



Nigeria: Contraceptive Logistics Management System Assessment Report



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USAID | DELIVER PROJECT, Task Order I

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Abstract

In June 2007, the Federal Ministry of Health (FMOH), with technical assistance from UNFPA and the USAID | DELIVER PROJECT, Task Order I, conducted an assessment of the performance of the logistics management and supply chain system for contraceptive commodities in Nigeria.

The survey's overall objective was to assess how the logistics systems managed selected contraceptive commodities at public health institutions. This report presents the findings of the assessment as well as recommendations to improve the contraceptive logistics systems in Nigeria.

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Abbreviations and Acronyms

CIDA	Canadian International Development Agency
CLMS	contraceptive logistics management system
DCDPA	Department of Community Development and Population Activities
DCR	daily consumption record
FCT	Federal Capital Territory
FEFO	first-to-expire, first-out
FMOH	Federal Ministry of Health
FP	family planning
ICPD	Cairo International Conference on Population and Development
IUCD	intrauterine contraceptive device
LGA	local government area
LIAT	Logistics Indicators Assessment Tool
LMIS	logistics management information system
LSAT	Logistics System Assessment Tool
MCH	maternal and child health
NGO	nongovernmental organization
NPHCDA	National Primary Health Care Development Agency
PPFN	Planned Parenthood Federation of Nigeria
RH	reproductive health
RHCS	reproductive health commodity security
RIF	Requisition and Issue Form
RIRF	Requisition, Issue, and Report Form
SDP	service delivery point
SDR	Store Distribution Report
SMOH	State Ministry of Health
STI	sexually transmitted infection
TFR	total fertility rate
UNFPA	United Nations Population Fund
USAID	U.S. Agency for International Development

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We hope that this report will contribute to improving the reproductive health commodity security situation in Nigeria.

Executive Summary

With a current population of 140 million and a growth rate of approximately 2.4 percent per annum, Nigeria is the most populous country in Africa (PRB, 2007). Nigeria's youth-dominated age structure, with approximately 44 percent younger than age 15, will have a significant effect on the growth rate, particularly because almost half the population will be at or reaching reproductive age within the next 15 years. In addition, the fertility rate in Nigeria is high, at an average of 5.7 children per woman (NDHS, 2003). Although the total fertility rate (TFR) has declined slightly from 6.0 in 1990, current rates, coupled with a desired large family, indicate that further immediate decreases will likely continue to be minimal.

Current use of family-planning (FP) methods in Nigeria is low. Only 8 percent of married women use a modern method, and only about one in four women obtain their modern methods from a public sector facility (NDHS, 2003). In addition, intention to use FP (among married women who are not currently using an FP method) is also relatively low, at 64 percent (NDHS, 2003).

The Federal Ministry of Health (FMOH) and its partners recognize that the achievement of deceleration in the population growth rate requires an effective and efficient contraceptive logistics management system (CLMS). The effort to strengthen the CLMS began with a baseline assessment in 2002 to provide key baseline indicators on the performance of the contraceptive supply chain at all levels. The assessment provided program planners with information to design interventions to improve the CLMS and to measure progress toward reproductive health commodity security (RHCS) over time.

Findings from a second assessment in 2005, along with a review of supervision and program reports at the central level, indicated that reporting and ordering, according to the outlined procedures, were problematic. To address those issues, a streamlined system was designed and piloted to improve efficiency.

The current 2007 assessment serves as a follow-up to the previous assessments to gather current information on national stock status of all contraceptive commodities at the facility level, as well as to identify current commodity management practices throughout the system. The specific objectives of the assessment were to accomplish the following:

- Evaluate the progress made toward increased product availability and improved logistics practices since the 2005 assessment.
- Provide current information on key logistics performance indicators and commodity management practices to inform recommendations for the improvement of commodity availability.

An analysis was completed for the national, urban, and rural levels of the 2007 assessment, and findings for key indicators were compared with those of the 2002 and 2005 assessments.

National-Level Findings

Stock status indicators demonstrate that contraceptive availability on the day of the visit was relatively high for most contraceptives with low stockout in the six-month period preceding the survey. However, the average duration of stockout was high, sometimes as long as the whole six-month period. Survey findings also indicated that most contraceptives are in —or approaching—undersupply at facilities.

Nationwide coverage of trained personnel is very high, particularly through formal CLMS training. Stockcard availability to record and report key logistics data is fairly high as well. However, a gap still exists in availability of all the necessary forms at the facility level, as well as timely filling of the available forms. This lack of forms indicates a gap in the application of knowledge from training to practice among service providers. Reporting is fairly poor, despite the high proportion of trained staff. Of those reports sent, complete and accurate reports were also very low.

Cost-recovery mechanisms, designed to help ensure sustainability of the program, were lacking in several key areas. A little more than half of the facilities kept appropriate ledgers or cash books, and approximately 60 percent had accurate records. Few stores kept separate bank accounts for contraceptive management, and many reported not understanding how to use the margins correctly.

Record keeping was also low among facilities assessed, with only a little more than 25 percent accurately completing the Requisition and Issue Forms (RIFs), less than half completing the daily consumption record correctly, and approximately one-half of the stores maintaining accurate stockcards.

Supervision, a key element for reinforcing proper procedures and learned practices, was also lacking in several key areas. Supervision checklists were used in less than half of the supervision visits that took place since 2004. A little more than 50 percent of the sampled sites had received any supervision visits in the three months preceding the survey. Transportation also remains a critical weak element in the system. The majority of stores report collecting their stock from the level above them, many do not have available transportation, and most rely on public transportation. Such a situation creates problems with regard to security of the commodities, inability to restock at proper supply levels because of carrying capacity, and financial burdens and constraints on facility personnel.

Storage conditions in general were high for all facilities. Only about 15 percent of facilities were in the unacceptable range, with the remaining 85 percent meeting acceptable or excellent storage conditions. The most commonly cited poor conditions included nonavailability of fire safety equipment, lack of organizational procedures such as first-to-expire, first-out (FEFO), and visible dates and labels.

Key Recommendations

- The Federal Ministry of Health should ensure that ordered commodities are distributed to the states in line with the distribution calendar.
- Implementers at all levels should adhere strictly to the CLMS ordering guidelines.
- Authorities, such as program managers, should intensify supportive supervisory visits at all levels according to the supervision plan.

- A program should be in place for advocacy to policymakers at all levels for support for the printing and distribution of logistics management information system (LMIS) forms and other management tools.
- States that have not yet opened a cost-recovery account should do so as soon as possible.
- Computerization of LMIS should take place at central and state levels to ensure prompt response and efficient management of commodities.

Results at Urban and Rural Levels

Urban and rural comparisons were made for several key indicators to ascertain potential differences between facilities in corresponding locations. In general, rural facilities fared worse than urban facilities on most key indicators.

Urban facilities consistently demonstrated higher levels of contraceptive availability on the day of visit, as well as lower stockout rates in the six-month period preceding the survey, than did the rural facilities. Urban facilities also generally had greater availability and updating of stockcards than did rural facilities. Though reporting in general was poor among all facilities, urban facilities had higher reporting levels than did rural facilities.

In terms of inventory control, a greater percentage of urban stores than rural stores reported ordering according to established minimum and maximum levels. Urban stores placed more emergency orders and service delivery points (SDPs) than did rural ones. Fewer rural facilities reported having a cash book, and almost three times as many urban stores reported having a separate bank account for contraceptives. Record keeping showed similar dynamics between urban and rural facilities, with a higher percentage of urban facilities keeping complete and accurate daily consumption records.

Supervision was also poorer among rural facilities; almost twice as many urban facilities received visits using the supervision checklists than did rural ones. Although the majority of both urban and rural facilities relied on public transportation to collect commodities, a higher percentage of urban stores had commodities delivered to them, which eliminated some of the transportation difficulties. The category of facilities meeting acceptable storage conditions showed little differentiation between urban and rural facilities, although more urban stores met excellent conditions than did rural ones.

Key Recommendations

- Authorities, such as managers of health services/commodities logistics, should intensify regular supervisory visits at all levels of the system, including rural and urban.
- Cash books should be available and should be checked regularly to ensure accountability.
- A program should be in place for advocacy to policymakers at all levels for support for the printing and distribution of LMIS forms and other management tools.
- All FP coordinators should adhere strictly to the CLMS ordering guidelines.

Comparison of Data Findings

Five states that were common to the sampled sites in 2002, 2005, and 2007 were included in the comparison: Bauchi, Edo, Enugu, Oyo, and Sokoto.

No clear-cut trend exists with respect to contraceptive availability on the day of the visit across the three surveys. Although availability increased for the male condoms Depo-Provera and Microgynon on the day of each survey from 2002 to 2005, availability of those same commodities decreased in 2007. The most significant jumps in contraceptive availability were made from 2002 to 2005, possibly because of intensive activities related to the improvement of the CLMS and seed stock distribution. The data indicate a clear trend of improvement in stockcard availability, with the most significant jumps made between 2005 and 2007 for all seven products: condom male, Excluton, IUCS, Lo-Feminal, Noristerat, Depo-Provera, and Microgynon. A discernible improvement exists between 2005 and 2007 for the percentage of facilities updating stockcards for all products, with the greatest improvements for intrauterine contraceptive devices (IUCDs) and Microgynon. The percentage of service providers adhering to the storage guidelines not only improved over the years but also showed a marked increase from 2005 values to those of 2007 for all 15 conditions, which are the following:

1. Identification and expiry date are visible on products.
2. Products are arranged on FEFO.
3. Cartons are in good condition.
4. Damaged products are removed from inventory.
5. Products are protected from direct sunlight.
6. Cartons and products are protected from water and humidity.
7. Storage area is free from harmful insects and rodents.
8. Storage area is secure with lock and key.
9. Another staff member has access to contraceptives when provider is absent.
10. Products are stored at appropriate temperature.
11. Roof is maintained in good condition to keep out sun and water.
12. Store is kept clean.
13. Space is sufficient for commodities.
14. Fire safety equipment is available and accessible.
15. Products are stored separately from insecticides.

Key Recommendations

- The FMOH should ensure that ordered commodities are distributed to the states on time.
- FP coordinators should adhere strictly to the CLMS ordering guidelines to improve contraceptive availability at all levels and facilities.
- Contraceptives seed stock should be provided to all newly established SDPs.

Background

In achieving improved family planning (FP) and reproductive health (RH) outcomes, Nigeria faces many challenges. With a current population of 140 million and a growth rate of approximately 2.9 percent per annum, Nigeria is the most populous country in Africa (NPC, 2006). Nigeria's youth-dominated age structure, with approximately 44 percent of the population younger than age 15, will have a significant effect on the growth rate; almost half the population will be at or reaching reproductive age within the next 15 years. Even if growth immediately drops to replacement rates, the Nigerian population will effectively double in the next 25 years.

The fertility rate in Nigeria is high, at an average of 5.7 children per woman (NDHS, 2003). Although the total fertility rate (TFR) has declined slightly from 6.0 in 1990, current rates—coupled with a desired large family—indicate that further immediate decreases will likely continue to be minimal.

Current use of FP methods in Nigeria is low. Although 77 percent of women and 90 percent of men know of at least one modern FP method, only 8 percent of married women use a modern method, and only 25 percent of women obtain their modern methods from a public sector facility (NDHS, 2003). However, intention to use FP among married women who are not currently using an FP method—is at 64 percent (NDHS, 2003).

Decelerating the population growth rate requires a careful balance between decreasing the demand for large families and simultaneously increasing the supply and use of FP commodities. The *National Policy on Population for Development, Unity, Progress, and Self-Reliance* emphasized RH as a priority in efforts to achieve this sustainable balance between population growth and resources. Revised in 2004, the current *National Policy on Population for Sustainable Development* is designed to achieve the following objectives:

- Improve the quality of life and standard of living for the Nigerian people.
- Expand access to and coverage of RH services, and improve the quality of those services.
- Strengthen and expand a comprehensive FP and fertility management program to ensure that all couples or individuals who want contraceptives have access to a reasonable range of methods at affordable prices.
- Strengthen and improve safe motherhood programs to reduce maternal mortality and morbidity and to enhance the health of women.

The Federal Ministry of Health (FMOH) and its partners have recognized that an effective logistics system that ensures the continuous availability of RH and FP commodities is a critical element in achieving those objectives and in attaining RH commodity security. Such a system will guarantee that all individuals and couples will have continuous access, on a voluntary basis, to the quality products they need for FP and RH. In 2001, the FMOH developed a national reproductive health policy and strategy as a commitment to the provision of quality-integrated FP and RH programs, which were consistent with the goals of the 1994 Cairo International Conference on Population and

Development (ICPD). In 2003, the FMOH and its partners developed the *National Strategic Plan for Reproductive Health Commodity Security* to support the national policy objectives. The six components of the strategy include coordination, demand, finance, logistics, policy, and service delivery. As a result of support for those policies and strategies, increased resources have been directed toward strengthening the Contraceptive Logistics Management System (CLMS).

Efforts to strengthen the CLMS began with a baseline assessment. In 2002, the FMOH/Department of Community Development and Population Activities (DCDPA), in collaboration with the USAID | DELIVER PROJECT, and United Nations Population Fund (UNFPA), conducted an assessment to provide key baseline indicators on the performance of the contraceptive supply chain at all levels. The logistics assessment provided program planners with information to design interventions to improve the CLMS and to measure progress toward reproductive health commodity security (RHCS) over time.

Overview of the Redesigned CLMS

Following the baseline assessment in 2002, DCDPA and its partners organized a system redesign workshop to improve the effectiveness and efficiency of the CLMS. The workshop resulted in five major outcomes: (a) the zonal tier of warehouses was eliminated to shorten the pipeline, (b) standard operating procedures were developed and disseminated, (c) new logistics forms were developed and introduced to all levels of the system, (d) cost recovery was introduced to generate funding and to provide incentives, and (e) RH and FP logistics officers and service providers were trained in all 36 states and the Federal Capital Territory (FCT) at all levels of the system.

One product that was developed as part of the redesign was the *CLMS National Handbook*. The handbook covers seven primary topics: (a) forecasting and procurement, (b) inventory management, (c) clearing and storage, (d) transportation and distribution, (e) logistics management information system, (f) cost recovery, and (g) logistics system monitoring and supervision (LMIS). The handbook and other CLMS management tools and contraceptive seed stock kits were distributed during the national rollout.

The forecasting and procurement elements of the CLMS are the responsibility of the FMOH at the central level. The system prepares forecasts annually using issues data from the central contraceptive warehouse. The FMOH works with UNFPA to finalize its procurement plans; UNFPA organizes funding through the Canadian International Development Agency (CIDA) Trust Fund and its global thematic trust fund for the procurement of commodities using its procurement system.

Under the system, inventory management uses defined minimum stock levels and fixed ordering periods. The system is structured so that facilities order from the immediately next higher level according to the established ordering frequency (for instance, service delivery points [SDPs] order from the local government areas [LGAs]; LGAs order from the states; and states order from the central warehouse).

The central level is responsible for the clearing and storage of RH commodities, as well as for transit and custom clearance when contraceptives arrive in Nigeria. Commodities are then stored in the central contraceptive warehouse in Lagos. The transportation and distribution of commodities are implemented according to a distribution calendar at all levels of the system.

The LMIS component of the system collects data about daily consumption, stock on hand, and distribution activity (for stores only), and it reports to the next higher level of the system. LMIS information is used to make key management decisions and to improve customer services.

The cost-recovery scheme is a significant component of the CLMS redesign. A price structure was developed, and the system was designed to operate on a cash-and-carry basis. Below the central level, the cost-recovery system operates like a contraceptive revolving fund, using funds earned from contraceptive sales to purchase future supplies and to provide margins to cover other costs, such as transportation and supervision.

The system primarily serves the public sector facilities, but it also provides contraceptives to approved central- and state-level, not-for-profit, nongovernmental organizations (NGOs), such as the Planned Parenthood Federation of Nigeria (PPFN).

Overview of the Streamlined CLMS

Field teams conducted a second assessment in 2005. Findings from the assessment, as well as a review of supervision and program reports at the central level, indicated that reporting and ordering, according to the outlined procedures, were problematic. In addition, state FP coordinators raised concerns that the number of forms to be completed was cumbersome, making on-time reporting more difficult.

To address those issues, a streamlined system was designed and piloted to improve efficiency. Redesign workshops were held in September and October 2005, resulting in three major outcomes: (a) streamlined existing forms, (b) simplified inventory control system, and (c) improved training methodology. The streamlined system was piloted in three states—Bauchi, Kano, and Nasarawa—to test the system from March through August 2006.

The 2005 assessment revealed that the number of forms currently being used in the redesigned system could be reduced to make the process more manageable (from 11 to 8 forms). Under the streamlined system, the Store Distribution Report (SDR) was eliminated, and the Requisition and Issue Form (RIF) and the Quarterly Reporting Form were combined into one Requisition, Issue, and Report Form (RIRF). The RIRF is self-balancing to allow facilities to calculate their order quantities.

Under the existing system, facilities use fixed ordering periods and defined minimum, but no defined maximum, stock levels. As a result of this inventory control system, facilities were often left holding large quantities of stock. Obtaining those stocks also required much of the facility's revenues from the cost recovery. The system posed financial constraints as well as increased potential for commodities to expire in the system. The streamlined system proposed minimum and maximum stock at each level, thereby requiring each facility to bring its stock to the maximum stock level at each reporting period. The design was to prevent current stock imbalances by putting in place procedures that would guide each facility to remain within the minimum and maximum levels at all times. In addition, the design reduced the quantities that each facility would have to buy, thus enabling the each facility to spend less of its margin for resupply.

In addition, to address gaps in skill sets of trained personnel, the training methodology was adjusted to allow for smaller groups and a greater hands-on experience for trainees. The methodology used during the trainings was also modified from a didactic to a more participatory approach.

Assessment Purpose and Objectives

The 2007 assessment serves as a follow-up to the 2002 baseline and 2005 midterm assessments. It provides a comprehensive picture of the current status of the contraceptive logistics management system (CLMS) at all levels of the system.

The purpose of the assessment was to gather current information on national stock status of all contraceptive commodities at the facility level, as well as to identify current commodity management practices throughout the system. The information was also used to inform recommendations to improve commodity availability and to improve the current state of the CLMS.

The specific objectives of the assessment were to accomplish the following:

- Evaluate the progress made toward the goal of increased product availability and improved logistics practices since the 2005 assessment.
- Provide current information on key logistics performance indicators and commodity management practices to inform recommendations that will improve commodity availability.

