired, estimate the number of tabs to the nearest quarter (e.g. if a tin of 1000, $\frac{1}{4}$ =250, $\frac{1}{2}$ =500 and $\frac{3}{4}$ =750).

Col. 14: Record if the facility is experiencing a stockout of the product on the day of the visit, **according to the physical inventory**, answer 0 for No, 1 for Yes.

Col. 15: Record the quantity of expired products. Count all expired products on the day of the visit. If there are products that are near expiry (**within one week**), **note in the comments section**.

Col 16: For any product that experienced a stockout in the last six months and/or including day of visit, note 1-3 of the most common reasons (by product) with the following codes (list all that apply): 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

TB drugs

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stock ed out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today ? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)	Tablets														
Streptomycin Injection (1000Mg)	Vials														
TB Patient Packs (RHZE/EH)	Unopened patient pack														
Basic Fuchine Powder (25 gms)	Unopened 25 gm bottles														
Poly Pots	Complete cap + pot														
Phenol crystals	Unopened 1 kg bottle														
Methelene Blue (25gm)	Unopened 25 gm bottle														

Comments

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

ARVs

Product	Units of count	Managed at this facility? N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated? N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Diflucan 200mg	Tablets														
d4T/3TC/NVP 30/150/200 mg	Tablets														
d4T/3TC/NVP 40/150/200 mg	Tablets														
d4T/3TC 30/150 Mg	Tablets														
d4T/3TC 40/150 Mg	Tablets														
d4T 15 mg	Tablets														
Nevirapine suspension (20ml) PMTCT	Unopened 20 ml bottles														

Comments

S = Stavudine (d4T), L = Lamivudine (3TC), N = Nevirapine (NVP)

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

HIV test kits and Blood Safety Commodities

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Determine	Test														
SD Bioline	Test														
Uni-Gold	Test														
RPR	Test														
Hepatitis B	Test														
Hepatitis C	Test														
Vironistika	Test														
CD4/CD8	Test														

Comments

Determine box = 100 tests; SD Bioline box = 20 tests; Uni-gold box = 20 tests

RPR box = 100 tests

Hepatitis B box = non-uniform; Hepatitis C box = non-uniform

Vironistika Box = non-uniform

CD4/CD8 box = non-uniform

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Reproductive Health

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
COCP (Chagulang & Microgyno)	Cycle														
POP (Microlut)	Cycle														
Injectable (Depo & Megestron)	Vial														
IUCDS (Copper T)	Piece														
Implants (Jadelle)	Set														
ECP (Postinor 2)	Doses														
Male Condoms (MOH & Sure)	Piece														
Female Condoms	Piece														

Comments

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Malaria															
Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coartem (Artemether-Lumefantrine)	6-tablet blister Pack														
Quinine (300 mg)	Tablet														
Quinine Injection (2mls)	Ampoule														
5% Dextrose Infusion (500mls)	Bottles														
Condoms for HIV prevention															
Male Condoms (MOH & Sure)	Piece														
Female Condoms	Piece														
Comments Malaria commodities															
Comments condoms for HIV Prevention															

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

STI Drugs from MOH Supply Kits

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total dispensed (most recent 6 months)	# of months of data available	Physical inventory of store	Physical inventory of dispensing area	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Benzathine Penicillin 2.4 mg	Vial														
Doxycycline 100mg	Capsule														
Metronidazole 200mg	Tablet														
Clotrimazole 100mg	Tablet/ Pessary														

Comments

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Section 5: Storage

501	<p>Where do you store the following health commodities Use the following codes</p> <p>01 = Higher level facility store (regional/district) 02 = Facility wide store 03 = Departmental specific storage area 04 = Stand alone commodity store 05 = Other (Specify)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">a) Condoms for HIV prevention (PHO)</td></tr> <tr><td style="text-align: center;">b) Family planning commodities</td></tr> <tr><td style="text-align: center;">c) TB drugs</td></tr> <tr><td style="text-align: center;">d) HIV test kits and blood safety commodities</td></tr> <tr><td style="text-align: center;">e) ART</td></tr> <tr><td style="text-align: center;">f) STI drugs</td></tr> <tr><td style="text-align: center;">g) Malaria commodities</td></tr> </table>	a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	g) Malaria commodities	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"> </td></tr> </table>							
a) Condoms for HIV prevention (PHO)																	
b) Family planning commodities																	
c) TB drugs																	
d) HIV test kits and blood safety commodities																	
e) ART																	
f) STI drugs																	
g) Malaria commodities																	

Items 1–13 should be assessed for all facilities for products that are ready to be issued or distributed to clients. Circle the appropriate response in the appropriate column based on visual inspection of the storage facility. Should be assessed for wherever the commodities are stored. **To qualify as “YES,” all products and cartons must meet the criteria for each item.**

No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ARV	STI	Malaria
502	Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
503	Products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO) counting and general management.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
504	Cartons and products are in good condition, not crushed due to mishandling. If cartons are open, determine if products are wet or cracked due to heat/radiation (fluorescent lights in the case of condoms, cartons right-side up for Depo-Provera®).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
505	The facility makes it a practice to separate damaged and/or expired products from usable products and removes them from inventory.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

506	Products are protected from direct sunlight at the time of the visit.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ARV	STI	Malaria
507	Cartons and products are protected from water and humidity at the time of the visit.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
508	Storage area is visually free from harmful insects, bats and rodents. (Check the storage area for traces of rodents [droppings or insects].)	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
509	Storage area is secured with a lock and key, but is accessible during normal working hours; access is limited to authorized personnel.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
510	Products are stored at the appropriate temperature on the day of the visit according to product temperature specifications.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
511	Roof is maintained in good condition to avoid sunlight and water penetration.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
512	Storeroom is maintained in good condition (clean, all trash removed, sturdy shelves, organized boxes).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
513	The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for foreseeable future).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
514	Fire safety equipment is functional, available and accessible (any item identified as being used to promote fire safety should be considered).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
515	Products are stored separately from insecticides, food, gas and chemicals.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