The assessment will provide national program planners and managers, particularly the Federal Ministry of Health, the U.S. Agency for International Development, and the United Nations Population Fund, with information to improve the functioning of the overall system and to continue to measure progress of the system over time.

Assessment Methodology

The primary tool used in the assessment was the Logistics Indicators Assessment Tool (LIAT). The LIAT assesses health commodity system performance and commodity availability at health facilities, and it provides stakeholders with up-to-date information on the current operating systems for contraceptive commodities management. The study collected quantitative information on the contraceptive logistics management system (CLMS) and assessed (a) the performance of the logistics system that manages family planning (FP) and reproductive health (RH) commodities, (b) the knowledge and understanding of the system by individuals at each level of the system, (c) the cost-recovery system, and (d) the availability of FP and RH commodities. To collect information from all levels of facilities in the system, the study also assessed specific activities, such as ordering and issuing, reporting, monitoring and supervision, and maintaining storage conditions. The instrument was adapted for the Nigerian CLMS system and was further revised with input from data collectors during the training period and following a pilot test. The final instrument is included in Appendix E.

Sampling Framework and Methodology

The decision to have two states in each of the six geopolitical zones in Nigeria, as well as to treat Lagos as a special state because of its highly urban nature, guided the selection of states. Therefore, 12 states and Lagos, which has equal weight as a state, were selected for the assessment. The states of each zone were stratified according to their sociocultural types and the level of CLMS reporting from those states. The final selection included the nine states that were assessed in 2005 (Bauchi, Edo, Enugu, the Federal Capital Territory, Kano, Lagos, Nasarawa, Oyo, and Sokoto) for the purposes of matching and trend analysis, as well as four additional states: Abia, Akwa-Ibom, Borno, and Ogun.

A 30 percent increase occurred in the number of health facilities covered over that of the 2005 assessment (from 158 in 2005 to 208 in 2007). The sample included 32 health facilities in each zone and 15 health facilities allocated to Lagos state. Each state's contribution to the 32 from the zone was proportional to the total number of facilities in each state with the exception of the South-West zone. For that zone, one state has less than a quarter of the facilities in the zone, and a direct random sampling could have led to a very small number of sites being selected from the state. Sampling in this zone was, therefore, based on a purposive allocation of sites across the geographic spread of facilities to ensure that each state had half of the selected sample sites and, therefore, a more representative sample.

In addition, to ensure wider representation and coverage, as well as a reasonable degree of confidence, three health facilities were selected in each local government area (LGA) in the state. For cost-effectiveness and time management, LGAs and health facilities that were contiguous were selected. The Federal Ministry of Health (FMOH) selected the LGAs and health facilities (listed in Appendix A) to minimize possible bias if the State Ministry of Health (SMOH) had made the selections.

The total sample size included 208 service delivery points (SDPs) and 73 stores (60 LGA stores and 13 state stores) for a total sample size of 281. For a complete sampling list, please refer to Appendix A. (See table 1 for a partial sample.)

Table 1. Sampling Matrix with Proportional Contributions by State

Zone	State	Total Health Facilities	Proportional Contribution to Health Facilities by State	No. of Health Facilities Selected	No. of LGAs Selected	No. of State Stores Selected
South-West	Ogun	188	0.13*	16	5	1
	Oyo	588	0.87*	16	5	1
South-South	Akwa Ibom	119	0.46	15	5	1
	Edo	138	0.54	17	6	1
South-East	Abia	77	0.70	18	5	1
	Enugu	34	0.30	14	4	1
North-East	Borno	18	0.09	15	5	1
	Bauchi	184	0.91	18	5	1
North-Central	Nasarawa	64	0.50	17	5	1
	FCT-Abuja	31		15	0	1
North-West	Sokoto	176	0.37	13	4	1
	Kano	301	0.63	19	6	1
Special State	Lagos	125		15	5	1
TOTAL	13	1,918	0.12	208	60	13

Note: LGA = local government area.

* Equal allocation adopted.

Indicator Choice

A set of standard indicators was selected to include those measured in 2002 and 2005, as well as additional indicators to provide a broader measurement of stock status and operating systems. This expansion of indicators allows for comparability with 2005 results and provides stakeholders with comprehensive information regarding the current situation. Table 2 lists select indicators, and Appendix B lists a full set of indicators.

Table 2. List of Indicators

Indicators	Data Source(s)
Stock Status	
Availability of contraceptive methods on the day of visit	Stockcard records, respondent, and physical inventory
Percentage of facilities stocked out of products in the previous six months	Stockcard records, respondent, and physical inventory
Average number of days a product was stocked out in the previous six months	Stockcard records, respondent, and physical inventory
Average frequency of stockouts of a product in the previous six months	Stockcard records, respondent, and physical inventory

Indicators	Data Source(s)
Percentage of facilities with stock below the minimum level	Stockcard records and physical inventory
Logistics Management Information System	
Percentage of facility personnel trained in CLMS	Respondent
Percentage of facilities with stockcards available and updated by product	Presence of stockcards and evidence of use in facilities and stores
Percentage of facilities with accurate stock balances on stockcards	Comparison of stockcard balance and physical inventory count
Reporting	
Percentage of stores that reported sending SDRs to higher level	Respondent
Percentage of SDRs that are complete and accurate	Presence of distribution reports and evidence of proper use
Inventory Control	
Percentage of facilities that ordered according to minimum and maximum stock levels	Respondent
Percentage of facilities that had to place an emergency order	Respondent
Cost Recovery	
Percentage of facilities reporting having a cash book for the CLMS or keeping a record to manage cost-recovery funds	Presence of cash book or record
Percentage of ledger balances matching total commodity sales	Evidence of proper use in cash book or record
Record Keeping	
Percentage of facilities with complete and accurate RIFs or RIRFs	Evidence of proper use
Percentage of SDPs with last daily consumption record complete and accurate	Evidence of proper use
Percentage of stores with tally cards complete and accurate for the past six months	Evidence of proper use
Supervision	
Percentage of stores conducting supervisory visits using the supervision checklist	Respondent
Percentage of facilities that report receiving supervision visits	Respondent
Transportation	
Percentage of stores/SDPs reporting they collected contraceptives for their facilities	Respondent
Method of transportation used	Respondent
Storage	
Percentage of facilities that maintain acceptable	Visual observation

Indicators	Data Source(s)
storage conditions	
Conditions	Visual observation

Note: CLMS = contraceptive logistics management system; RIFs = Requisition and Issue Forms; RIRFs = Requisition and Issue Report Forms; SDPs = service delivery points; SDRs = Store Distribution Reports.

Data Collection

The 13 assessment teams (26 data collectors) comprised individuals from the FMOH, the SMOH, and the USAID | DELIVER PROJECT. One team member served as a team leader who was responsible for overseeing the data collection process in each designated area. Each team received monitoring visits by a member of the FMOH, United Nations Population Fund (UNFPA), U.S. Agency for International Development (USAID), or USAID | DELIVER PROJECT during the data collection period to provide assistance, to ensure adherence to quality standards, and to troubleshoot any problems that might arise in the field. Appendix C has a complete list of data collectors and monitors.

Before implementing the assessment, 24 data collectors participated in a four-day training program in the use of the LIAT instrument. The orientation included a discussion of data collection guidelines to (a) identify the types of information to be gathered, (b) standardize the data collection process, and (c) promote comparability of results. During the training, the instrument was pretested in four pilot sites in the Abaji and Kwali Area Councils of the Federal Capital Territory (FCT) of Abuja 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 final version of the tool.

Twelve teams were dispatched to 12 states over a two-week period to collect data from each of the selected facilities. Data collection in FCT-Abuja occurred in a two-day segment following the initial data collection period, with assistance from several returned FCT-Abuja-based team leaders.

Data Entry and Analysis

Data were entered into CS Pro and transferred into the SPSS statistical analysis software for analysis. Data were cleaned and data quality checks were completed in Nigeria. Analysis and report writing were completed in Nigeria, with support provided by the USAID | DELIVER PROJECT in Nigeria and Washington.

Quality Assurance

Several methods were used to ensure quality adherence throughout the assessment process. The data collection instrument was reviewed before the training to ensure it was adapted to the current situation; the instrument was reviewed and modified again following a pilot test during the training, with input from data collectors. 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 completed a daily review of all completed instruments and was guided by a quality control checklist to ensure (a) that the instruments were filled out properly and

(b) that they included all necessary information. Each instrument was reviewed again by the Survey Management Team prior to data entry.

Several quality safeguards were incorporated into the data entry program, such as automatic skips where appropriate, range checks, and coding checks. All surveys underwent double entry to ensure accuracy of encoded information.

Once data were entered into the SPSS database, quality checks and validation were completed to ensure accuracy of the database. Preliminary analysis and frequencies were run before full data analysis to ensure consistency within the database.

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Limitations of the Survey

There are several limitations of the survey:

- Between the baseline and midterm survey tools, only a few questions remained the same. Although those questions were maintained in the 2007 survey tool, direct comparisons could be made on only a few indicators.
- For about half the duration of the data collection, a nationwide strike occurred that resulted in transportation difficulties, as well as in challenges in reaching facility personnel.
- Several sites from the original sample required replacement. Attempts were made to keep replacement sites within original parameters, but some variation may have resulted.
- Data collectors were also involved in the operation of the system, so some level of subjectivity is likely.

National-Level Findings

Analysis and findings in this study are presented within three broad categories:

- National-level findings.
- Urban- and rural-level comparison.
- Comparison of 2002, 2005, and 2007 Logistics Indicators Assessment Tool (LIAT) assessment results.

The national aggregate findings present data on indicators measuring stock status and logistics system performance from all sites that manage contraceptives throughout the 12 states and Federal Capital Territory (FCT) in the sample. For some indicators, the analysis is segregated into stores and service delivery points (SDPs) to provide more comprehensive information about the elements of the system. The urban- and rural-level comparison presents findings on a select number of stock status and logistics system performance indicators. The urban and rural comparison findings are presented as an aggregate of sites, with further categorization into stores and SDPs where applicable for the analysis. The comparison findings present data on key indicators that have been consistently used in all three assessments to provide a portrait of changes over time in the system. The comparison analysis includes only those five states that were included in the 2002 assessment.

Data on gloves and syringes were analyzed but not discussed in the findings because those are not contraceptives products. Furthermore, many facilities that manage gloves and syringes do not keep separate records on them because they are contained within packaging or kits.

Store and Facility Information

A total of 281 facilities (73 stores and 208 SDPs) were sampled for this study. Although all the facilities in the sample were listed in the Federal Ministry of Health (FMOH) database as providing family-planning (FP) services, the survey revealed that 2 (2.7 percent) of the stores and 10 (4.8 percent) of the facilities were not providing those services. The major reasons that respondents gave for the nonprovision of services were (a) transfer of trained providers and (b) lack of training of the replacement personnel.

Of the 12 sites not providing contraceptive services, 7 were in Sokoto state; 2 were in Kano state; and 1 each in Edo, Enugu, and Abia states. Those facilities did not have service providers working in FP and had no contraceptives in stock. As table 3 indicates, all states had more than 90 percent of their facilities staffed with FP service providers, apart from Sokoto, which had only 54.8 percent.

Table 3. Distribution of Facilities Assessed during the Survey

State	Store			SDP		
	Total Number of Facilities Assessed	Number of Facilities Providing FP Services	Percentage of Facilities Providing FP Services	Total Number of Facilities Assessed	Number of Facilities Providing FP Services	Percentage of Facilities Providing FP Services
Abia	6	6	100.0	18	17	94.4
Akwa-Ibom	6	6	100.0	15	15	100.0
Bauchi	6	6	100.0	18	18	100.0
Borno	6	6	100.0	15	15	100.0
Edo	7	7	100.0	17	16	94.1
Enugu	5	5	100.0	14	13	92.9
FCT	1	1	100.0	15	15	100.0
Lagos	6	6	100.0	15	15	100.0
Kano	7	6	85.7	19	18	94.7
Nasarawa	6	6	100.0	17	17	100.0
Ogun	6	6	100.0	16	16	100.0
Oyo	6	6	100.0	16	16	100.0
Sokoto	5	4	80.0	13	7	53.8
Total Facilities	73	71	97.3	208	198	95.2

Note: FP = family planning; SDP = service delivery point.

More than 90 percent of all stores managed the more popular contraceptives, including male condoms; both brands of injectables, Depo-Provera and Noristerat; and all three brands of oral contraceptives. More than 80 percent of stores managed female condoms and intrauterine contraceptive devices (IUCDs). The one outlier was Implanon where only around 15 percent of stores managed the product. SDP management patterns were roughly the same, with more than 90 percent managing male condoms and both brands of injectables, and with more than 80 percent managing the three pill brands. Between 70 and 80 percent managed injectables and IUCDs. However, only 3.1 percent managed Implanon.

Please refer to Appendix D for more detailed information on the management of contraceptive products by facility type (table D1).

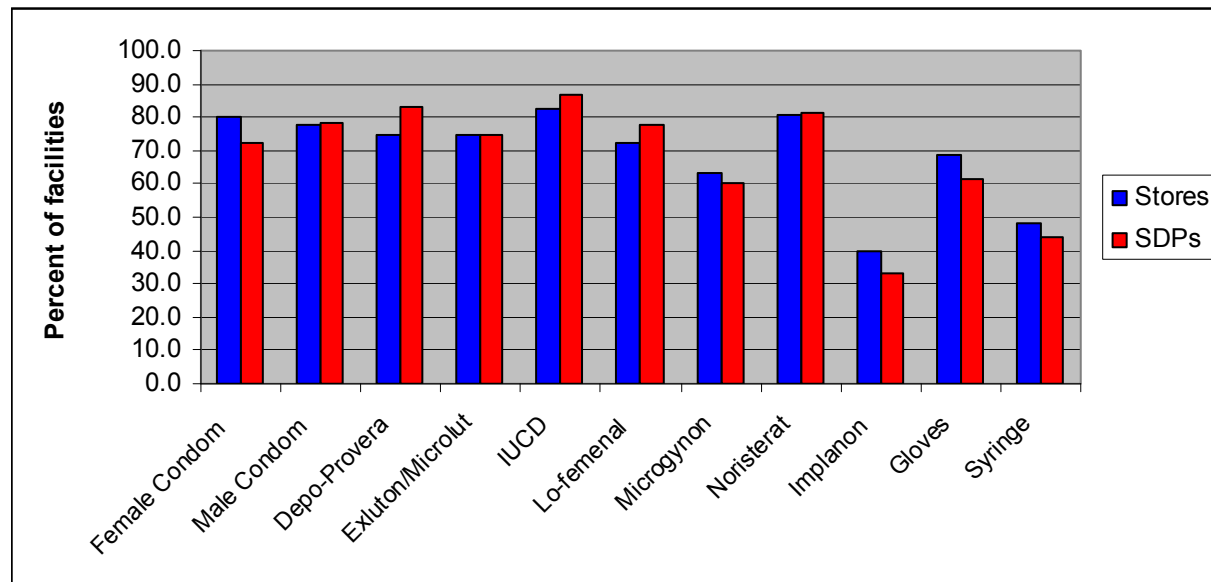
Stock Status

A physical count of commodities on the day of the visit determined contraceptive availability. The survey found that some degree of variability in contraceptive availability existed in the clinics. IUCDs and Noristerat were the most widely available contraceptive methods, with more than 80 percent of the stores and SDPs that manage the products having them in stock. Approximately 75 percent of facilities had available supplies of the male condoms, Depo-Provera and Lo-Femenal, and 60 percent of facilities had available supplies of Microgynon. By contrast, only about 40 percent of

stores and about 30 percent of facilities that had reported managing Implanon actually had an available stock of the product on the day of the visit.

Figure 1 provides a graphic description of the level of availability of each commodity at the sites on the day of the visit.

Figure 1. Availability of Contraceptive Products on the Day of Visit by Facility

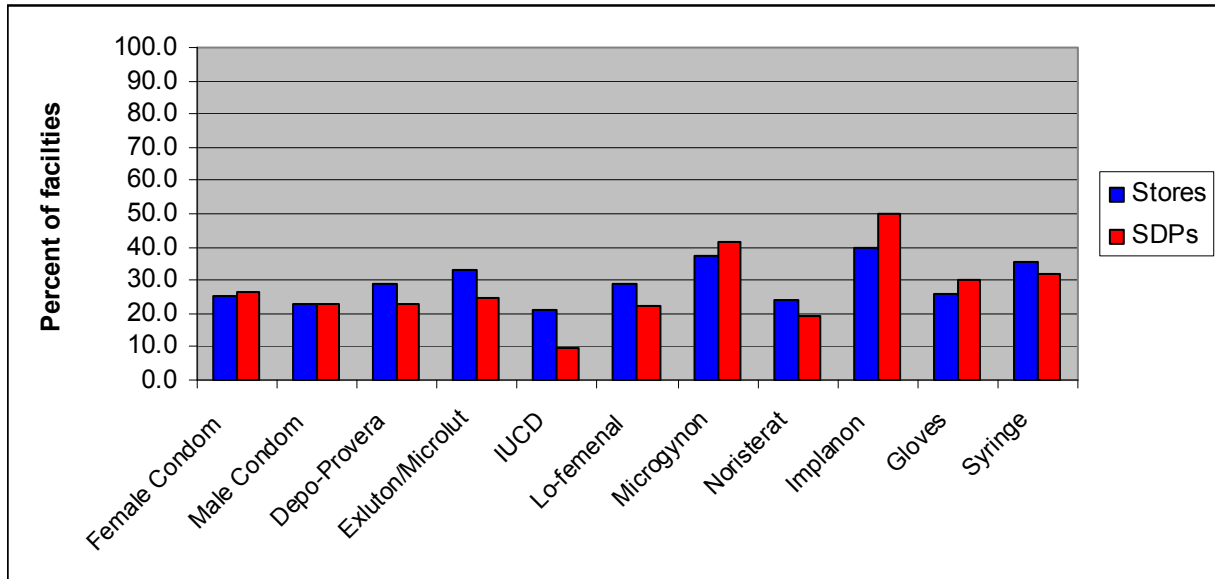


Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

So they could gain further insight into the availability of family planning (FP) methods at facilities, service personnel were asked to provide data on the occurrence of stockouts, the number of times each facility had stocked out of any of the commodities, and the average duration of the stockouts over the six-month period preceding the survey. Generally, stores and SDPs exhibited the same pattern of stockouts for each of the contraceptive methods.

Contraceptives were generally available in stores and SDPs during the six months leading up to the survey, with about 20 and 30 percent of stores and SDPs respectively stocked out of contraceptives during this time. The few exceptions to this pattern included the following: 40 percent of stores and 50 percent of SDPs were stocked out of Implanon, about 40 percent of stores and SDPs were stocked out of Microgynon, and 10 percent of SDPs were stocked out of IUCDs (see figure 2 for details).

Figure 2. Percentage of Facilities Stocked Out of Contraceptive Products in the Past Six Months



Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

Table 4, which follows, provides a tabulation of the average number of times in the six months before the survey that stores and SDPs stocked out of any of the methods, as well as the average number of days that the stockouts lasted. The data indicate that although the number of stockouts of contraceptives was low, the average duration of stockouts was high for all contraceptive methods during the six months leading up to the survey. Both stores and SDPs experienced one stockout of each contraceptive product during the previous six months, on average. However, the average duration of the stockouts was generally more than two and a half months for all common short-term contraceptives. In both facility types, stockout duration was shortest for Noristerat and longest for female condoms. The major reasons given for the prolonged stockouts were the nonavailability of contraceptives at the level of stores from which they would order and very low or nonexistent demand for the method.

Table 4. Average Frequency and Number of Days of Stockouts of Contraceptive Products in the Past Six Months

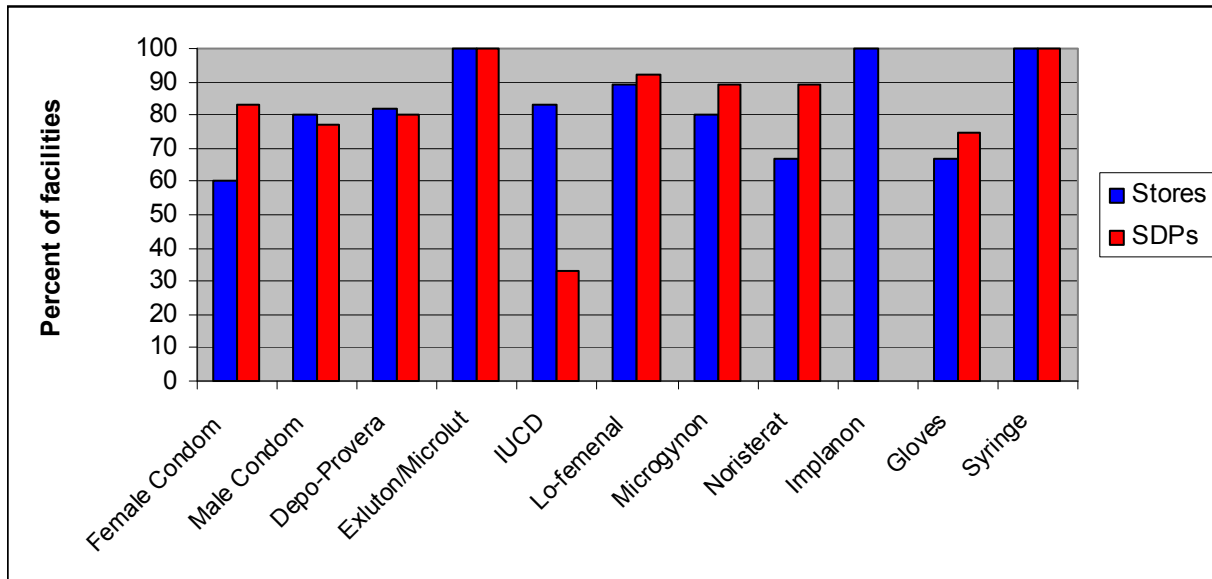
Contraceptive Products	Stores		SDPs	
	Average frequency of stockout	Average number of days of stockout	Average frequency of stockout	Average number of days of stockout
Female condom	1.0	137	1.0	130
Male condom	1.1	121	1.2	110
Depo-Provera	1.1	85	1.0	103
Exluton/Microlut	1.1	116	1.0	98
IUCD	1.1	103	1.0	86
Lo-femenal	1.0	98	1.0	104
Microgynon	1.1	107	1.1	111
Noristerat	1.0	57	1.1	74
Implanon	1.0	67	1.0	128

Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

Survey findings also indicate that most contraceptives are approaching a state of undersupply or are in a state of undersupply at stores and SDPs. An undersupply situation denotes a higher risk of stockout. The minimum stock level for stores is three or four months (redesigned and streamlined systems) and for SDPs is two or three months of stock on hand. By this standard, female condoms, Depo-Provera, Exluton, and Microgynon are all below recommended supply levels at stores, and male and female condoms, plus all brands of injectables and oral contraceptives, are at or below recommended supply levels at SDPs. (See figure 3.) Please refer to Appendix D for more detailed information on the average months of stock on hand by facility type (table D2).

In summary, although most facilities providing FP services had contraceptives in stock on the day of the visit, the fairly long duration of stockouts, the large proportion of facilities with stock levels below minimum levels, and the low number of months of stock on hand paint a picture of a contraceptive supply system at risk. That is, facilities currently hold stock at levels unlikely to ensure a consistent and reliable availability of commodities to clients.

Figure 3. Percentage of Facilities Stocking below Minimum Levels



Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

Logistics System Performance

The findings in this section provide an indication of the level of performance of the contraceptive logistics management system (CLMS), as well as a measure of the progress of system performance. Findings are under the following headings: Logistics Management Information System (LMIS), Reporting, Inventory Control, Cost Recovery, Record Keeping, Storage Guidelines, Transportation, and Supervision.

Logistics Management Information System

Training is a critical element in strengthening a contraceptive logistics management system. Figure 4 demonstrates that approximately 93 percent of store personnel and 84 percent of SDP personnel have received CLMS training. Nationwide coverage of trained personnel is very high for all facilities.

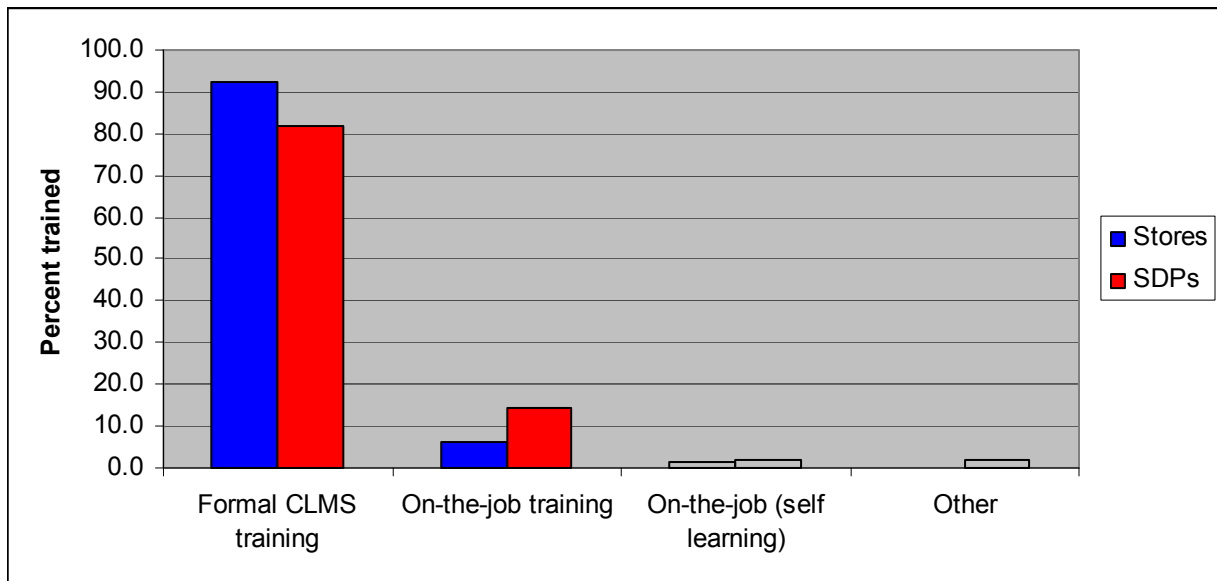
Of those trained, the majority (at 92 and 82 percent, respectively) of both store and SDP personnel were trained during a formal CLMS exercise. On-the-job training—provided by supervisors, personnel from the FMOH, State Ministry of Health (SMOH), or USAID | DELIVER PROJECT, or a combination during supportive supervision visits to facilities—accounted for the second highest method in which facility personnel received CLMS training, at approximately 6 percent for store personnel and 14 percent for SDP personnel. The figures indicate that most logistics operators are trained, regardless of transfers, retirements, and other sources of attrition (see figure 5).

Figure 4. Percentage of Personnel Trained in CLMS by Facility



Note: CLMS = contraceptive logistics management system; SDPs = service delivery points.

Figure 5. Percentage of Personnel Trained in CLMS by Facility



Note: CLMS = contraceptive logistics management system; SDPs = service delivery points.

Logistics personnel require CLMS tools such as stockcards and consumption registers to record and report key logistics data. Survey findings indicate that though most stores and SDPs had available forms, the percentage with updated forms was on average about 70 percent. Approximately 80 percent of facilities surveyed had all the forms required for managing the LMIS, and approximately 20 percent had some, but not all, of the forms. Forms that are not updated represent a gap in the

system, where the most current information is not available for key decisionmakers to make programmatic or supply decisions. Because a high percentage of both store and SDP personnel have been trained in the CLMS, the lower percentage of updated cards could indicate either a gap in the application of knowledge from training to practice or other constraints on facility personnel. The lower percentage also indicates an area in need of strengthening during supportive supervision visits. Table 5 shows the level of availability of stock cards at facilities visited as well as how many of these cards were updated.

Table 5. Percentage of Facilities with Stockcards Available and Updated

Contraceptive Products	Stores		SDPs	
	<i>Stockcards available</i>	<i>Stockcards updated</i>	<i>Stockcards available</i>	<i>Stockcards updated</i>
Female condom	90.0	72.9	85.0	75.9
Male condom	85.3	69.2	83.3	71.9
Depo-Provera©	89.6	71.9	82.8	70.7
Exluton/Microlut	90.6	66.7	85.9	74.4
IUCD	89.5	78.6	84.7	76.9
Lo-femenal	86.4	73.0	82.0	73.4
Microgynon	90.5	72.6	83.7	70.1
Noristerat	89.7	75.4	83.6	73.1
Implanon	70.0	88.9	50.0	33.3

Note: IUCD = intrauterine contraceptive advice; SDPs = service delivery points.

Facilities were also assessed on the accuracy of the balance entries on stockcards. Accuracy was determined by comparing the closing balance of each contraceptive on the stockcards with the physical count of each contraceptive on the day of the visit by data collectors. As shown in table 6, the data indicate that for the majority of products the accuracy of the stockcards averaged about 66 percent for stores and 57 percent for SDPs. An average of approximately 74 percent of stores and 64 percent of SDPs had stockcards within 10 percent accuracy. The exception was Implanon, which achieved 100 percent with accurate balances at stores and 80 percent at SDPs.

Table 6. Percentage of Facilities with Accurate and Near-Accurate Balance Entries on Stockcards

Contraceptive Products	Stores		SDPs	
	<i>Accurate balance</i>	<i>Within 10% accuracy</i>	<i>Accurate balance</i>	<i>Within 10% accuracy</i>
Female condom	65.5	76.4	66.7	70.4
Male condom	57.9	71.9	51.9	61.5
Depo-Provera	62.1	70.7	46.2	54.4
Exluton/Microlut	68.4	73.7	55.1	63.5
IUCD	66.7	79.6	62.6	67.5
Lo-femenal	57.9	70.2	49.0	58.7
Microgynon	57.4	59.3	57.6	64.6
Noristerat	54.2	66.1	46.7	51.2
Implanon	100.0	100.0	80.0	80.0
Gloves	64.4	66.7	60.6	63.6
Syringe	67.7	67.7	53.2	53.2

Note: IUCD = intrauterine contraceptive advice; SDPs = service delivery points.

Reporting

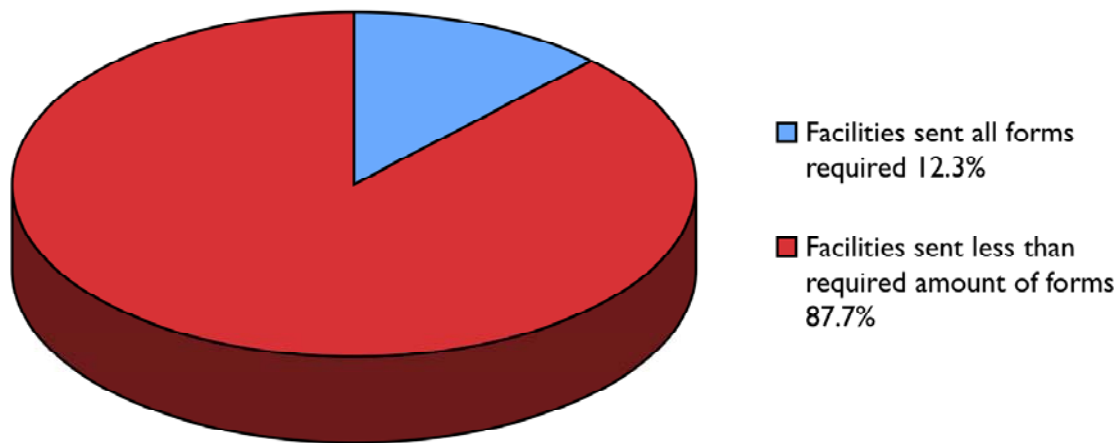
Although reliable record keeping is critical to the well functioning of an effective CLMS, the information must be reported to higher levels so effective logistics decision making can take place. In addition, the information sent on those reports should be complete and accurate. The data indicate that reporting is still suboptimal.

Virtually all store managers (94.3 percent) report that they had been trained to complete the Store Distribution Report (SDR). However, in spite of this high proportion of trained staff members, only 45.3 percent actually send their SDR to a higher level. Of those, only 70.8 percent were found to have sent complete and accurate reports.

The data also indicate a low rate of complete and accurate reporting in ordering supplies. The Report and Issue Form (RIF) and the Report and Issue Report Form (RIRF), which are used in the streamlined states of Bauchi, Kano, and Nasarawa, provide quantity order request information to the issuing facility at the end of each reporting period. Information from the forms furnishes actual consumption data, which are required to provide accurate resupply quantities and to generate accurate forecasts and procurements. As shown in figure 6, only one in eight facilities (12.3 percent) submitted all the required RIF or RIRF to the appropriate level during the six-month period preceding the survey.

For both stores and SDPs, a serious gap exists in reporting. With the low percentage of reports filtering to the higher level, key decision-making processes will continue to be based on incomplete, and in some cases, inaccurate information.

Figure 6. Percentage of Facilities That Send RIFs and RIRFs



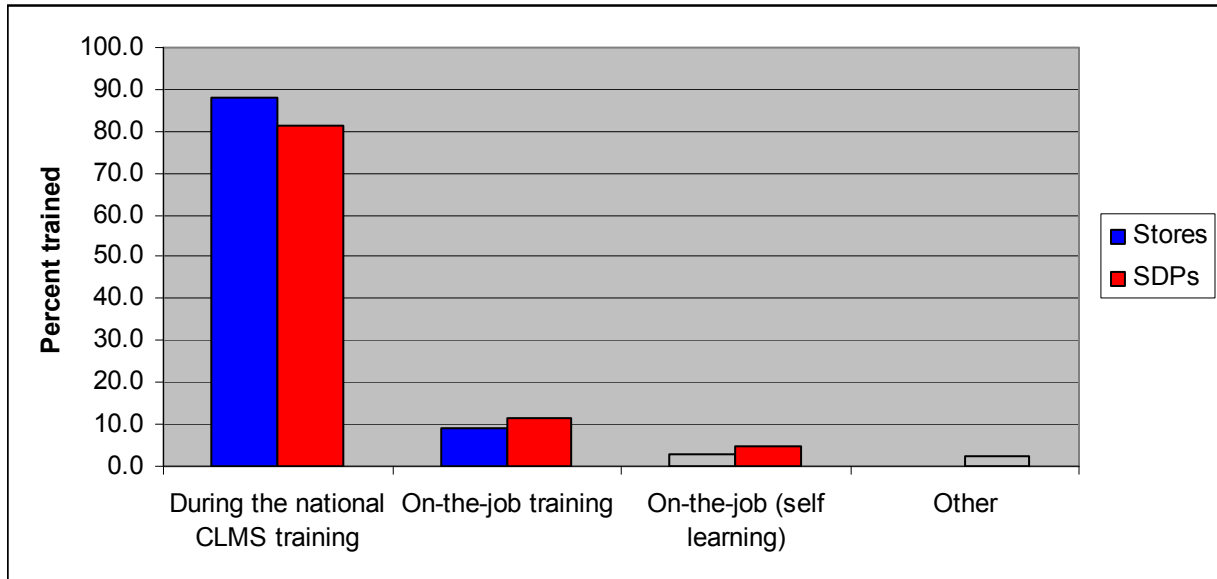
Inventory Control

To measure the adherence of providers to inventory control procedures, the study assessed the percentage of personnel who reported that they ordered according to established inventory control procedures. In addition, the study assessed (a) the proportion of personnel who reported that they have received training on how to calculate the order quantities and (b) the percentage of facilities that placed emergency orders in the previous six months. The indicators were designed to capture the practices and training of personnel who managed inventory at the facility level. A high frequency of emergency orders might indicate deficient inventory control.

The findings revealed that about 94 percent of store personnel and 84 percent of SDP personnel were trained on how to calculate the order quantities. Of those trained, more than 90 percent of all personnel received their training through the national CLMS training or through on-the-job training. (See figure 7.)