**THE ADDITIONAL STANDARDS BELOW CAN BE APPLIED TO ANY FACILITY
LARGE ENOUGH TO REQUIRE STACKING OF MULTIPLE BOXES.**

516	Products are stacked at least 10 cm off the floor.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
517	Products are stacked at least 30 cm away from the walls and other stacks.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
518	Products are stacked no more than 2.5 meters high.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

Additional guidelines for specific questions:

- Q 503:** In noting proper product arrangement, consider the shelf life of the different products.
- Q 504:** Check cartons to determine if they are smashed due to mishandling. Also, examine the conditions of the products inside opened or damaged cartons to see if they are wet, cracked open due to heat/radiation (e.g., for condoms, because of fluorescent lights), or crushed.
- Q 508:** Check the storage area for traces of rodents (droppings) or insects harmful to the products.
- Q 509:** This refers to either a warehouse secured with a lock or to a cabinet in a clinic with a key.
- Q 515:** Fire safety equipment does not have to meet international standards. Consider any item identified as being used to promote fire safety (e.g., water bucket, sand). Do not consider empty and/or expired fire extinguishers as valid fire safety equipment.

Section 6

LMIS DATA QUALITY: USABLE STOCK ON HAND AT TIME OF MOST RECENT LMIS REPORT

Column:

1. Name of all Indicator products considered in this survey. (**Note: Column 1 is already filled out.**)
2. Ask whether the products are managed at the facility, answer 0 for NO and 1 for YES (**If NO, Skip to the next commodity**)
3. Record whether they have LMIS reports, answer 0 for NO and 1 for YES (**If NO, Skip to next item**)
4. Get the most recent LMIS record and report showing the selected products, and record the stock on hand from the LMIS report in column

Acceptable LMIS sources:

5. Write the quantity of usable stock on hand from the stock records from the time of the selected LMIS report.
6. Note the reasons for any discrepancy.

ENTER by Acceptable data source for LMIS Data Quality

FAMILY PLANNING		MALARIA	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility Consumption Data Report and Requests (CDRR)	Quarterly Report (Facility)	DAR	DAR
District CDRR	Quarterly Report (District)	ICC	ICC
Daily Activity Register (DAR)	Daily Activity Register (DAR)	CDRR	CDRR
Inventory Control Card (ICC)	Inventory Control Card (ICC)		
STI		TEST KITS	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility CDRR	DAR	Facility CDRR for test kits	Facility CDRR for test kits
District CDRR	ICC		
DAR for STD			
ICC			
ARV		CONDOMS FOR HIV	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility CDRR for ARVs	Facility CDRR for ARVs	Social Outlet Condom Distribution Form	Quarterly Report (Facility)
		Divisional CDRR	Quarterly Report (District)
		District CDRR	Daily Activity Register (DAR)
			Inventory Control Card (ICC)
TB			
Eastern South	Non-Eastern South		
Facility CDRR for TB/Leprosy	Stock Cards		
District CDRR for TB/Leprosy	Half Annual Report on NLTP Drugs and Other Items (District Medical Store)		
DAR for TB/Leprosy	Half Annual Report on NLTP Drugs and Other Items (Provincial Medical Store)		
Stock Cards			

LMIS Data Quality

TB					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item – only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)					
Streptomycin Injection (1000Mg)					
TB Patient Packs (RHZE/ EH)					
Basic Fuchine Powder (25 gms)					
Poly Pots					
Phenol crystals					
Methelene Blue (25gm)					
Comments					

**LMIS Data Quality
ARVs**

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item – only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Diflucan 200mg					
d4T/3TC/NVP 30/150/ 200 mg					
d4T/3TC/NVP 40/150/ 200 mg					
d4T/3TC 30/150 Mg					
d4T/3TC 40/150 Mg					
d4T 15 mg					
Nevir-apine suspension (20ml) PMTCT					
Comments					

LMIS Data Quality
Blood Safety Commodities

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Determine					
SD Bioline					
Uni-Gold					
RPR					
Hepatitis B					
Hepatitis C					
Vironistika					
CD4/CD8					
Comments and reasons for discrepancy					

LMIS Data Quality

Reproductive Health					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
COCP (Chagu langu & Microgyno)					
POP (Microlut)					
Injectable (Depo & Megestrona)					
IUCDS (Copper T)					
Implants (Jadelle)					
ECP (Postinor 2)					
Male Condoms (MOH & Sure)					
Female Condoms					
Comments:					

LMIS Data Quality

Condoms for HIV prevention

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Male Condoms (MOH & Sure)					
Female Condoms					
Comments					

LMIS Data Quality

Malaria					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Coartem (Artemether-Lumefantine)					
Quinine (300 mg)					
Quinine Injection (2mls)					
5% Dextrose Infusion (500mls)					
Comments					

LMIS Data Quality

STI Drugs for KEMSA STI Kits

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card plus the DAR at the time of LMIS report	Reasons for discrepancy
			4	5	6
Benzathine Penicillin 2.4 mg					
Doxycycline 100mg					
Metronidazole 200mg					
Clotrimazole 100mg					
Comments					

SECTION 7

DIFFERENCE BETWEEN QUANTITY ORDERED AND QUANTITY RECEIVED (FROM LAST COMPLETE/FILLED ORDER)

Column:

1. Name of all Indicator products considered in this survey. **Note: Column 1 is already filled out.**
2. Ask whether the products are managed at the facility, answer 1 for Yes or 0 for No **(if NO Skip to next commodity)**
3. Ask whether the product is ordered from this facility, answer 1 for Yes or 0 for No **(if NO Skip to next commodity)**
4. Ask whether order records are available, answer 1 for Yes or 0 for No **(if NO Skip to next commodity). NOTE: Use the CDRR first; if not available, use the S-11 form.**
5. Enter the quantity ordered for the last order period for which products should have been received (i.e., don't include open orders whose expected receipt date has not arrived).
6. Enter the date the order was placed.
7. Enter the quantity received in the last order.
8. Enter the date the order was received.
9. Enter the reasons cited for orders not being filled (following the legend below).
 - 01 incorrect amount ordered/mathematical error
 - 02 higher level stocked out
 - 03 higher level rationing
 - 04 order amount changed by higher level management
 - 05 other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility	Does this facility place orders for this commodity?	Are order records available?	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
	No=0 Yes = 1	No=0 Yes = 1	No=0 Yes = 1					
1	2	3	4	5	6	7	8	9
TB								
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)								
Streptomycin Injection (1000Mg)								
TB Patient Packs (RHZE/ EH)								
Basic Fuchine Powder (25 gms)								
Poly Pots								
Phenol crystals								
Methelene Blue (25gm)								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility	Does this facility place orders for this commodity?	Are order records available?	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	No=0 Yes = 1	No=0 Yes = 1	No=0 Yes = 1	5	6	7	8	9
ARVs								
Diflucan 200mg								
d4T/3TC/NVP 30/150/ 200 mg								
d4T/3TC/NVP 40/150/ 200 mg								
d4T/3TC 30/150 Mg								
d4T/3TC 40/150 Mg								
d4T 15 mg								
Nevir-apine suspension (20ml) PMTCT								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Blood Safety Commodities								
Determine								
SD Bioline								
Uni-Gold								
RPR								
Hepatitis B								
Hepatitis C								
Vironistika								
CD4/CD8								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Reproductive Health								
COCP (Chagu langu & Microgyno)								
POP (Microlut)								
Injectable (Depo & Megestron)								
IUCDS (Copper T)								
Implants (Jadelle)								
ECP (Postinor 2)								
Male Condoms (MOH & Sure)								
Female Condoms								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Condoms for HIV Prevention								
Male Condoms (MOH & Sure)								
Female Condoms								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Malaria								
Coartem (Artemether-Lumefantine)								
Quinine (300 mg)								
Quinine Injection (2mls)								
5% Dextrose Infusion (500mls)								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
STI Drugs for KEMSA STI Kits								
Benzathine Penicillin 2.4 mg								
Doxycycline 100mg								
Metronidazole 200mg								
Clotrimazole 100mg								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

End Time (24 hour clock) [__|__]:[__ __]

Thank you very much for participating in this survey. Your responses are very valuable and useful.

NOTES/COMMENTS:

Facility Identification

Instructions

- Record the name of the district and location. Assigned codes to be placed in the responses boxes on the right.

Facility Location

Name of the District Store _____

Location (Town) _____

Province _____

District _____

Facility Identification Code

Working Facility Telephone Number _____

Alternative In-Charge Telephone Number _____

Team Code _____

Codes

[][]

[][]

[][][][][][]

[][]

Introduction

- Introduce team members and ask the district representatives to introduce themselves.
- Explain the objectives of this survey

Good day. My name is _____. I am representing the Ministry of Health. We are conducting a survey regarding the health commodities logistic system. We are looking at the availability of selected commodities and information about how you order and receive these products. This is not a supervision visit. We are visiting selected districts in the country and this district was randomly selected to be in the survey. The objectives of the survey are to collect current information on logistics system performance and stock status of key health products.

The results will be analyzed by facility level and not by individual district so the reported performance is not based on any one districts or facilities responses. The results of this survey will provide information to make decisions and to promote improvements in the logistics system. The survey will be conducted again in the future to measure changes in the logistic system practices and performance.

We would like to ask you a few questions about the products and supplies available in this facility. In addition we would like to actually count selected products you have in stock today and observe the general storage conditions. Do you have any questions?

Start Time (24 hour clock) [][]:[][]

Section 1: Facility Type

No	Questions and Filters	Coding categories	Responses (circle)
101	Which type of health facility is this system attached to?	National teaching and referral hospital Provincial hospital District hospital Health centre Dispensary Clinic Hospital Sub district hospital Other Specify..... ...	01 02 03 04 05 06 07 08 88
102	What Level of Store does this system have?	Central Level Regional Level District Level Division Level Location Level Other Specify..... ...	01 02 03 04 05 88
103	Who is the operating agency of this system?	Government NGO Private Faith based Community Other Specify..... ...	01 02 03 04 05 88
104	Is there a tarmac road to the store?	No Yes	0 1
105	Is there operational electricity on the day of visit at the store? (source can be electrical line, solar, or generator, but electricity must be observed during visit)	No Yes	0 1
106	Operational water within the store		

	compound on the day of visit?	No	0
		Yes	1
107	Operational telephone or radio communication on the day of visit at the store (paid for by the store)?	No	0
		Yes	1