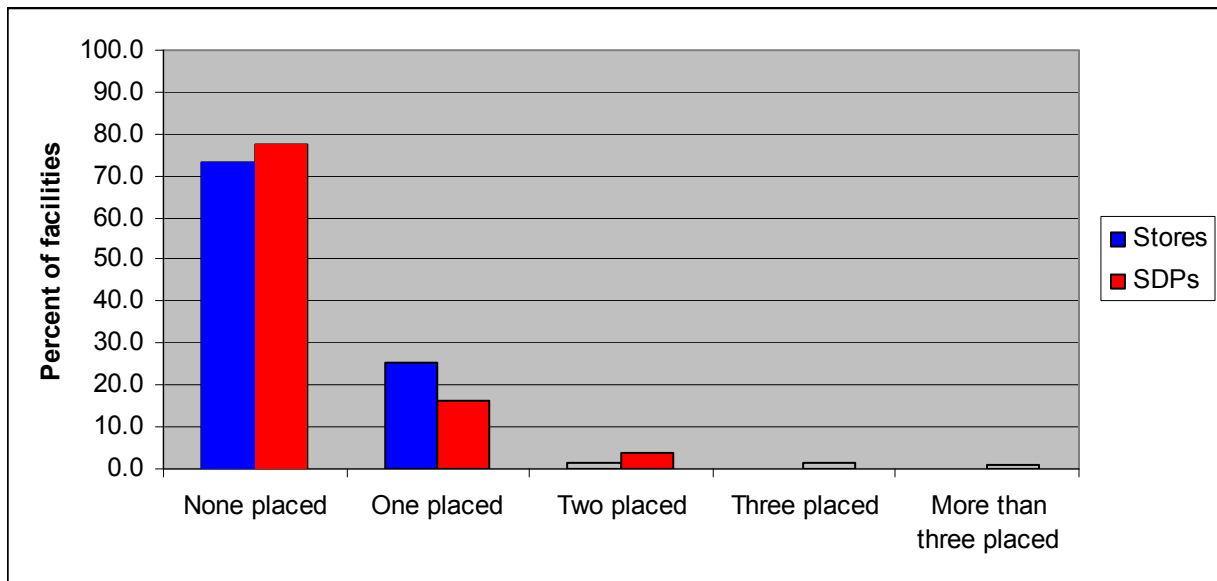
However, approximately 78 percent of store personnel and 66 percent of SDP personnel report ordering according to the inventory control procedure. About 75 percent of stores and SDPs did not place emergency orders in the six months preceding the survey, with only 25 percent or less of facilities placing one emergency order in the same six-month period. (See figure 8.)

Figure 7. How Personnel Received Inventory Management Training by Facility



Note: CLMS = contraceptive logistics management system; SDPs = service delivery point.

Figure 8. Percentage of Facilities Placing an Emergency Order in the Previous Six Months



Note: SDPs = service delivery points.

Cost Recovery

The cost-recovery element of the CLMS was designed to ensure sustainability of the program. Although highly subsidized, the cost of contraceptives includes a repurchase portion, a margin to cover transportation and supervision costs, and an incentive for SDP service providers. Adherence

to the procedures for cost recovery was predicated on facilities keeping ledgers or cash books that detail the recommended use of margins.

Survey findings indicate that about 66 percent of all stores and 53 percent of SDPs kept a cost-recovery cash book or ledger. Inspection of the ledgers or cash books indicated that only 63 percent of stores and about 62 percent of SDPs had entries that matched commodity sales. Therefore, only two-fifths of stores (41.7 percent) and one-third of SDPs (32.9 percent) adhered to the financial recording procedures of the cost-recovery system.

Only 22.5 percent of the stores evaluated stated that they had separate accounts for contraceptive management. Of those that had separate accounts, approximately 75 percent reported that they do not encounter any problems when seeking official approval to withdraw from the account, and 88.7 percent of stores and 91.9 percent of SDPs reported using the funds strictly for CLMS purposes.

A large majority of facilities (88.2 percent of stores and 79.2 percent of SDPs) reported using the margins; of those facilities, 79.1 percent of stores and 75.7 percent of SDPs used the margins according to the guidelines. Some of the reasons given for not using the margins included (a) not understanding the use of the guidelines (44 percent for SDPs and 9.1 percent for stores), (b) not requiring transportation costs for facilities that share locations with stores (3.8 percent for SDPs), and (c) low margins because of the very small demand for FP services at certain sites (9.1 percent for stores).

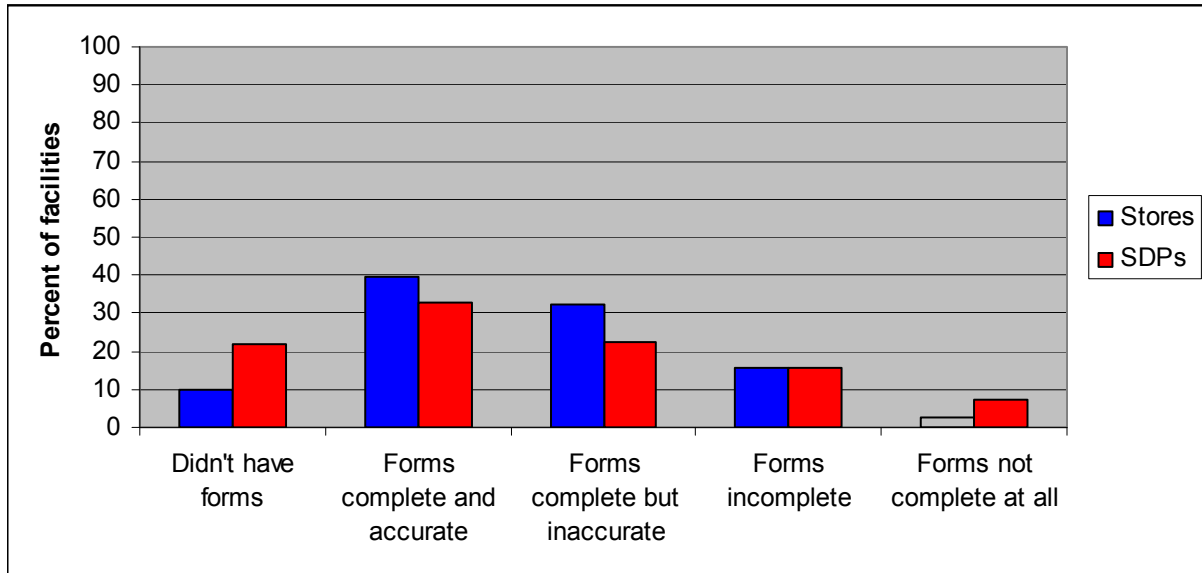
Record Keeping

Accurate and timely record keeping is essential for a well-functioning CLMS, because all aspects of the logistics system depend on well-kept records. In evaluating this function, the survey assessed the availability, completeness, and accuracy of the records used. Those records include RIFs and RIRFs, daily consumption records (DCRs), stockcards, and cost recovery records. Record keeping in general was found to be suboptimal.

Figure 9 indicates that only 39.4 percent of stores and 32.7 percent of SDPs had the RIFs and RIRFs completed accurately. Approximately one-third and one-fifth of stores and SDPs, respectively, had the forms completed, but they were filled out inaccurately. In addition, almost one-tenth of stores and one-fifth of SDPs did not have these forms in stock.

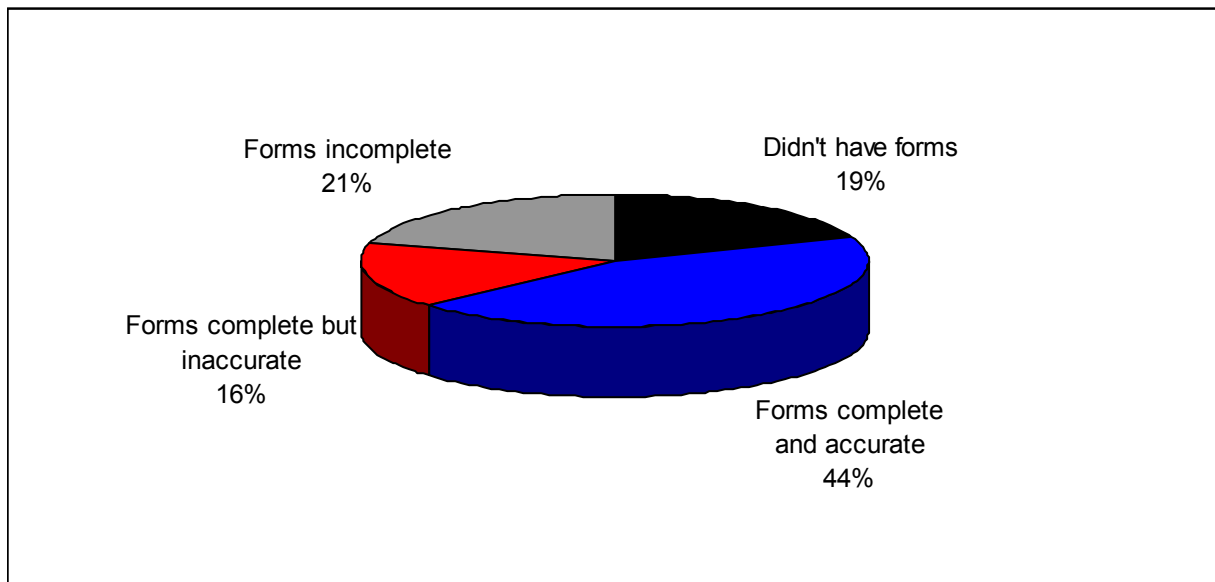
SDPs use the DCR to record the type and quantity of contraceptives dispensed to clients who visit their facilities for FP services. Findings indicated that the last monthly DCR was complete and accurate in less than half of SDPs (44 percent). Almost one-fifth of the SDPs (19 percent) did not have the forms, and another one-third (37 percent) had either incomplete or complete but inaccurate records. (See figure 10.)

Figure 9. Percentage of Facilities with Complete and Accurate RIFs and RIRFs



Note: SDPs = service delivery points.

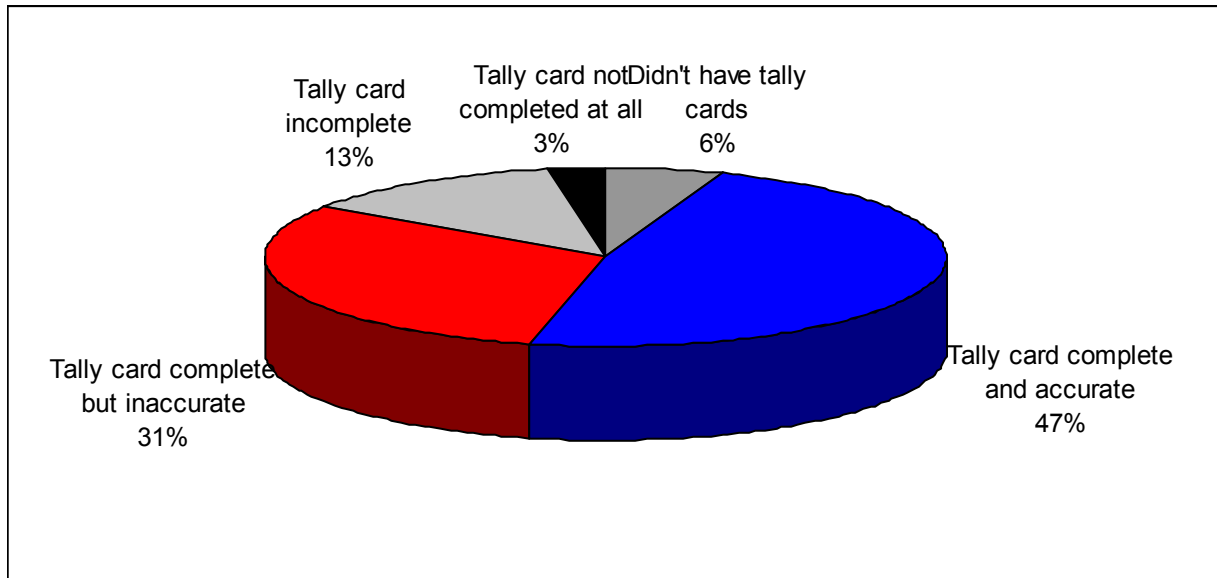
Figure 10. Percentage of SDPs with Complete and Accurate DCRs



Note: DCRs = daily consumption records; SDPs = service delivery points.

Results of the study indicate that almost one-half of stores surveyed (47.9 percent) had complete and accurate stockcards. Only a small minority (5.6 percent) did not have the cards, and an additional 2.8 percent had the cards but had not filled them in at all. More than two-fifths of stores (44 percent) had either incomplete or complete but inaccurate forms. (See figure 11.)

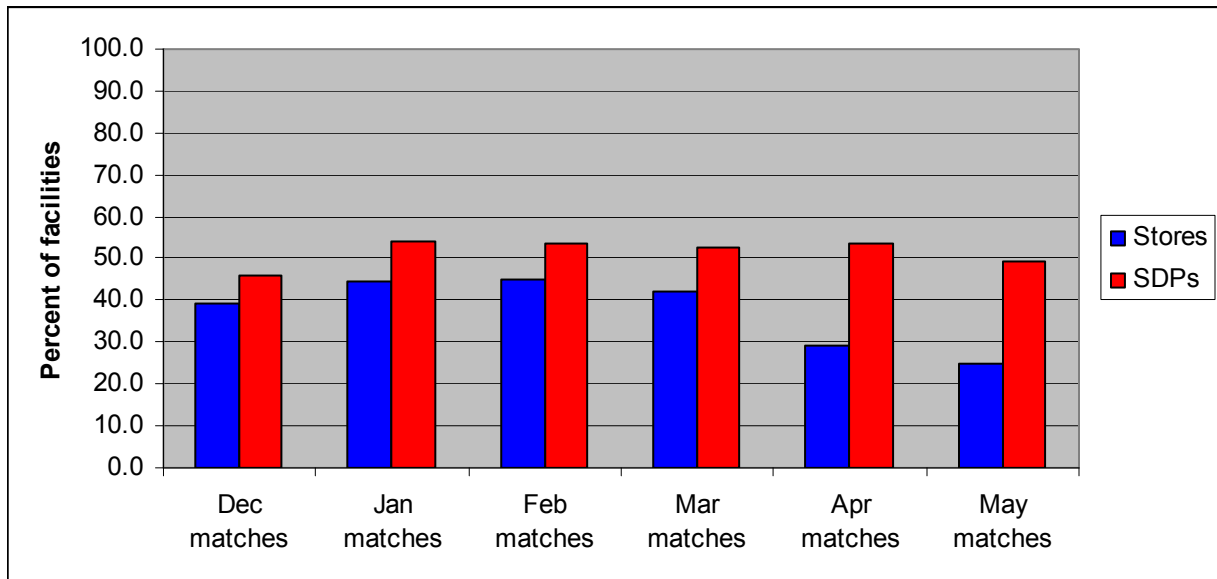
Figure 11. Percentage of Stores with Complete and Accurate Tally Cards for the Past Six Months



Record keeping completeness and accuracy were also measured by matching entries on either the DCRs for SDPs or on stockcards for stores against cost-recovery records for each of the previous six months before the survey. On average, 38 percent of the stores and 52 percent of the SDPs had accurate cost-recovery records for the past six months. In addition, in viewing the trends over the past six months, there was no evident consistent pattern between stores and SDPs (such as accuracy and completeness dropping or rising at the same time) nor within a facility (such as a consistent upward or downward trend). Interesting to note, however, is the consistent drop for stores in the two months preceding the survey. (See figure 12.)

Important to note is that, despite high levels of training nationwide among respondents at stores and SDPs, a disconnect exists between receiving the training and application of the training in practice, as evidenced by the lower levels of completeness and the accurate completion of records among a variety of forms.

Figure 12. Percentage of Facilities with Complete and Accurate Cost-Recovery Records for the Past Six Months



Note: SDPs = service delivery points.

Supervision

Properly conducted supervision using standardized checklists and providing timely feedback to supervised personnel is an important means of reinforcing formal training and tracking the performance of the logistics system. Thus, in looking at the performance of the CLMS and its progress over time, this study collected data on (a) the number of supervisions, (b) the training of those who provided this service, and (c) the frequency and effectiveness of the visits.

Although approximately 83 percent of store personnel and 49 percent of SDP personnel were trained to complete the supervisory checklist, less than half the stores (42 percent) had carried out supervision visits using the checklists since 2004. Almost one-third of those who did not provide supervision reported that they could not do so because of lack of transportation.

About one-third of store personnel who made supervisory visits did so within the month prior to the survey. One-fifth of the stores conducted supervisions using checklists in the 3-month period leading up to the study, and another fifth of store personnel had made supervisory visits in the past 6 months, as shown in figure 13.

The study also assessed the frequency of supervision visits by stores to SDPs since 2004. A little more than half of the stores had made four or more such visits, with only 7 percent making just one such visit since 2004. As shown in figure 14 below, only 60 percent of stores had supervision checklists on file, but of those, approximately 83 percent were complete and accurate. (See figure 14.)