Section 2: Training

No	Questions and Filters	Coding categories	Responses
201	What is the title of the principal person responsible for managing (ordering, receiving supplies, storing supplies, inventory management) the following commodities in this store?		No Yes
		a) Condoms for HIV prevention (PHO)	0 1
		b) Family planning commodities	0 1
		c) TB drugs	0 1
		d) HIV test kits and blood safety commodities	0 1
		e) ART	0 1
		f) STI drugs	0 1
		h) Malaria commodities	0 1
202	<p><u>Instructions to interviewer:</u> <u>Get the person named above to be your respondent for the rest of the section. Circle YES if you get the person and NO if you fail to get the person.</u></p> <p>If NO, skip to Section 3</p>		No Yes
		a) Condoms for HIV prevention (PHO)	0 1
		b) Family planning commodities	0 1
		c) TB drugs	0 1
		d) HIV test kits and blood safety commodities	0 1
		e) ART	0 1
		f) STI drugs	0 1
		h) Malaria commodities	0 1
203	Number of years or months the person has been managing these commodities		Years Months
		a) Condoms for HIV prevention (PHO)	
		b) Family planning commodities	
		c) TB drugs	
		d) HIV test kits and blood safety commodities	
		e) ART	
		f) STI drugs	
		h) Malaria commodities	
204	<p>Which is the main way you learned how to fill/complete logistics forms/records and reports</p> <p>01 = Never learned → Skip to Q206</p> <p>02 = During logistics training workshop</p> <p>03 = On-the-job training → Skip to Q206</p> <p>04 = On-the-job (self learning) → Skip to Q206</p> <p>05 = Other (specify) → Skip to Q206</p>	a) Condoms for HIV prevention (PHO)	
		b) Family planning commodities	
		c) TB drugs	
		d) HIV test kits and blood safety commodities	
		e) ART	
		f) STI drugs	
		g) Malaria commodities	

No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ART	STI	Malaria
205	What were you trained on? Do NOT read out answers. Note : There should be no empty cells.		Not Mentioned=0 Mentioned=1 (Multiple responses possible. After respondent answers, probe by asking for any others)						
	a) How to order		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	b) When to order		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	c) How to fill logistic data reporting tools		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	d) When to compile the reports		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	e) Where to send the reports		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	f) How to store products		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	g) Other		0 1	0 1	0 1	0 1	0 1	0 1	0 1
	(Specify)								

How many of the **technical** personnel staff working and managing these commodities for the district have been trained in logistics (ordering, receiving supplies, storing supplies, inventory management)

206		No. of Staff	No. with Formal Training
	a) Condoms for HIV prevention (PHO)		
b) Family planning commodities			
c) TB drugs			
d) HIV test kits and blood safety commodities			
e) ART			
f) STI drugs			
g) Malaria commodities			

NOTES/COMMENTS:

Section 3: LMIS, Ordering, Transport

No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ART	STI	Malaria
301	Do you have a Stock Card to manage health products? Ask to see the latest Stock	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

Card		If NO, Skip to Q304							
302	Does the Stock Card contain the following categories?	Con dom s	FP	TB	Test Kits	ART	STI	Malari a	
	A. stock on hand	No	0	0	0	0	0	0	
		Yes	1	1	1	1	1	1	
	B. quantities dispensed	No	0	0	0	0	0	0	
		Yes	1	1	1	1	1	1	
C. losses and adjustments	No	0	0	0	0	0	0		
	Yes	1	1	1	1	1	1		
D. quantities requested	No	0	0	0	0	0	0		
	Yes	1	1	1	1	1	1		
303	Has the Stock Card been used during the last 30 days or to the last transaction?	No	0	0	0	0	0	0	
		Yes	1	1	1	1	1	1	

NOTES/COMMENTS:

No.	Questions and Filters	Coding categories	Con dom s	FP	TB	Test Kits	ART	STI	Malari a
304	Do you have a Summary Consumption Data Report and Request (CDRR) form to manage health products? Ask to see the latest CDRR	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
		Improvise d	2	2	2	2	2	2	2

	If NO, skip to Q310 If YES, skip to Q306		If NO, Skip to Q310 If YES, Skip to Q306						
305	Does the Summary Consumption Data Report and Request (CDRR) for commodities contain the following categories?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
	A. stock on hand	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
	B. quantities dispensed	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
C. losses and adjustments	No	0	0	0	0	0	0	0	
	Yes	1	1	1	1	1	1	1	
D. quantities requested	No	0	0	0	0	0	0	0	
	Yes	1	1	1	1	1	1	1	
306	Has the Summary Consumption Data Report and Request been used during the last 30 days or to the last transaction?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
	No	0	0	0	0	0	0	0	
	Yes	1	1	1	1	1	1	1	
307	How often are these CDRR reports sent to the higher level?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
	Do NOT read out answers.	a) Monthly	Not Mentioned=0 Mentioned=1						
			0	0	0	0	0	0	0
	(Multiple responses possible. After respondent answers, probe by asking for any others)	b) Quarterly	Con dom s	FP	TB	Test Kits	ART	STI	Malari a
			0	0	0	0	0	0	0
1			1	1	1	1	1	1	
c) Every Two Months	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1		

		d) Other	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		(Specify)							
308	When was the last time you sent a CDRR for products for this district?	a)Never	1	1	1	1	1	1	1
		b) This month	2	2	2	2	2	2	2
		c)Last month	3	3	3	3	3	3	3
		d) 2 months ago	4	4	4	4	4	4	4
		e) 3 months ago	5	5	5	5	5	5	5
		f) More than 3 months ago	6	6	6	6	6	6	6
		g) Don't Know	97	97	97	97	97	97	97
309	How often are you supposed to send these CDRR reports to the higher level? Not Mentioned=0 Mentioned=1	a) Monthly	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		b) Quarterly	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		c) Semi-annually	0	0	0	0	0	0	0
	1	1	1	1	1	1	1		
		d) Annually	0	0	0	0	0	0	
			1	1	1	1	1	1	
		e) Other (Specify)	0	0	0	0	0	0	
			1	1	1	1	1	1	

NOTES/COMMENTS:

			Con dom s	FP	TB	Test Kits	ART	STI	Malari a
310	How many facilities got their supplies from here within the last month?	Number Ask for a list to confirm							
311	How many facilities are supposed to get their supplies from here?	Number Ask for a list to confirm							
312	How many facilities submitted complete LMIS reports for the last reporting period?	Number of facilities Ask for a list to confirm							
313	How many facilities are supposed to send LMIS reports to this facility?	Number of facilities Ask for a list to confirm							
314	How many emergency orders for the following products have you placed in the last 3 months?		Con dom s	FP	TB	Test Kits	ART	STI	Malari a
		None	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1
		2	2	2	2	2	2	2	2
		3	3	3	3	3	3	3	3
		4+	4	4	4	4	4	4	4
	Don't Know	97	97	97	97	97	97	97	97
315	Who determines this District's re-supply quantities? (Multiple responses	Not Mentioned=0	Mentioned=1						
		a) The District itself	0	0	0	0	0	0	0
			1	1	1	1	1	1	1

		b) Higher-level facility	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		Other	0	0	0	0	0	0	0
		(Specify)	1	1	1	1	1	1	1
316	How are the District's re-supply quantities determined?	Formula	1	1	1	1	1	1	1
		(Specify)							
		Other means (specify)	2	2	2	2	2	2	2
		Don't Know	97	97	97	97	97	97	97

No.	Questions and Filters	Coding categories	Con dom	FP	TB	Test Kits	ART	STI	Malari a
317	Who is responsible for transporting products to your district? Not Mentioned=0 Mentioned=1	KEMSA central	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		KEMSA regional	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
		District (MOH)	0	0	0	0	0	0	0
			1	1	1	1	1	1	1
318	(Only ONE response)	a) District Vehicles	1	1	1	1	1	1	1
		b) Public transportation	2	2	2	2	2	2	2
		c) Private vehicle transport	3	3	3	3	3	3	3
		d) None (delivered by higher level)	4	4	4	4	4	4	4
	f) Other (Specify)	88	88	88	88	88	88	88	
319	On average, approximately how long does it take between ordering and receiving products?	Con dom s	FP	TB	Test Kits	ART	STI	Malari a	

	If never ordered, circle 77	a) Never ordered	77	77	77	77	77	77	77
		b) Less than 2 weeks	1	1	1	1	1	1	1
		c) 2 weeks to 1 month	2	2	2	2	2	2	2
		d) Between 1 and 2 months	3	3	3	3	3	3	3
		e) More than 2 months	4	4	4	4	4	4	4
320	When did you receive your most recent supervision visit?		Condoms	FP	TB	Test Kits	ARV	STI	Malari a
	Check visitors book, if necessary.	Never received	1	1	1	1	1	1	1
		Within the last 1 month	2	2	2	2	2	2	2
		Within the last 3 months	3	3	3	3	3	3	3
		Within the last 6 months	4	4	4	4	4	4	4
		More than 6 months ago	5	5	5	5	5	5	5
		Don't Know	97	97	97	97	97	97	97
321	When did you receive your last supervision visit that included commodities management (e.g., stock cards checked, reports checked, expired stock removed, supplies checked)?		Never received	1	1	1	1	1	1
			Within the last month	2	2	2	2	2	2
			Within the last 3 months	3	3	3	3	3	3
			Within the last 6 months	4	4	4	4	4	4
			More than 6 months ago	5	5	5	5	5	5
			Don't Know	97	97	97	97	97	97

If the study team is studying a cold chain logistics system, answer questions 325–328. If not, go to next section

	Questions and filters	Coding categories	Responses
322	Do you have a functioning refrigerator(s) where you store ARVs and HIV test kits?	Not Mentioned = 0	Mentioned = 1

	ARVs	No	0
		Yes	1
	HIV test kits and blood safety commodities	No	0
		Yes	1
If NO, skip to Q401			
323	Do the refrigerator (s) have a functioning thermometer for the ARVs and test kits?	Not Mentioned = 0	Mentioned = 1
	ARVs	No	0
		Yes	1
	HIV test kits and blood safety commodities	No	0
		Yes	1
If NO skip to Q325			
324	Record the actual temperature		
	ARVs	[_____]	
	HIV test kits and blood safety commodities	[_____]	
325	Are refrigerators located at least ½ meter away from the wall or cartons stacked higher than 1 meter?		
	ARVs	No	0
		Yes	1
	HIV test kits and blood safety commodities	No	0
		Yes	1
326	Do you maintain a temperature chart	ARVs	No 0
			Yes 1
	If NO skip to Q328	HIV test kits and blood safety commodities	No 0
			Yes 1
327	Is the temperature chart up-to-date?	ARVs	No 0
	(to be up-to-date, there must be an entry		Yes 1

		HIV test kits and blood safety commodities	No Yes	0 1
328	Is there a supply of paraffin or LPG, generator for cold chain and purposes? Ask only if no functioning electricity. If there is an Electricity Code, answer NOT APPLICABLE = 95	ARVs	No Yes NA	0 1 95
		HIV test kits and blood safety commodities	No Yes NA	0 1 95

NOTES/COMMENTS:

SECTION 4

Stock Status (1 January – 30 June)

Source: Ask respondent

Col 3: Whether or not the product is managed at this facility, answer 0 for No, 1 for Yes. (If No Skip to next commodity)

Source: Stock cards

Col. 4: Check if the stock card is available; answer 0 for No, 1 for Yes. **(If no Skip to column 10 and complete column 10-15)**

Col 5: Check if there is a stock card entry within the last 30 days from the day of the visit. Answer 0 for No, 1 for Yes. Note: If the stock card was last updated with the balance of 0 and the facility has not received any re-supply, consider the stock card up-to-date. If stock card is not updated within the last 30 days (answered NO), SKIP to column 10.

Col. 6: Record the balance on the stock card, regardless of last update.