Figure 13. Percentage of Stores by Time of Last Supervisory Visit

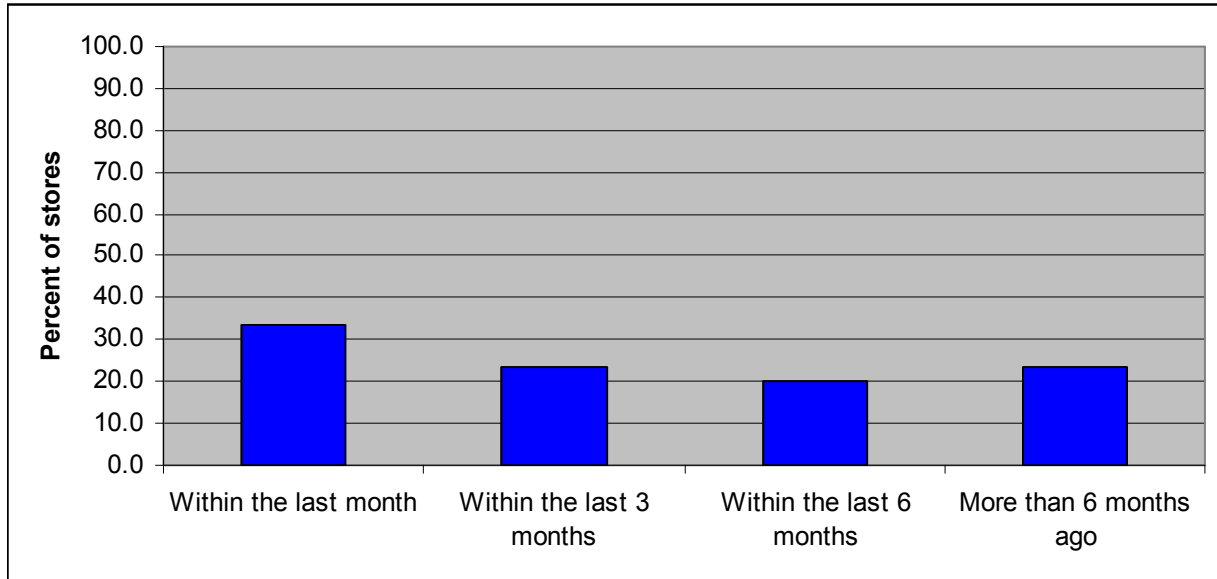
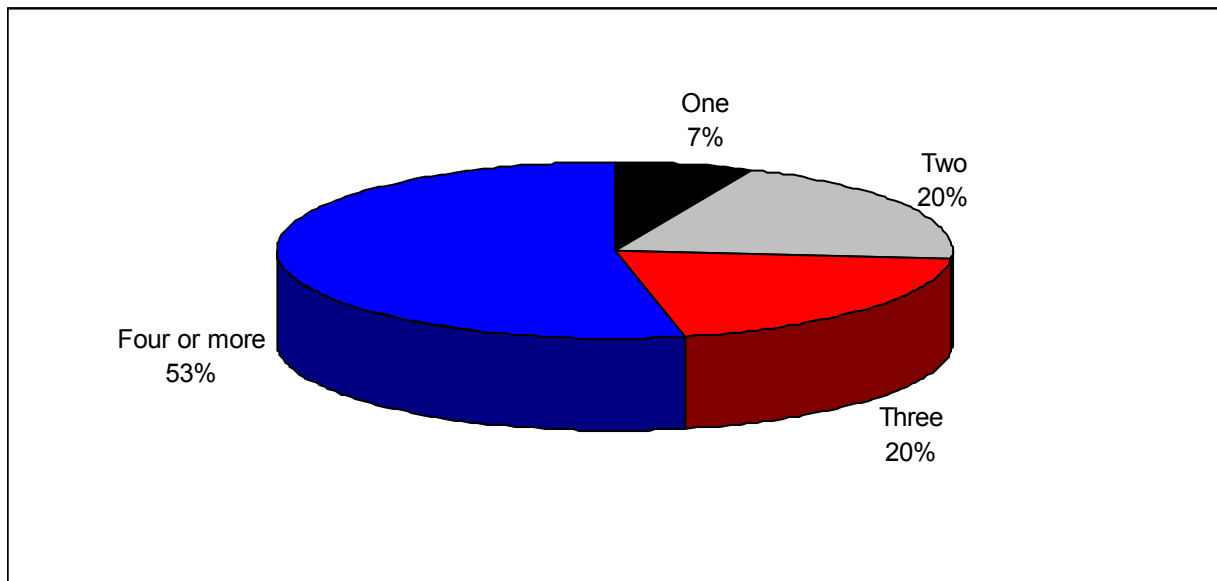


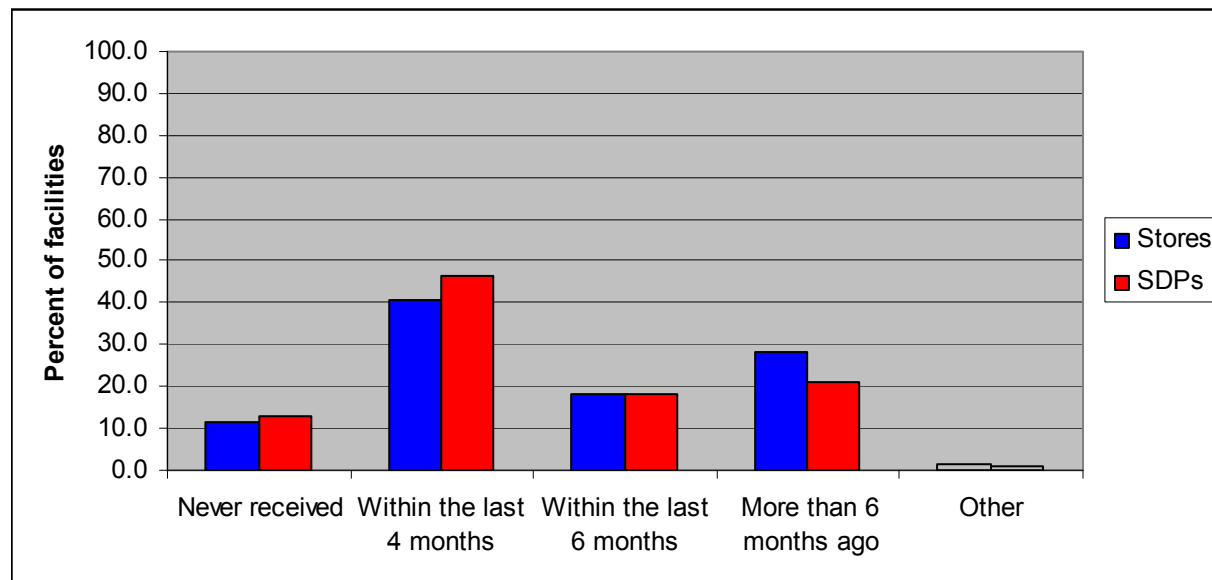
Figure 14. Frequency of Supervisory Visits by Stores Since 2004



Both stores and SDPs have relatively low rates in terms of receiving a supervision visit. A little more than 10 percent have never received a visit; only 41 percent of stores and 47 percent of SDPs report having received a supervision visit in the past 4 months. More than 28 percent of stores and 21 percent of SDPs report having received a supervision visit more than 6 months before the survey. Although all essential items were checked during the visit, the store distribution report, cash book,

and storage guidelines were least checked among stores and SDPs. See figure 15 for details of the facilities that reported receiving supervision visits.

Figure 15. Percentage of Facilities Reporting Receiving Supervision



Note: SDPs = service delivery points.

Transportation

Efficient transportation is a vital requirement for a well-functioning logistics system. Such a system enables commodities to be moved in a timely fashion to where they are required and to ensure continual availability of contraceptives at SDPs.

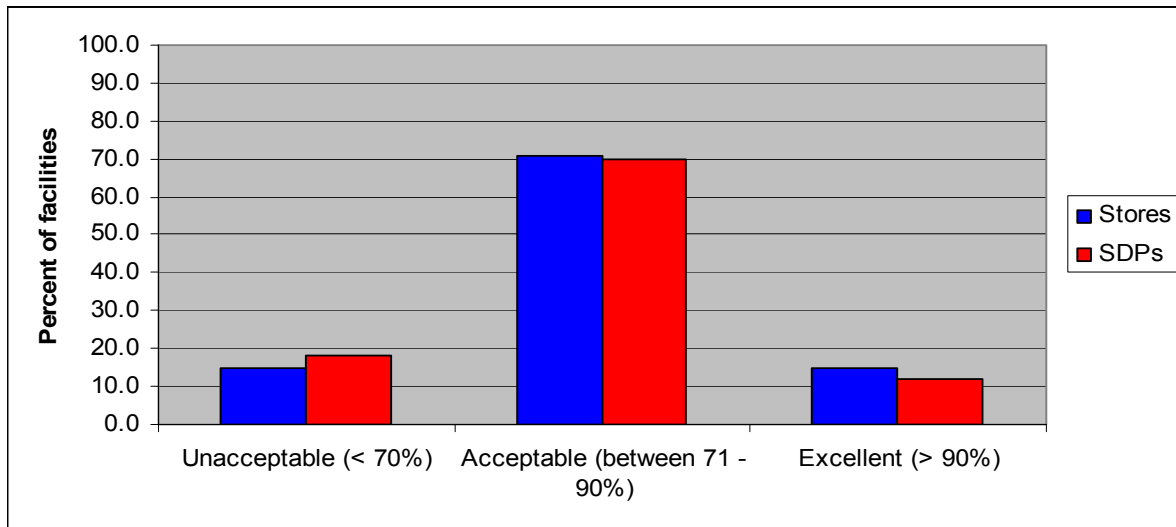
The majority of stores and SDPs report collecting their stock from the level above them (83 percent and 92 percent, respectively). For stores and SDPs that collect their stock, the majority use public transportation (72 percent for stores and 54 percent for SDPs). Other methods used included private vehicle (13 percent for stores and 6 percent for SDPs) and motorcycle (13 percent for stores and 22 percent for SDPs).

Because the system places the responsibility for collection primarily on the facility level, resources and other constraints at the facility level may create breaks in the supply chain, which can contribute to stockouts. Also, the fact that most personnel use public transportation to collect commodities presents additional constraints in the supply chain, because the amount that can be carried safely on public transport is limited. In addition, although the value of contraceptives is not as high as other commodities, additional risks exist with regard to potential theft and security of the commodities in the more insecure environment of public transportation.

Storage Conditions

Storage of contraceptives, as in storage of all drugs, requires specified conditions to ensure the efficacy of the preparations. In assessing sites, inspectors (data collection teams) scored each facility using 15 guidelines. Facilities that met more than 90 percent were considered to have excellent storage conditions, those that met between 71 and 90 percent were acceptable, and those that met less than 70 percent were unacceptable. About two-fifths of both stores and SDPs met acceptable storage conditions. About 15 percent of stores and 12 percent of SDPs had excellent storage conditions. (See figure 16.)

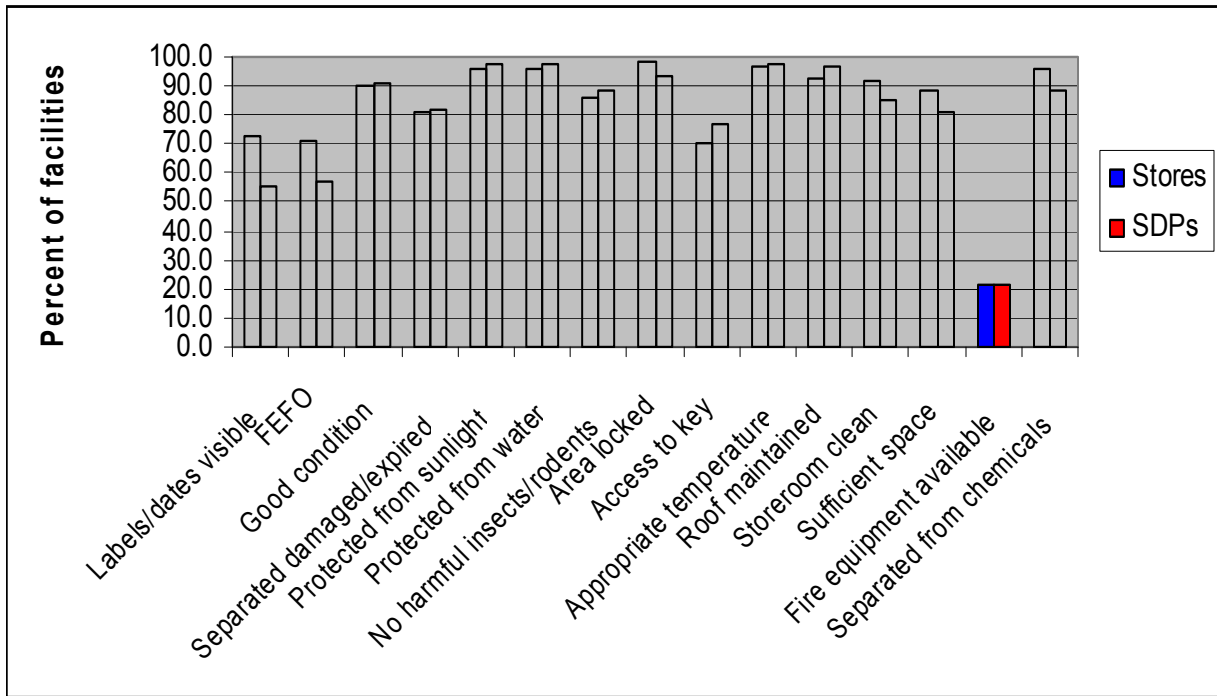
Figure 16. Percentage of Facilities Meeting Acceptable Storage Conditions



Note: SDPs = service delivery points.

An examination of the specific storage conditions included in the survey showed that the least-met storage condition was availability of fire extinguishers (21.4 percent for both stores and SDPs). The most commonly met storage conditions were protection from direct sunlight and water for SDPs (98 percent) and a locked and secured area for stores (99 percent). (See figure 17.)

Figure 17. Percentage of Facilities Meeting Individual Storage Conditions



Note: FEFO = first-to-expire, first-out; SDPs = service delivery points.

Urban- and Rural-Level Findings

This section presents findings on the basis of the location of the facilities. It compares the results of several key indicators by rural and urban area so it can identify the influence of site location on resultant indicator values. Where appropriate, the analysis that follows presents data on stores and service delivery points (SDPs) separately so it can provide more in-depth analysis of both levels. In general, urban facilities fared better than rural ones on most indicators.

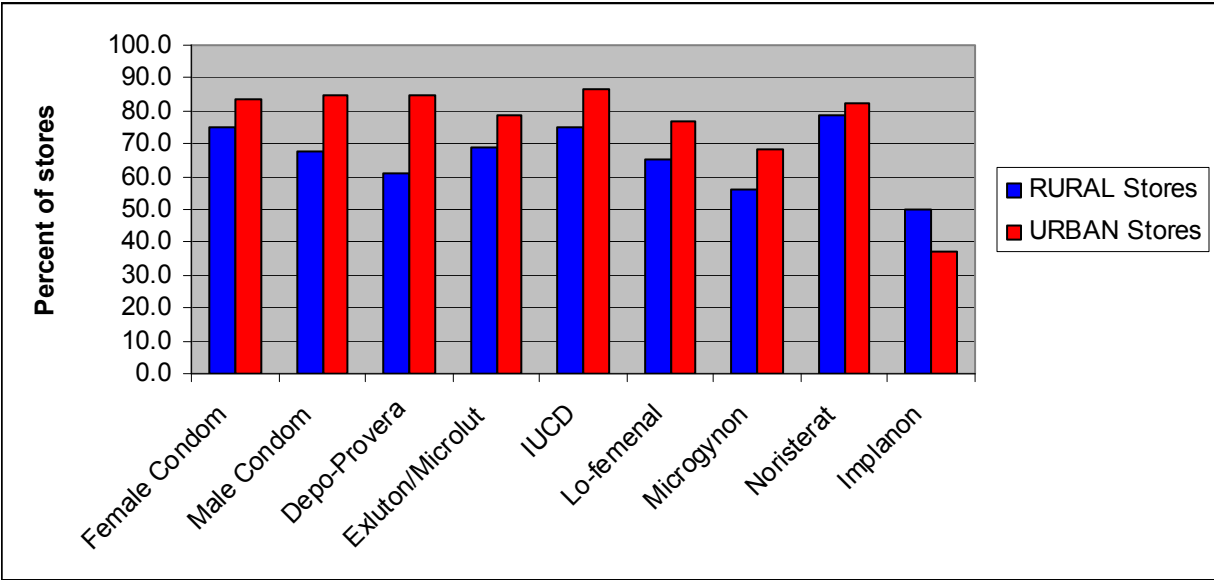
Stock Status

Two of the stock status indicators were assessed on urban and rural levels to determine differentials on indicator values: (a) the availability of commodities on the day of the visit and (b) the proportion of facilities that had stockout of any method during the six-month period before the survey.

Apart from Implanon, availability of contraceptives at urban stores was consistently higher than those at rural stores. Five of the contraceptives were available at more than 80 percent of urban stores, but for rural stores, the highest availability was achieved for Noristerat at approximately 79 percent. (See figure 18.)

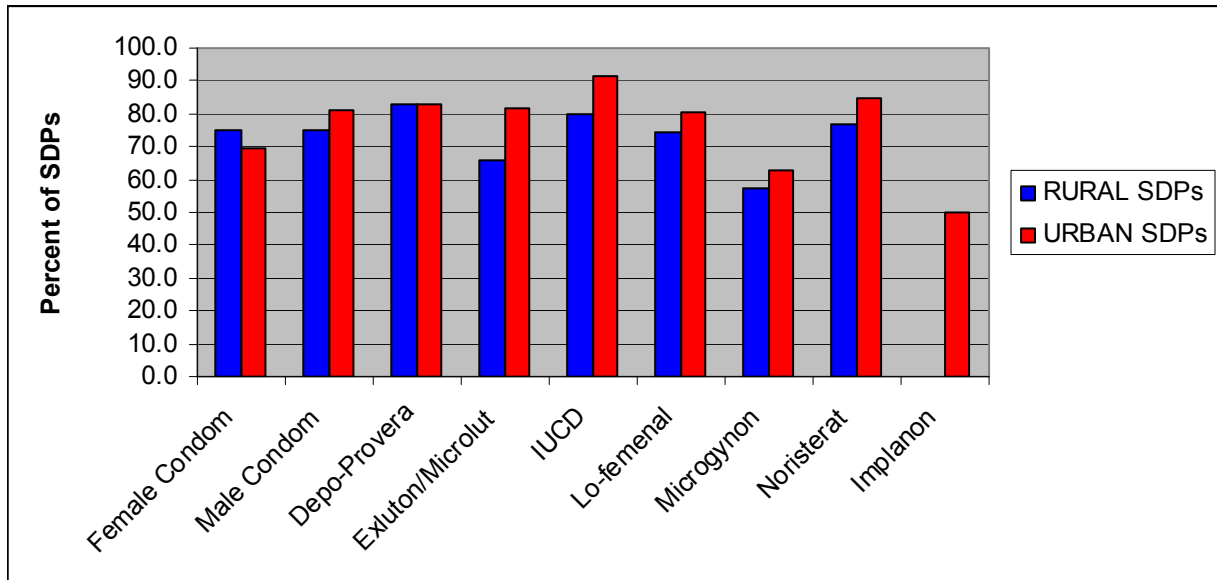
At the SDP level, availability was consistently higher—with the exception of female condoms—at urban SDPs than at rural ones. Availability at urban SDPs ranged from 50 to 92 percent, but for rural SDPs the range was 0 to 80 percent. (See figure 19.)

Figure 18. Availability of Contraceptives on the Day of Visit at Stores at the Urban and Rural Levels



Note: IUCD = intrauterine contraceptive device.