Col. 7: Record if the facility has had any stockout of the product during the most recent 6 full months before the survey (1 January – 30 June); answer 0 for NO, 1 for YES according to stock cards, if stock cards are not available, leave blank and **skip to column 10**.

Col. 8: Record how many times the product stocked out during the most recent full 6 months (1 January – 30 June) before the survey according to stock cards, if available. If stock cards are not available, leave blank and **skip to column 10**.

Col. 9: Record the total number of days the product was stocked out during the most recent full 6 months before the survey (1 January – 30 June).

Source: Summary Consumption Data Records and Requests (CDRR)

Col 10: Record the quantity of product dispensed during the most recent 6 months before the survey (1 January – 30 June).

Col 11: Record the number of months the issued data represents (may be less than 6); record the months for which there is any data recorded, **including 0**.

Source: Direct observation

Col. 12: Record the quantity of **usable** product in the facility store.

Col. 14: Record if the facility is experiencing a stockout of the product on the day of the visit, **according to the physical inventory**. Answer 0 for No, 1 for Yes.

Col. 15: Record the quantity of expired products. Count all expired products on the day of the visit. If there are products that are near expiry **(within one week), note in the comments section**.

Col 16: For any product that experienced a stockout in the last six months and/or including day of visit, note 1-3 of the most common reasons (by product) with the following codes (list all that apply): 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

TB drugs

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock-out today? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12		15	16
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)	Tablets											14		
Streptomycin Injection (1000Mg)	Vials													
TB Patient Packs (RHZE/EH)	Unopened patient pack													
Basic Fuchine Powder (25 gms)	Unopened 25 gm bottles													
Poly Pots	Complete cap + pot													
Phenol crystals	Unopened 1 kg bottle													
Methylene Blue (25gm)	Unopened 25 gm bottle													
Comments														

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

ARVs

Product	Units of count	Managed at this facility? N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated? N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stock ed out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock out today? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12		15	16
Diflucan 200mg	Tablets													
d4T/3TC/NVP 30/150/200 mg	Tablets											14		
d4T/3TC/NVP 40/150/200 mg	Tablets													
d4T/3TC 30/150 Mg	Tablets													
d4T/3TC 40/150 Mg	Tablets													
d4T 15 mg	Tablets													
Nevirapine suspension (20ml) PMTCT	Unopened 20 ml bottles													
Comments														

S = Stavudine (d4T), L = Lamivudine (3TC), N = Nevirapine (NVP)

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

HIV test kits and Blood Safety Commodities

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock-out today? N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12		15	16
Determine	Test													
SD Bioline	Test											14		
Uni-Gold	Test													
RPR	Test													
Hepatitis B	Test													
Hepatitis C	Test													
Vironistika	Test													
CD4/CD8	Test													

Comments

Adjust numbers for full carton sizes

Determine box = 100 tests; SD Bioline box = 20 tests; Uni-gold box = 20 tests
 RPR box = 100 tests
 Hepatitis B box = non-uniform; Hepatitis C box = non-uniform
 Vironistika Box = non-uniform
 CD4/CD8 box = non-uniform

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Reproductive Health

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12		15	16
COCP (Chagulang & Microgyno)	Cycle											14		
POP (Microlut)	Cycle													
Injectable (Depo & Megestrol)	Vial													
IUCDS (Copper T)	Piece													
Implants (Jadelle)	Set													
ECP (Postinor 2)	Doses													
Male Condoms (MOH & Sure)	Piece													
Female Condoms	Piece													

Comments

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Malaria															
Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs	
1	2	3	4	5	6	7	8	9	10	11	12		15	16	
Coartem (Artemether-Lumefantrine)	6-tablet blister Pack											14			
Quinine (300 mg)	Tablet														
Quinine Injection (2mls)	Ampoule														
5% Dextrose Infusion (500mls)	Bottles														
Condoms for HIV prevention															
Male Condoms (MOH & Sure)	Piece														
Female Condoms	Piece														
Comments Malaria commodities															
Comments condoms for HIV Prevention															

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

STI Drugs from MOH Supply Kits

Product	Units of count	Managed at this facility N = 0 Y = 1	Stock card available N = 0 Y = 1	Stock card updated N = 0 Y = 1	Last balance on stock card	Stock-out most recent 6 months N = 0 Y = 1	# of stock-outs	Total # of days stocked out	Total issued (most recent 6 months)	# of months of data available	Physical inventory of store	Stock-out today N = 0 Y = 1	Quantity of expired products	Reasons for stock outs
1	2	3	4	5	6	7	8	9	10	11	12		15	16
Benzathine Penicillin 2.4 mg	Vial											14		
Doxycycline 100mg	Capsule													
Metronidazole 200mg	Tablet													
Clotrimazole 100mg	Tablet/Pessary													

Comments

Reasons: 1=Did not order; 2=Don't know how to order; 3=Ordered commodities were not received; 4=Higher level stocked out; 5=Order amount changed at the higher level; 6=Product withdrawn from facility; 7= Ordered but did not go for commodities; 8=Other: Specify by product in comments

Section 5: Storage Conditions

501	Where do you store the following health commodities	<p>Use the following codes</p> <p>01 = Higher level facility 02 = District store 03 = Department specific storage area 04 = Stand alone commodity store 05 = Other (specify)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>a) Condoms for HIV prevention (PHO)</td></tr> <tr><td>b) Family planning commodities</td></tr> <tr><td>c) TB drugs</td></tr> <tr><td>d) HIV test kits and blood safety commodities</td></tr> <tr><td>e) ART</td></tr> <tr><td>f) STI drugs</td></tr> <tr><td>h) Malaria commodities</td></tr> </table>	a) Condoms for HIV prevention (PHO)	b) Family planning commodities	c) TB drugs	d) HIV test kits and blood safety commodities	e) ART	f) STI drugs	h) Malaria commodities	
a) Condoms for HIV prevention (PHO)										
b) Family planning commodities										
c) TB drugs										
d) HIV test kits and blood safety commodities										
e) ART										
f) STI drugs										
h) Malaria commodities										