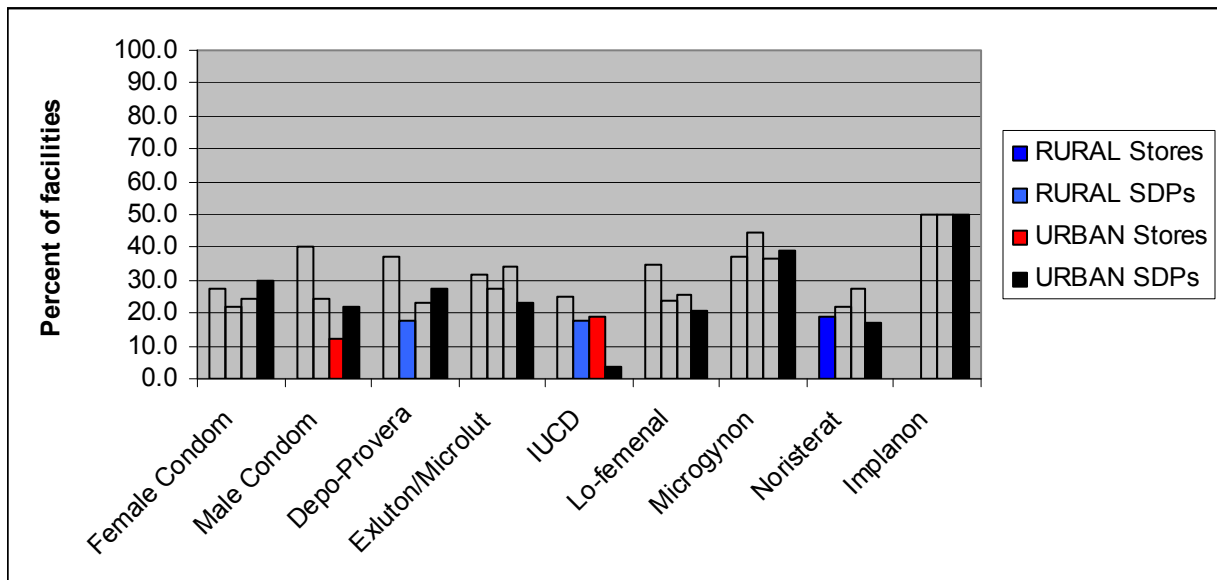
Figure 19. Availability of Contraceptives on the Day of Visit at SDPs at the Urban and Rural Levels



Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

More rural stores reported stockouts in most family-planning (FP) methods than did urban stores in the past six months, with the exception of Noristerat, Exluton/Microlut, and Implanon. Similarly, rural SDPs reported more stockouts for a greater number of products than did urban SDPs. (See figure 20.)

Figure 20. Percentage of Facilities Stocked Out of Contraceptives in the Past Six Months at the Urban and Rural Levels



Note: IUCD = intrauterine contraceptive device; SDPs = service delivery points.

For both indicators (a) the availability of commodities on the day of the visit and (b) the proportion of facilities that had stockout of any method during the six-month period before the survey, rural facilities generally fared poorer in terms of availability and experienced a greater number of stockouts. One reason for lower rural performance is the relative lack of resources to collect contraceptives from the next higher level of the system.

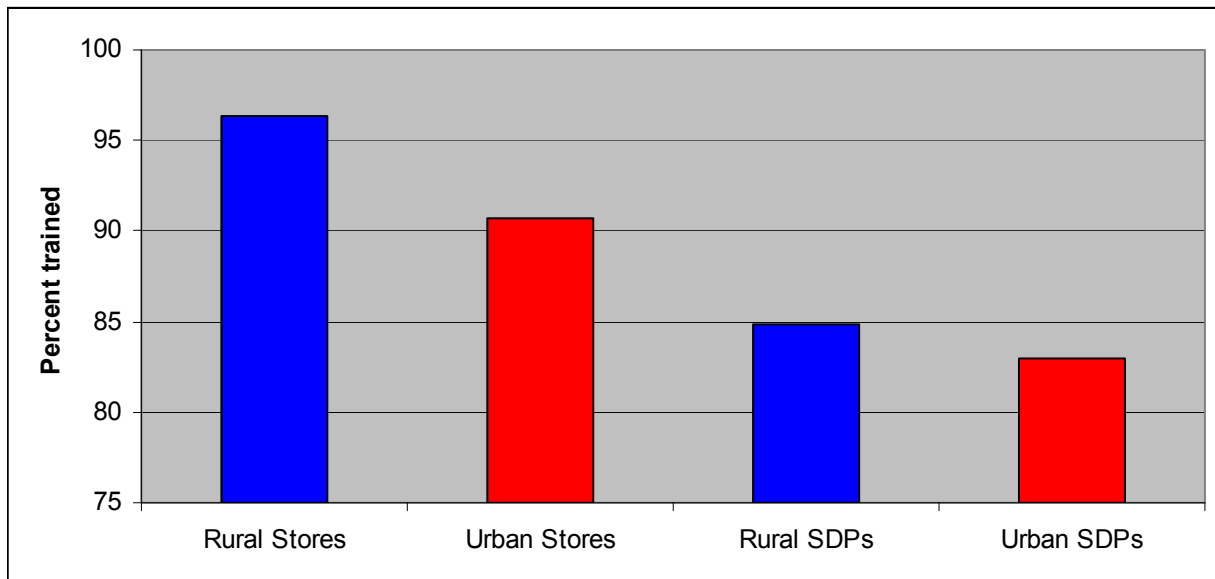
Logistics System Performance

In analyzing the effect of sites in urban or rural locations on logistics system performance, inspectors (assessment team) selected key indicators for logistics management information system LMIS, reporting, inventory control, cost recovery, and record keeping.

Logistics Management Information System

For both stores and SDPs, the percentage of personnel trained was higher for rural areas than for urban, although the differential is not significant. (See figure 21.)

Figure 21. Percentage of Facility Personnel Trained in CLMS at the Urban and Rural Levels



Note: CLMS = contraceptive logistics management system; SDPs = service delivery points.

Urban stores generally had a greater percentage of stockcard availability, with the exception of female condoms, than did rural stores. In terms of updated stockcards, stores also generally fared better but with a more marked difference between urban and rural. Implanon, however, remained unchanged for both rural and urban stores. Similarly, among urban and rural SDPs, urban SDPs had greater availability of stockcards and a greater percentage updated. However, the differences were not significant. (See table 7.)

Table 7. Percentage of Facilities with Stockcards Available and Updated by Product at the Urban and Rural Levels

Contraceptive Products	Stores						SDPs					
	<i>Available</i>			<i>Updated</i>			<i>Available</i>			<i>Updated</i>		
	All Loc	Urban	Rural	All Loc	Urban	Rural	All Loc	Urban	Rural	All Loc	Urban	Rural
Female condom	90.0	89.2	91.3	79.6	93.9	57.1	85.0	83.7	86.6	81.5	86.1	75.9
Male condom	85.3	87.5	82.1	77.6	91.4	56.5	83.3	84.5	81.9	80.7	82.9	77.9
Depo-Provera	89.6	92.3	85.7	76.7	86.1	62.5	82.8	83.2	82.4	81.1	80.9	81.3
Exluton/Microlut	90.6	92.1	88.5	72.4	82.9	56.5	85.9	84.2	87.8	81.5	81.3	81.7
IUCD	89.5	91.9	85.0	86.3	91.2	76.5	84.7	86.6	82.3	84.4	87.3	80.4
Lo-femenal	86.4	89.7	81.5	80.7	94.3	59.1	82.0	83.0	80.7	83.3	85.5	80.6
Microgynon	90.5	92.1	88.0	78.9	88.6	63.6	83.7	86.0	81.0	77.8	77.5	78.1
Noristerat	89.7	92.5	85.7	80.3	89.2	66.7	83.6	85.0	81.8	82.7	83.3	81.9
Implanon	70.0	75.0	50.0	100.0	100.0	100.0	50.0	50.0	50.0	66.7	100	0.0

Note: Loc = locations.

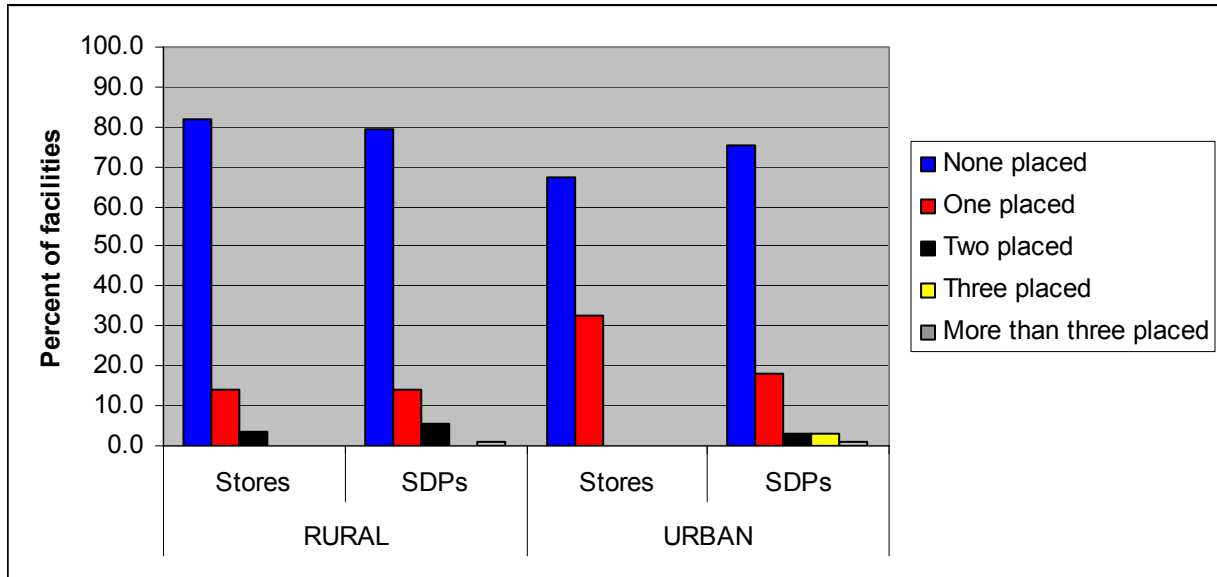
Reporting

Although only a small proportion of all stores sent Store Distributions Reports (SDRs) to higher levels, more urban stores sent SDRs to the appropriate level than did rural stores, at 50 percent and 37 percent, respectively. Again, this fact may be attributable to greater difficulties of rural SDPs in sending reports up the line because of transportation and resource limitations.

Inventory Control

More urban stores and SDPs reported ordering according to established minimum and maximum stock levels than did rural stores and SDPs. Approximately 81 percent of urban stores and 72 percent of urban SDPs ordered according to established minimum and maximum levels, compared with 71 percent of rural stores and 58 percent of rural SDPs similarly ordering. However, a greater percentage of rural stores and SDPs placed no emergency orders in the six months preceding the survey than did urban stores and SDPs. (See figure 22.)

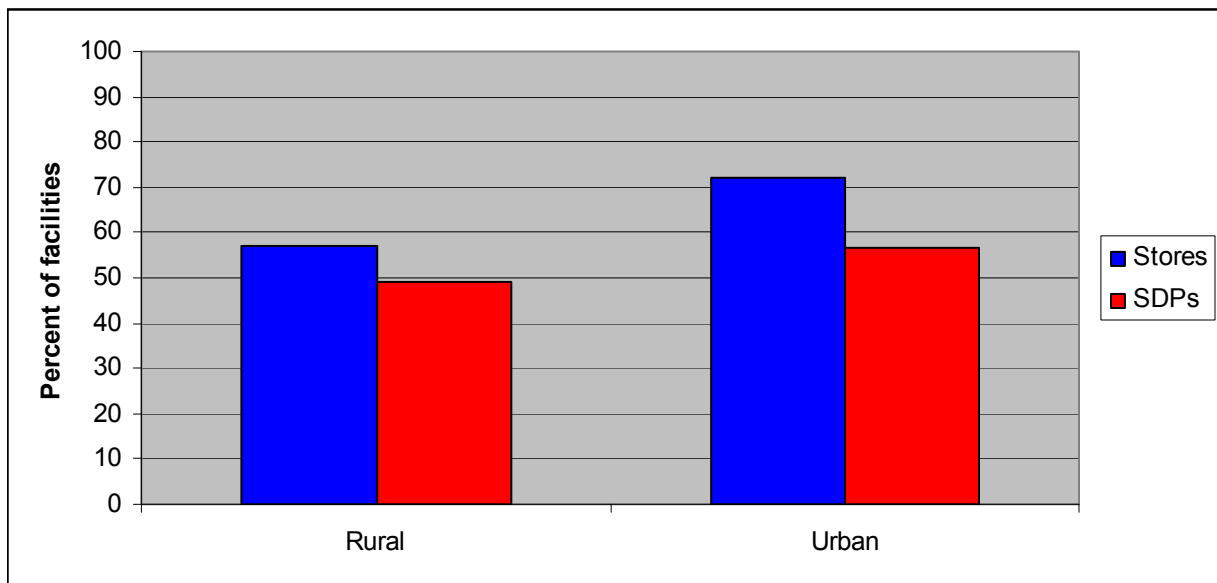
Figure 22. Percentage of Facilities Placing Emergency Orders in the Previous Six Months at the Urban and Rural Levels



Cost Recovery

A lower proportion of rural facilities reported having a cash book than did urban ones, at 72 versus 57 percent of stores and 57 versus 49 percent of SDPs. (See figure 23.)

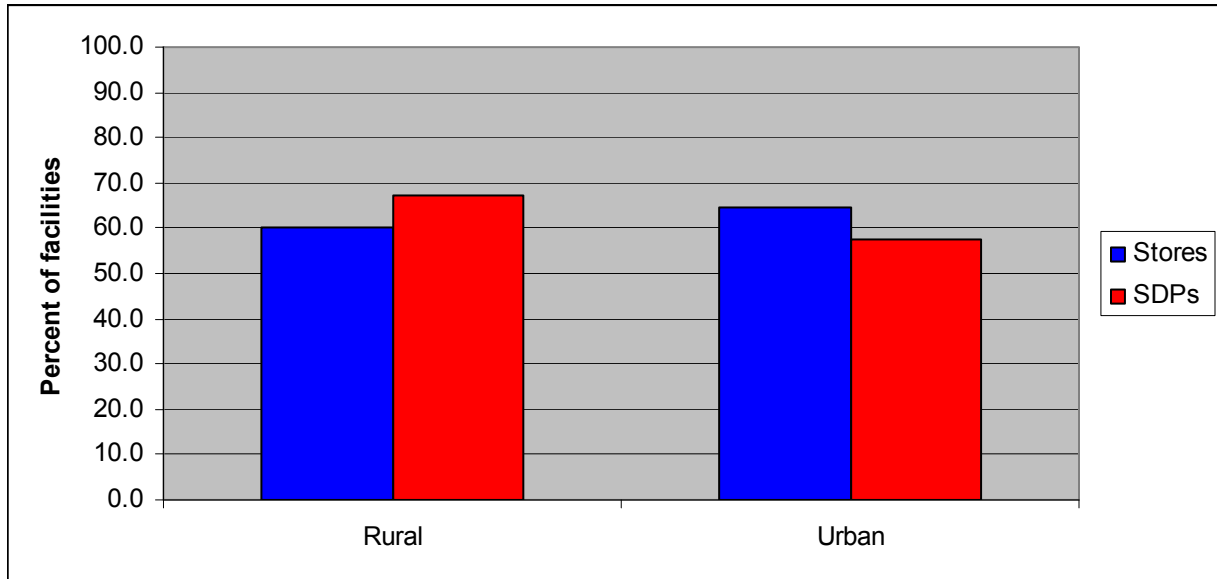
Figure 23. Percentage of Facilities Reporting Having a Cash Book or Ledger for Cost-Recovery Funds at the Urban and Rural Levels



Note: SDPs = service delivery points.

Although almost three times as many urban stores reported having a separate bank account for contraceptives (at 30 percent for urban and 11 percent for rural), the overall percentage of those facilities maintaining a separate account was extremely low. However, although matching ledger balances were slightly higher at rural SDPs than at urban ones and were slightly higher at urban stores than at rural ones, the differential was not very significant. See figure 24 for details of facilities with ledger balances equal to total commodities sales.

Figure 24. Percentage of Ledger Balances Matching Total Commodity Sales at the Urban and Rural Levels

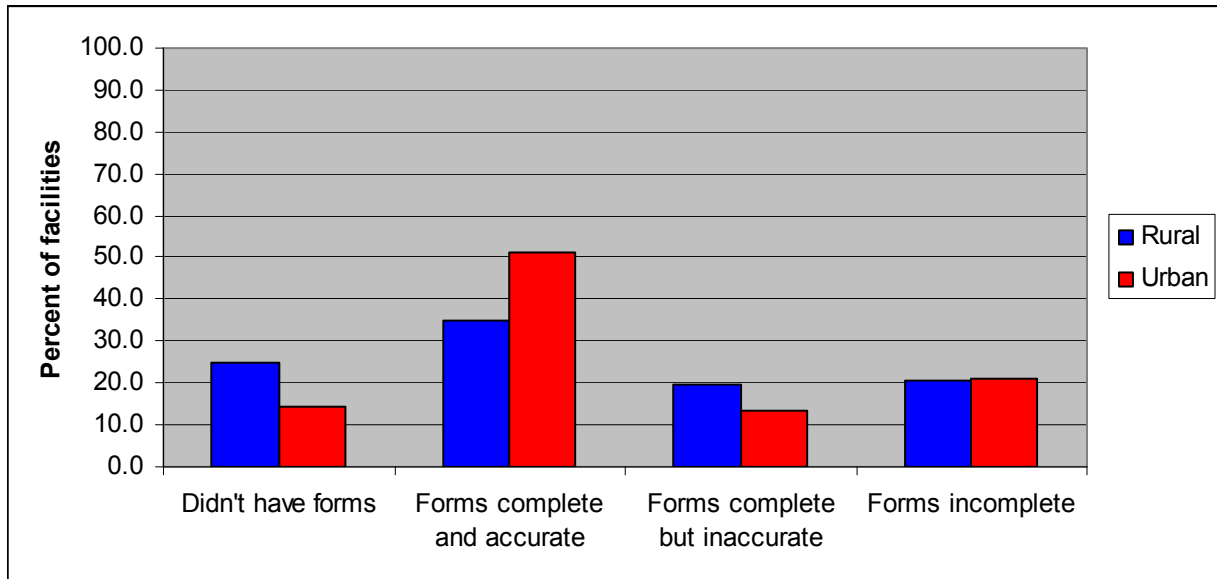


Note: SDPs = service delivery points.

Record Keeping

A greater percentage of urban SDPs had complete and accurate DCRs when compared to rural SDPs: 52 percent for urban versus 35 percent for rural. In addition, almost 25 percent of rural SDPs versus 14 percent of urban SDPs reported that they did not have the forms available.

Figure 25. Percentage of SDPs with Last Daily Consumption Record Complete and Accurate at the Urban and Rural Levels



Note: SDPs = service delivery points.

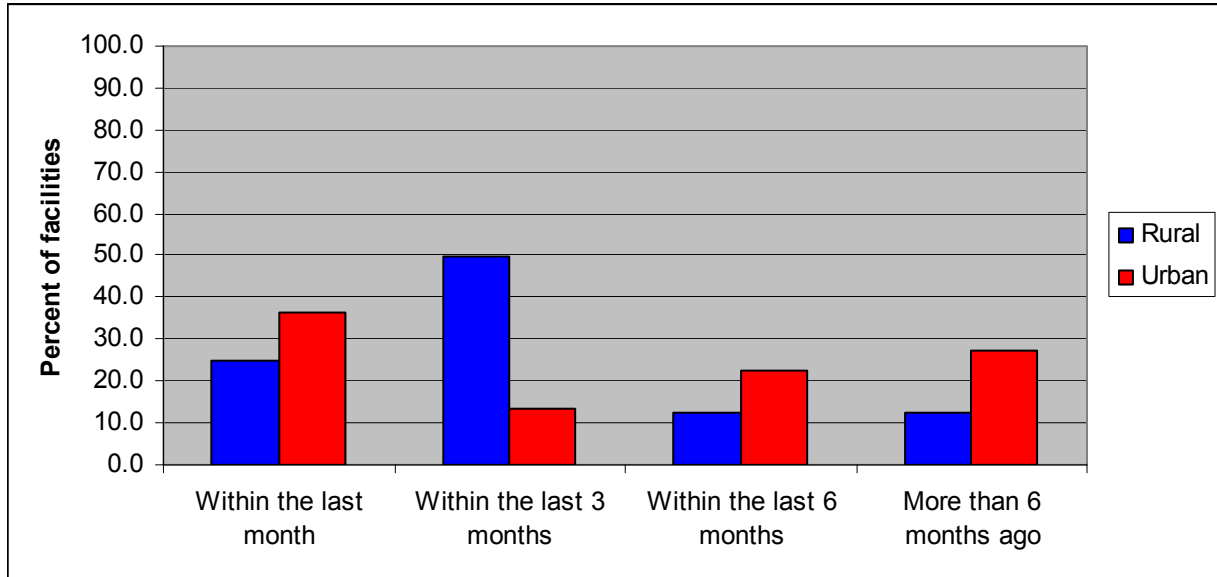
Supervision

Supervision indicators compared for rural and urban facilities included (a) percentage of stores conducting supervision using the checklists, (b) reasons for not carrying out supervision, (c) when the last supervision took place, and (d) proportion of facilities that received supervision.

Almost twice as many urban stores as rural stores were supervised using the supervision checklists, at 51 percent and 29 percent, respectively. For both urban and rural facilities, the inability to schedule a supervisory visit was the reason most cited for why the visits did not take place, at 71 percent for urban stores and 65 percent for rural stores. Both urban and rural stores also cited a lack of available transportation, but that lack was slightly higher among rural stores (30 percent) than among urban ones (24 percent).

With respect to the time period in which the last supervision visit took place, more urban than rural facilities conducted supervision visits in the past month, and the majority of rural facilities conducted visits within the three months preceding the survey. Figure 26 details the frequency of supervision visits to rural and urban facilities.

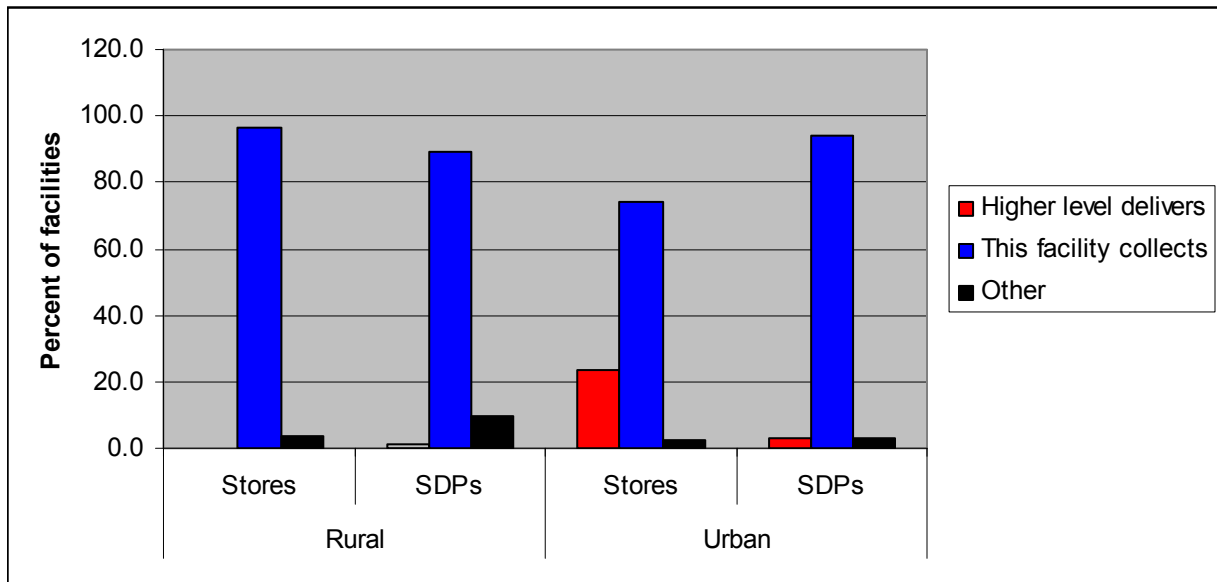
Figure 26. Time Period for Conducting Last Supervision Visit at the Urban and Rural Levels



Transportation

The majority of both urban and rural facilities reported that their facilities collected contraceptive commodities when such were needed. A greater percentage of urban stores and SDPs also experienced a higher level of having commodities delivered to them than did rural stores and SDPs. For those facilities that are required to collect their commodities from a higher level, both urban and rural levels used public transportation, although at a higher level among rural facilities (79 percent of rural stores and 67 percent of urban stores; 53 percent of rural SDPs and 55 percent of urban SDPs). (See details in figure 27.)

Figure 27. Method of Commodity Transportation at the Urban and Rural Levels

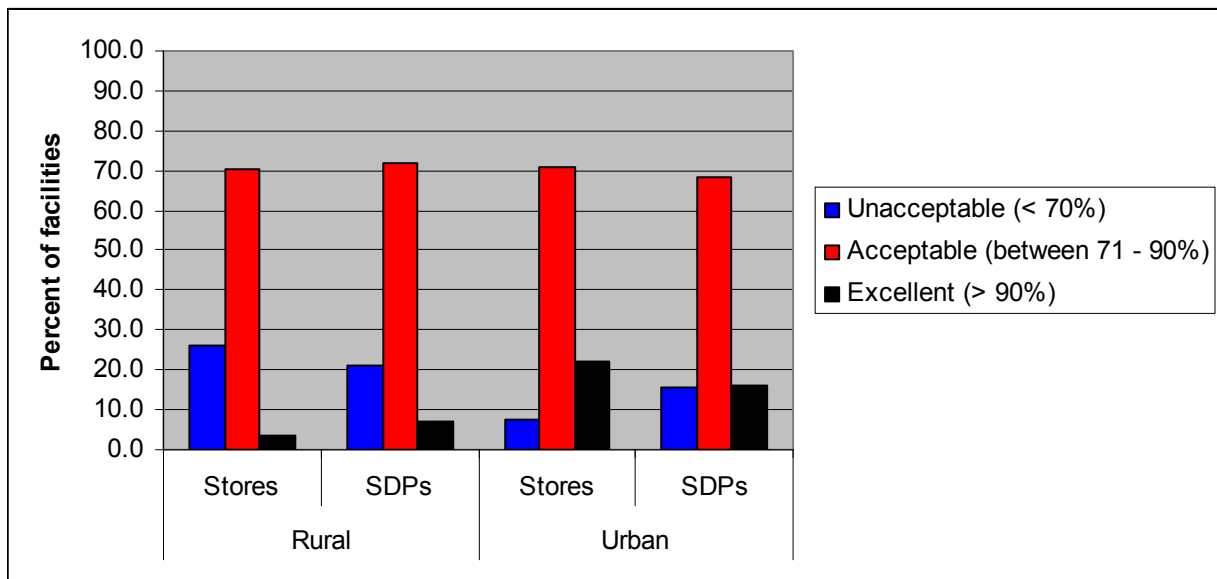


Note: SDPs = service delivery points.

Storage Conditions

The proportion of stores at both urban and rural levels that met acceptable storage conditions was virtually the same: about 70 percent. However, more urban stores and SDPs achieved excellent storage conditions than did rural ones (as shown in figure 28).

Figure 28. Percentage of Facilities That Meet Acceptable Storage Conditions at the Urban and Rural Levels



Note: SDPs = service delivery points.

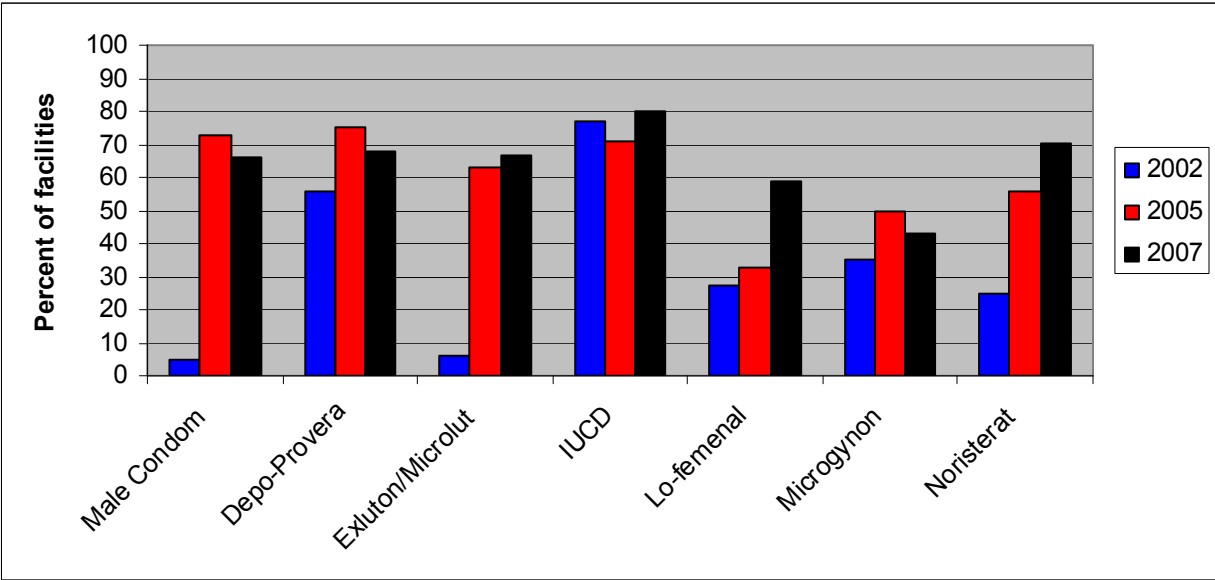
Comparison of Data Findings

Data describing stock availability, availability and accuracy of stockcard entries, adherence to storage guidelines, and training of facility personnel on the contraceptive logistics management system (CLMS) were compared to provide the basis for assessment of trends over time. The comparison was made for Bauchi, Edo, Enugu, Oyo, and Sokoto, because they are the five states common to the sampled sites of the 2002, 2005, and 2007 Logistics Indicators Assessment Tools (LIATs).

Stock Status

No clear-cut trend exists in this indicator. Availability of commodities over the years has increased for Exluton, intrauterine contraceptive device (IUCD), Lo-femenal, and Noristerat. The male condoms Depo-Provera, and Microgynon recorded an increase in stock availability from 2002 to 2005 but decreased in 2007. The most significant jumps in contraceptive availability were made from 2002 to 2005, a fact that may be due to intensive activities related to the improvement of the CLMS and seed stock distribution. Figure 29 shows the trends in availability of commodities from 2002 to 2007.

Figure 29. Availability of Contraceptives on the Day of Visit by Facility—2002, 2005, and 2007 Comparison

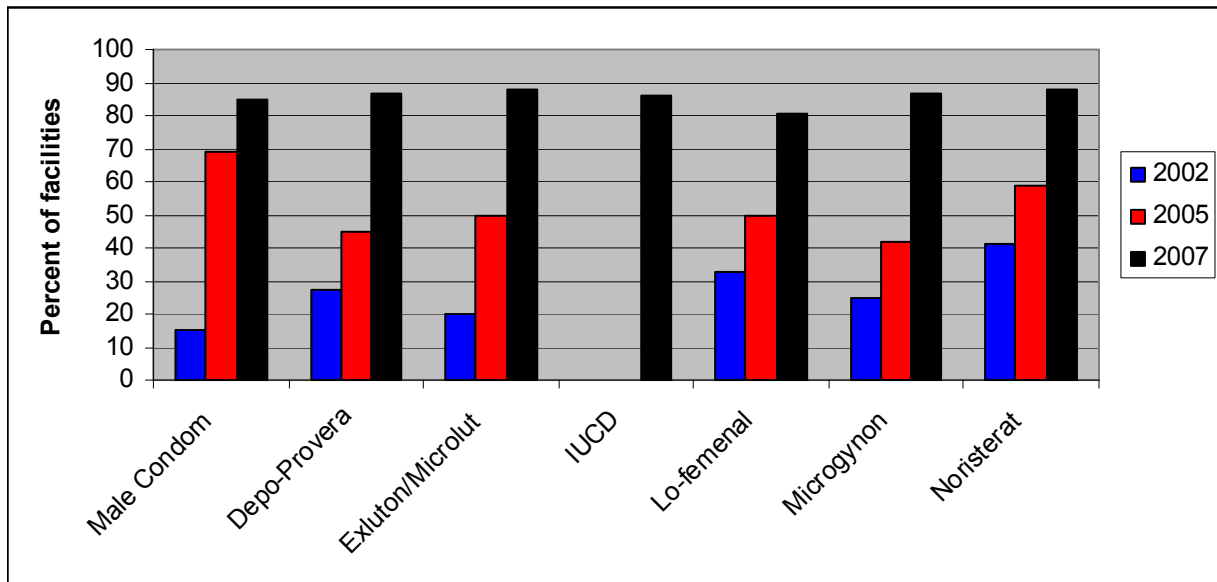


Note: IUCD = intrauterine contraceptive device.

Logistics Management Information System (LMIS)

LMIS performance was evaluated by assessing the availability of stockcards and the percentage of stockcards updated across three surveys (Contraceptive Logistics Indicators Assessments in 2002, 2005, and 2007). The data indicated a clear trend of improvement in stockcard availability, with the most significant jumps made between 2005 and 2007 for all seven products in the comparison table. (See figure 30.)

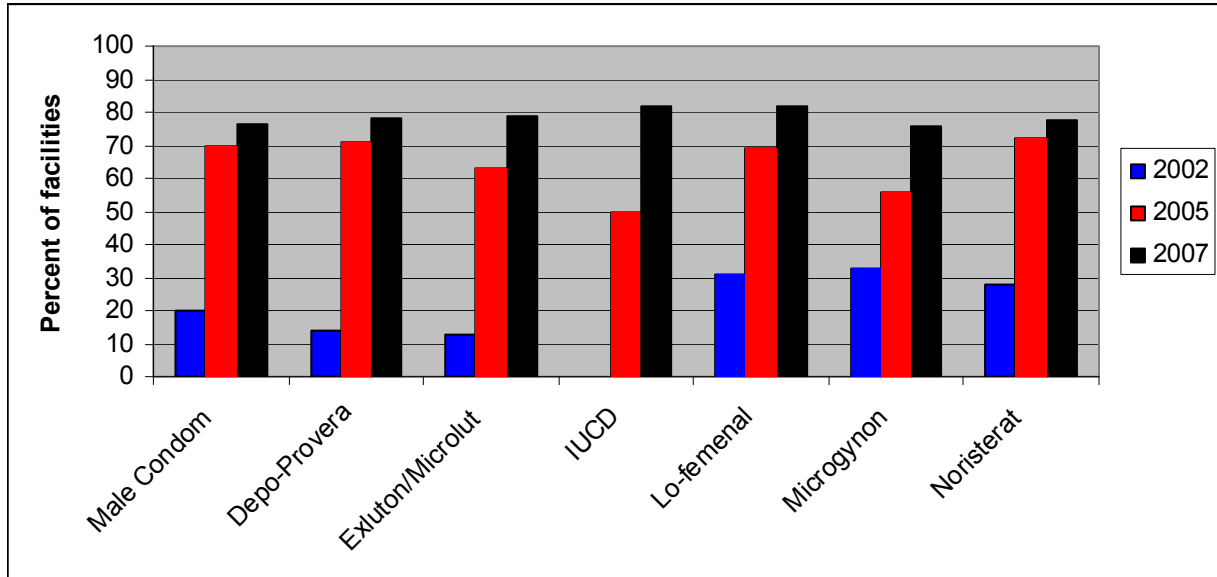
Figure 30. Percentage of Facilities with Stockcards Available by Product—2002, 2005, and 2007 Comparison



Note: IUCD = intrauterine contraceptive device.

A discernable improvement also exists between 2005 and 2007 for the percentage of facilities updating stockcards for all products, with the greatest improvements being for IUCDs and Microgynon. (See figure 31.)

Figure 31. Percentage of Facilities with Stockcards Updated by Product—2002, 2005, and 2007 Comparison

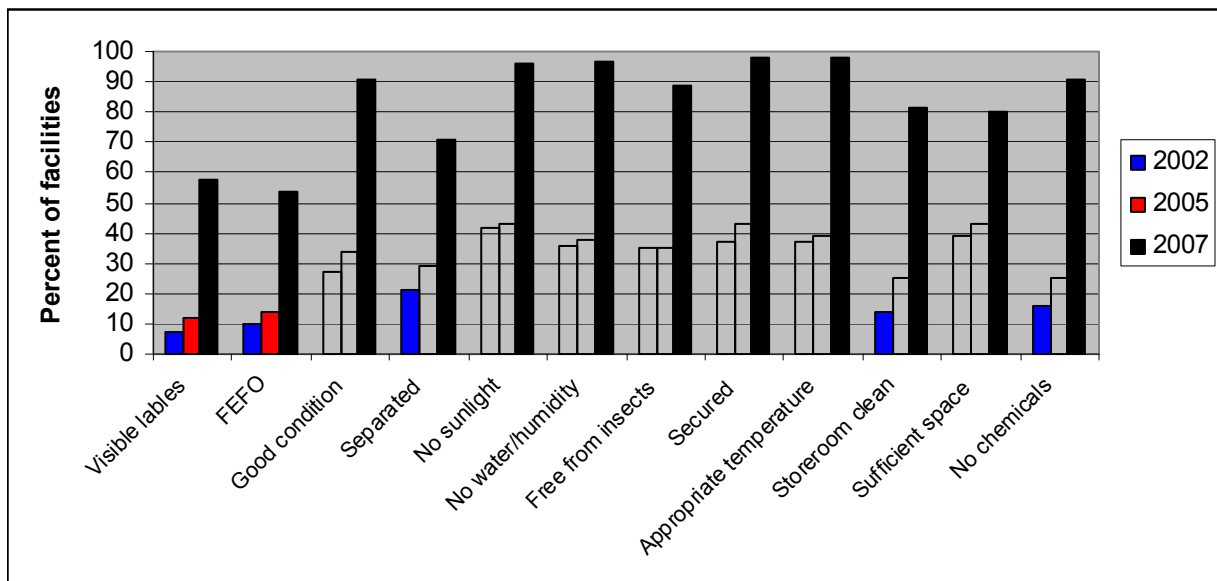


Note: IUCD = intrauterine contraceptive device.