Items 1–13 should be assessed for all facilities for products that are ready to be issued or distributed to clients. Circle the appropriate response in the appropriate column based on visual inspection of the storage facility; note any relevant observations in the comments column. **To qualify as “yes,” all products and cartons must meet the criteria for each item.**

No.	Questions and Filters	Coding categories	Condoms	FP	TB	Test Kits	ART	STI	Malaria
502	Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
503	Products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO) counting and general management.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
504	Cartons and products are in good condition, not crushed due to mishandling. If cartons are open, determine if products are wet or cracked due to heat/radiation (fluorescent lights in the case of condoms, cartons right-side up for Depo-Provera®).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

505	The facility makes it a practice to separate damaged and/or expired products from usable products and removes them from inventory.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
506	Products are protected from direct sunlight at the time of the visit.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
507	Cartons and products are protected from water and humidity at the time of the visit.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
508	Storage area is visually free from harmful insects, bats and rodents. (Check the storage area for traces of rodents [droppings or insects].)	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
509	Storage area is secured with a lock and key, but is accessible during normal working hours; access is limited to authorized personnel.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
510	Products are stored at the appropriate temperature on the day of the visit according to product temperature specifications.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

No.	Questions and Filters	Coding categories	Conditions	FP	TB	Test Kits	ARV	STI	Malaria
511	Roof is maintained in good condition to avoid sunlight and water penetration.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
512	Storeroom is maintained in good condition (clean, all trash removed, sturdy shelves, organized boxes).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
513	The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for foreseeable future).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
514	Fire safety equipment is functional, available and accessible (any item identified as being used to promote fire safety should be considered).	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
515	Products are stored separately from insecticides, food, gas and chemicals	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

THE ADDITIONAL STANDARDS BELOW CAN BE APPLIED TO ANY FACILITY LARGE ENOUGH TO REQUIRE STACKING OF MULTIPLE BOXES.

516	Products are stacked at least 10 cm off the floor.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
517	Products are stacked at least 30 cm away from the walls and other stacks.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1
518	Products are stacked no more than 2.5 meters high.	No	0	0	0	0	0	0	0
		Yes	1	1	1	1	1	1	1

Additional guidelines for specific questions:

- Item 2:** In noting proper product arrangement, consider the shelf life of the different products.
- Item 3:** Check cartons to determine if they are smashed due to mishandling. Also, examine the conditions of the products inside opened or damaged cartons to see if they are wet, cracked open due to heat/radiation (e.g., for condoms, because of fluorescent lights), or crushed.
- Item 4:** Conduct the discarding of damaged or expired products according to the facility's procedures (this may differ from one facility to another). Specify if procedures exist and note what they are.
- Item 7:** It is important to check the storage area for traces of rodents (droppings) or insects harmful to the products.
- Item 8:** This refers to either a warehouse secured with a lock or to a cabinet in a clinic with a key.

Item 13: Fire safety equipment does not have to meet international standards. Consider any item identified as being used to promote fire safety (e.g., water bucket, sand). Do not consider empty and/or expired fire extinguishers as valid fire safety equipment.

Section 6

LMIS DATA QUALITY: USABLE STOCK ON HAND AT TIME OF MOST RECENT LMIS REPORT

Column:

7. Name of all Indicator products considered in this survey. (**Note: Column 1 is already filled out.**)
8. Ask whether the products are managed at the facility, answer 0 for NO and 1 for YES (**If No Skip to the next commodity**)
9. Record whether they have LMIS reports, answer 0 for NO and 1 for YES (**If NO, Skip to the next item**)
10. Get the most recent LMIS record and report showing the selected products, and record the stock on hand from the LMIS report in column

Acceptable LMIS sources:

11. Write the quantity of usable stock on hand from the stock records from the time of the selected LMIS report.
12. Note the reasons for any discrepancy.

ENTER by Acceptable data source for LMIS Data Quality

FAMILY PLANNING		MALARIA	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility Consumption Data Report and Requests (CDRR)	Quarterly Report (Facility)	DAR	DAR
District CDRR	Quarterly Report (District)	ICC	ICC
Daily Activity Register (DAR)	Daily Activity Register (DAR)	CDRR	CDRR
Inventory Control Card (ICC)	Inventory Control Card (ICC)		
STI		TEST KITS	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility CDRR	DAR	Facility CDRR for test kits	Facility CDRR for test kits
District CDRR	ICC		
DAR for STD			
ICC			
ARV		CONDOMS FOR HIV	
Eastern South	Non-Eastern South	Eastern South	Non-Eastern South
Facility CDRR for ARVs	Facility CDRR for ARVs	Social Outlet Condom Distribution Form	Quarterly Report (Facility)
		Divisional CDRR	Quarterly Report (District)
		District CDRR	Daily Activity Register (DAR)
			Inventory Control Card (ICC)
TB			
Eastern South		Non-Eastern South	
Facility CDRR for TB/Leprosy		Stock Cards	
District CDRR for TB/Leprosy		Half Annual Report on NLTP Drugs and Other Items (District Medical Store)	
DAR for TB/Leprosy		Half Annual Report on NLTP Drugs and Other Items (Provincial Medical Store)	
Stock Cards			

LMIS Data Quality

TB					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item – only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)					
Streptomycin Injection (1000Mg)					
TB Patient Packs (RHZE/ EH)					
Basic Fuchine Powder (25 gms)					
Poly Pots					
Phenol crystals					
Methelene Blue (25gm)					
Comments					

LMIS Data Quality

ARVs

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 (If NO Skip to next item – only use acceptable data sources)	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Diflucan 200mg					
d4T/3TC/NVP 30/150/ 200 mg					
d4T/3TC/NVP 40/150/ 200 mg					
d4T/3TC 30/150 Mg					
d4T/3TC 40/150 Mg					
d4T 15 mg					
Nevir-apine suspension (20ml) PMTCT					
Comments					

LMIS Data Quality
Blood Safety Commodities

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Determine					
SD Bioline					
Uni-Gold					
RPR					
Hepatitis B					
Hepatitis C					
Vironistika					
CD4/CD8					
Comments and reasons for discrepancy					

LMIS Data Quality

Reproductive Health					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
COCP (Chagu langu & Microgyno)					
POP (Microlut)					
Injectable (Depo & Megestron)					
IUCDS (Copper T)					
Implants (Jadelle)					
ECP (Postinor 2)					
Male Condoms (MOH & Sure)					
Female Condoms					
Comments:					

LMIS Data Quality
Condoms for HIV prevention

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Male Condoms (MOH & Sure)					
Female Condoms					
Comments					

LMIS Data Quality

Malaria					
Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Coartem (Artemether-Lumefantine)					
Quinine (300 mg)					
Quinine Injection (2mls)					
5% Dextrose Infusion (500mls)					
Comments					

LMIS Data Quality
STI Drugs for KEMSA STI Kits

Product	Managed at this facility No =0 Yes = 1	LMIS report available? No =0 Yes = 1 <i>(If NO Skip to next item –only use acceptable data sources)</i>	Usable Stock on Hand (at time of most recent LMIS report)		
			According to most recent LMIS report	From stock card at the time of LMIS report	Reasons for discrepancy
			4	5	6
Benzathine Penicillin 2.4 mg					
Doxycycline 100mg					
Metronidazole 200mg					
Clotrimazole 100mg					
Comments					

SECTION 7

DIFFERENCE BETWEEN QUANTITY ORDERED AND QUANTITY RECEIVED

Column:

10. Name of all Indicator products considered in this survey. **Note: Column 1 is already filled out.**
11. Ask whether the products are managed at the facility, answer 1 for Yes or 0 for No **(if NO, Skip to the next commodity)**
12. Ask whether the product is ordered from this facility, answer 1 for Yes or 0 for No **(if NO, Skip to the next commodity)**
13. Ask whether order records are available, answer 1 for Yes or 0 for No **(if NO, Skip to next commodity). NOTE: Use the CDRR first; if not available, use the S-11 form.**
14. Enter the quantity ordered for the last order period for which products should have been received (i.e., don't include open orders whose expected receipt date has not arrived).
15. Enter the date the order was placed.
16. Enter the quantity received in the last order.
17. Enter the date the order was received.
18. Enter the reasons cited for orders not being filled (following the legend below).
 - 01 incorrect amount ordered/mathematical error
 - 02 higher level stocked out
 - 03 higher level rationing
 - 04 order amount changed by higher level management
 - 05 other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
TB								
Rifampicin/Isoniazide (RH) 150/75Mg (Rifina)								
Streptomycin Injection (1000Mg)								
TB Patient Packs (RHZE/ EH)								
Basic Fuchine Powder (25 gms)								
Poly Pots								
Phenol crystals								
Methelene Blue (25gm)								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
ARVs								
Diflucan 200mg								
d4T/3TC/NVP 30/150/ 200 mg								
d4T/3TC/NVP 40/150/ 200 mg								
d4T/3TC 30/150 Mg								
d4T/3TC 40/150 Mg								
d4T 15 mg								
Nevir-apine suspension (20ml) PMTCT								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Blood Safety Commodities								
Determine								
SD Bioline								
Uni-Gold								
RPR								
Hepatitis B								
Hepatitis C								
Vironistika								
CD4/CD8								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Reproductive Health								
COCP (Chagu langu & Microgyno)								
POP (Microlut)								
Injectable (Depo & Megestrone)								
IUCDS (Copper T)								
Implants (Jadelle)								
ECP (Postinor 2)								
Male Condoms (MOH & Sure)								
Female Condoms								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Condoms for HIV Prevention								
Male Condoms (MOH & Sure)								
Female Condoms								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
Malaria								
Coartem (Artemether-Lumefantine)								
Quinine (300 mg)								
Quinine Injection (2mls)								
5% Dextrose Infusion (500mls)								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

Difference between Quantity Ordered and Quantity Received

Product	Managed at this facility No=0 Yes = 1	Does this facility place orders for this commodity? No=0 Yes = 1	Are order records available? No=0 Yes = 1	Quantity ordered for last order period	Date order placed	Quantity received in last order	Date order received	Reasons for orders not being filled
1	2	3	4	5	6	7	8	9
STI Drugs for KEMSA STI Kits								
Benzathine Penicillin 2.4 mg								
Doxycycline 100mg								
Metronidazole 200mg								
Clotrimazole 100mg								
Comments								

01=incorrect amount ordered/mathematical error; 02=higher level stocked out; 03=higher level rationing; 04=order amount changed by higher level management; 05=other (specify)

End Time (24 hour clock) [__|__]:[__ __]

Thank you very much for participating in this survey. Your responses are very valuable and useful.

NOTES/COMMENTS:

For more information, please visit www.deliver.jsi.com.

DELIVER

John Snow, Inc.

1616 North Fort Myer Drive, 11th Floor

Arlington, VA 22209 USA

Phone: 703-528-7474

Fax: 703-528-7480

www.deliver.jsi.com