Storage Conditions

The percentage of service providers adhering to storage guidelines not only improved over the years but also showed a marked increase from 2005 values to those of 2007 for all 15 conditions. (See figure 32.)

Figure 32. Percentage of Facilities Adhering to Storage Guidelines—2002, 2005, and 2007 Comparison

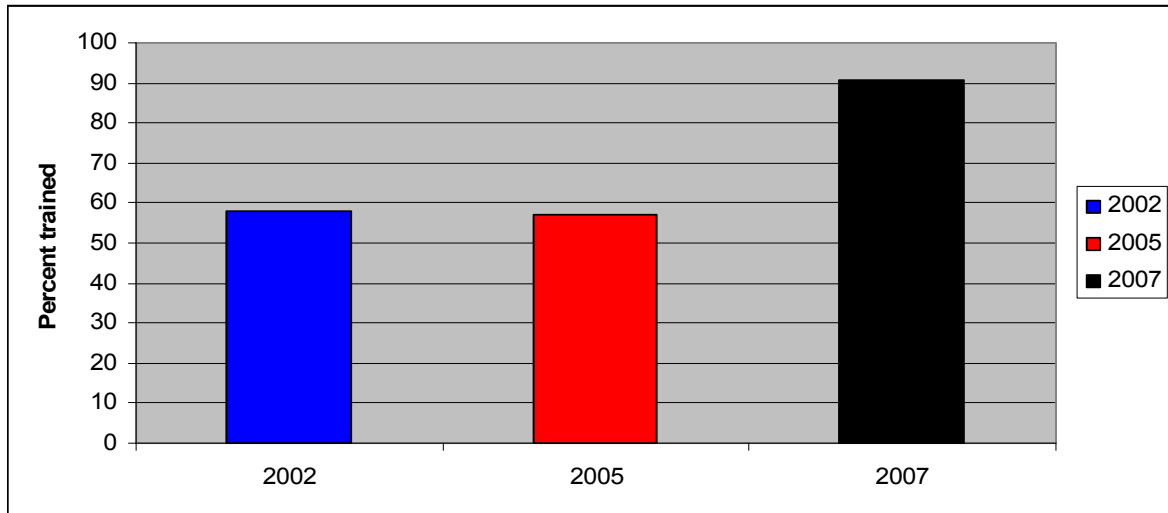


Note: FEFO = first-to-expire, first-out.

Training

Although the percentage of facility personnel trained in CLMS was virtually unchanged from 2002 to 2005, 2007 showed a marked improvement.

Figure 33. Percentage of Personnel Trained in CLMS—2002, 2005, and 2007 Comparison



Note: CLMS = contraceptive logistics management system.

Recommendations

Despite the extremely high levels of training among personnel who manage contraceptives at the facility level, the application of this training remains problematic. Additional training on the existing system nationwide would probably not be the best approach to reinforce the training, given the high time and cost commitments required. Recommendations include the following:

- Supervision should be reinforced. A lack of supervision exists, and this lack is a key juncture where the application of learned materials can and should be reinforced. Both the quality and the frequency of supervision should be addressed. Supportive supervisory visits should, therefore, be intensified at all levels according to the supervision plan.
- Existing forms should be reexamined for quantity and content. One potential reason the forms are not being completed properly is that they are complicated and their instructions are not clear. Simplifying forms and providing additional instruction and guidance on the forms (such as laminated, easy-to-follow steps that could be posted in a clinic in the area where the forms are completed) could be considered.
- Training should be reinforced. Although additional training is cost and resource intensive, targeted training could be considered in areas that seem to be particularly lacking.
- The cost-recovery segment of the system is not effective. Although cost-recovery systems such as these are questionable in terms of sustaining the system, even partial sustainability cannot be achieved if cost-recovery activities are not effective. Facility personnel seem to require additional information about balancing ledger and cash books and about the use of margins. That information could be targeted in supervision or in select training for some personnel. Providing appropriate supplies may also help, especially in more resource-constrained facilities. Ensuring proper use of the ledgers also reinforces accountability with funds, which is another critical element of trying to partially sustain the system through the cost-recovery program. States that have not yet opened a cost-recovery account should do so as soon as possible.
- Transportation is a contributing factor in breakages in the supply chain. Because transportation of commodities (from state store to the service delivery points [SDPs]) largely falls on the facilities themselves, commodities simply will not always arrive at the facilities when needed. Contributing factors are (a) ability to leave the facility; (b) distance to supply centers, especially for rural facilities; and (c) resources to pay for transport. The large reliance on public transportation also creates security and theft concerns for the commodities. Findings show a gap in the transportation area that needs to be addressed.
- The Federal Ministry of Health should ensure that ordered commodities are distributed to the states in line with the distribution calendar.
- Implementers at all levels should adhere strictly to the contraceptive logistics management system (CLMS) ordering guidelines.
- Advocacy to policymakers should exist at all levels for support for the printing and distribution of logistics management information system (LMIS) forms and other management tools.

- Computerization of LMIS should exist at central and state levels to ensure prompt response and efficient management of commodities.

References

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- Population Reference Bureau. 2007. *2007 Population Reference Bureau*. Available at <http://www.prb.org/Countries/Nigeria.aspx> (accessed June 2007).

Appendix A

Sampling List

Note: U denotes Urban; R denotes Rural

No.	State	LGA	Site Name
1	Ogun		Ogun State Store
2		Abeokuta North [U]	LGA Store
3			BOCIF
4			Lafenwa Health Clinic, Lafenwa
5			Olorunda PHC, Olorunda
6			Totoro HC
7			LGA Store
8		Odeda [R]	Olodo PHC Clinic, Odeda
9			Obantoko PHC Clinic, Odeda
10			Ilugun PHC
11		Obafemi Owode [R]	LGA Store
12			Owode PHC Clinic, Odeda
13			Obafemi PHC Clinic, Obafemi
14			Kajola PHC, Kajola
15		Ikenne [U]	LGA Store
16			Ikenne General Hospital, Ikenne
17			Irolu PHC Clinic, Irolu
18		Ijebu-Ode [U]	Iperu PHC, Iperu
19			LGA Store
20			General Hospital, Ijebu-ode
21			Ita-Alapo PHC Clinic, Ita-Alapo
22			Oke-Oyinbo PHC
23	Oyo		Oyo State Store
24		Orire [R]	LGA Store
25			General Hospital, Ikoyi-Ile (MCH)
26			PHC, Iluju
27			PHC Youth Friendly Clinic, Tewure
28		Ibarapa East [R]	LGA Store
29			Family Planning Clinic, Eruwa
30			General Hospital Lanlate

No.	State	LGA	Site Name	
31		Afijio [R]	FP Clinic, Eruwa	
32			LGA Store	
33			General Hospital, Ilora	
34			General Hospital, Fiditi	
35			PHC, Fiditi	
36		Ibadan South South West [U]	LGA Store	
37			Oni Memorial Children Hosp. FP Clinic, Ibadan	
38			MCH Clinic, Ibadan, Apata	
39			PHC Foko	
40			State Hosp. FP Clinic Ring Road, Ibadan	
41		PHC Aleshinloye		
42		Ogbomoso South [U]	LGA Store	
43			Ijeru Primary Health Care	
44			PHC/Youth Friendly Clinic, Ilogbo	
45	Edo		Edo State Store	
46		Owan East [R]	LGA Store	
47			Referral Centre Clinic	
48			Warrake Comprehensive PHC	
49		Esan West [U]	LGA Store	
50			PHC Uhiele	
51			PHC Ekpoma	
52		PHC Illeh		
53		Uhunmwode [R]	LGA Store	
54			PHC Oke	
55			PHC Ehor	
56			PHC Orhua	
57		Oredo [U]	LGA Store	
58			Urban Health Centre	
59			PHC Oredo	
60			New Benin Health Centre	
61		Etsako West [U]	LGA Store	
62			PHC Elele	
63			PHC Auchu	
64			PHC Jattu	
65		Etsako Central [R]	LGA Store	
66			PHC Fugar	
67			PHC Arua	
68			PHC Iraokhore	
69		Abia		Abia State Store

No.	State	LGA	Site Name
70		Bende [R]	LGA Store
71			Bende Maternity
72			Umunato General Hospital
73			Uzuakoli PHC
74		Ohafia [U]	LGA Store
75			General Hospital, Ohafia
76			Agborji Health Centre
77			Ania PHC
78		Umuahia North [U]	LGA Store
79			World Bank Health Centre
80			Afugiri PHC
81			FMC, EPC
82		Nkwoegwu Maternity	
83		Umuahia South [U]	LGA Store
84			General Hospital Amachara
85			Nsirimo PHC
86			Ubakala Health Centre
87		Ogbodiukwu Health Centre	
88		Ugwunagbo [R]	LGA Store
89			Umugo Health Centre
90			Ugwunagbo Health Centre
91			Ngwaiyiekwe Health Centre
92		Amaro Health Centre	
93		Akwa-Ibom	
94	Uruan [R]		LGA Store
95			PHC Uruan
96			Methodist General Hospital, Ituk Mbang
97			Health Centre, Nwamba
98	Uyo [U]		LGA Store
99			PHC, Uyo
100			UUTH, Uyo
101			PHC Ikot Eboh
102	HC Ikot Ayan		
103	Abak [R]		LGA Store
104			PHC Dept. Abak
105			H/C Afaha Obong
106			HC Midim
107	Ikot Ekpene [U]		LGA Store
108		General Hospital Ikot-Ekpene	

No.	State	LGA	Site Name	
109		Eket [U]	PHC Ikot-Ekpene	
110			LGA Store	
111			CHC Okon	
112			General Hospital Eket	
113			PHC Eket	
114	Enugu	Enugu North [U]	Enugu State Store	
115			LGA Store	
116			Railway Ind. Clinic	
117			Polyclinic - Asata	
118			UNTH Enugu	
119			Esut Specialist Hospital	
120			FSP Clinic	
121		Udenu [R]	LGA Store	
122			Orba MPHC	
123			Obollo-Afor Health Centre	
124			Amalla Health Centre	
125		Nkanu West [R]	LGA Store	
126			Health Centre, Agbani	
127			General Hospital, Agbani	
128			Amurri Health Centre	
129			Ozalla Health Centre	
130			Akabge Ugwu HC	
131		Enugu East [U]	LGA Store	
132			Abakpa Primary Health Centre	
133		Lagos	Mushin [U]	Lagos State Store
134				LGA Store
135				Isolo PHC
136				Palm Avenue PHC
137				Alves PHC
138			Lagos Mainland [U]	LGA Store
139				Harvey Road Health Centre
140				Ebute-Metta Health Centre
41				Ondo Street West PHC
142			Ikorodu [U]	LGA Store
143				Ikorodu General Hospital
144				Ipakodo PHC
145			Igbogbo PHC	
146	Ibeju-Lekki [R]		LGA Store	
147			Ibeju PHC, Lekki	

No.	State	LGA	Site Name	
148			Awoyaya PHC	
149			Lekki PHC, Lekki	
150			Epe [R]	LGA Store
151				General Hospital, Epe
152				PHC Clinic, Epe
153				Eredo PHC
154			Nasarawa	Obi [R]
155	LGA Store			
156	PHC Dudu-guru			
157	PHC Agwatashi			
158	Nasarawa Eggon [R]	LGA Store		
159		Masarawa Eggon PHC		
160		Arigbadu PHC		
161		PHC, Wowyen		
162		PHC Kagbu "B"		
163	Nasarawa Town [U]	LGA Store		
164		PHC Panda		
165		PHC Loko		
166		PHC Udege		
167	Toto [R]	LGA Store		
168		PHC G/Buke		
169		PHC Toto		
170		PHC Nakuse		
171		PHC Ugya		
172	Lafia [U]	LGA Store		
173		Lafia East PHC		
174		Doma Road PHC		
175		PHC Shabu		
176		PHC State Secretariat		
177	Sokoto	Gwadabawa [R]	Sokoto State Store	
178			LGA Store	
179			Gwadabawa Rural Health Centre	
180			Meli Dispensary	
181			Assara Dispensary	
182		Wamako [U]	LGA Store	
183			UDUTH, Sokoto	
184			Arkila Clinic	
185			Farfaru Basic Health Clinic	
186		Sokoto North [U]	LGA Store	

No.	State	LGA	Site Name	
187			Women/Children Welfare Clinic	
188			Helele Clinic	
189			Market Clinic	
190			Kofar Rini Clinic	
191		Wurno [R]	LGA Store	
192			General Hospital, Wurno	
193			Wurno Town Dispensary	
194			Achida Upgraded Dispensary	
195		Bauchi		Bauchi State Store
196			Toro [R]	LGA Store
197				Toro Maternity
198				Zaranda Maternity
199				Magama Maternity
200				Nabordo Maternity
201	Dass [R]		LGA Store	
202			General Hospital, Dass	
203			Town Maternity	
204			Dott Maternity	
205	Bauchi [U]		LGA Store	
206			PHC Federal Low Cost Maternity	
207			Tirwun MCH	
208			Town Maternity	
209			Yalwa Dominiliary	
210	Katagum [U]		LGA Store	
211			Azare Town Maternity	
212			Urban Maternity Azare	
213			Katagum/SYP Maternity Chinade	
214			Matsango Maternity	
215	Dambam [R]		LGA Store	
216			Dambam Maternity Clinic	
217			Jalam Maternity Clinic	
218			Dagauda Maternity Clinic	
219	Borno			Borno State Store
220			Biu [U]	LGA Store
221				MCH, Biu
222				General Hospital
223		MCH Maringa		
224		M. Municipal Council [U]	LGA Store	
225			Specialist Hospital, Maiduguri	

No.	State	LGA	Site Name	
226			Gwange Clinic	
227			Bolori Comprehensive Clinic	
228			Yerwa Clinic	
229			Zajiri PHC	
230		Dikwa [R]	LGA Store	
231			General Hospital, Dikwa	
232			MCH Dikwa	
233		Bama [U]	LGA Store	
234			MCH, Bama	
235			General Hospital, Bama	
236			Banki CHC	
237		Hawul [R]	LGA Store	
238			Gen Hosp Marama	
239			MCH, Shaffa	
240		Kano		Kano State Store
241			Minjibir [R]	LGA Store
242				Kunya Basic Health Clinic
243				Saubana Basic Health Clinic
244				Kwarkiya Health Clinic
245	Dala [U]		LGA Store	
246			Dala Orthopaedic Hospital	
247			Waziri Gidado General Hospital	
248			Dala MCH	
249			Kurna Clinic	
250	Kura [R]		LGA Store	
251			Kura General Hospital	
252			Unguwar Gaba Health Clinic	
253			Kirya Health Post	
254	Tarauni [U]		LGA Store	
255			Hausawa MCH	
256			Ja'oji Health Clinic	
257			K-alu Clinic	
258	Sumaila [R]		LGA Store	
259			Sumaila General Hospital	
260			MCH Patricia, Sumaila Town	
261			Karofi Health Clinic	
262	Kumbotso [U]		LGA Store	
263			Comprehensive Health Centre	
264			Basic Health Centre, Sheka	

No.	State	LGA	Site Name
265			Maikalwa Health Clinic
266	Fct		FCT State Store
267		Gwagwalada	Specialist Hospital, G/Lada
268			Town Clinic, G/Lada
269		Municipal (AMAC)	Family Health Clinic
270			Wuse General Hospital
271			Karu Health Clinic
272			Asokoro General Hospital
273			Nyanyan General Hospital
274			Mambila Barracks. M.R.S.
275			Gwagwa Health Clinic
276		Bwari	General Hospital, Bwari
277			PHC, Deidei
278			Mpape Health Centre
279			Kubwa General Hospital
280		Kuje	General Hospital Kuje
281	PHC Clinic, Kuje		

Appendix B

Indicators

Indicators	Data Source(s)
Stock Status	
Availability of contraceptive methods on the day of visit	Stock card records, respondent, and physical inventory
Percent of facilities stocked out of products in the previous six months	Stock card records, respondent, and physical inventory
Average number of days a product was stocked out in the previous six months	Stock card records, respondent, and physical inventory
Average frequency of stockouts of a product in the previous six months	Stock card records, respondent, and physical inventory
Percent of facilities with stock below the minimum level	Stock card records and physical inventory
Months of stock on hand	Stock card records and physical inventory
Logistics Management Information System	
Percent of facility personnel trained in CLMS	Respondent
Percent of facilities reporting they have all the forms to manage contraceptives	Respondent and presence of forms
Percent of facilities with stock cards available by product	Presence of stock cards in facilities
Percent of facilities with stock cards updated by product	Presence of stock cards and evidence of utilization in facilities and stores
Percent of facilities with accurate stock balances on stock cards	Comparison of stock card balance and physical inventory count
Reporting	
Percent of stores reporting being trained to complete the store distribution report	Respondent
Percent of stores reporting sending store distribution report to higher level	Respondent
Of those stores sending store distribution reports to the higher level, percent of distribution reports that are complete and accurate	Presence of distribution reports and evidence of proper utilization
Percent of SDPs that are required to submit RIF/RIRFs are actually submitting	Respondent
Inventory Control	

Indicators	Data Source(s)
Percent of facilities that ordered according to minimum/maximum stock levels	Respondent
Percent of facilities that had to place an emergency order	Respondent
Percent reporting they had received training on how to calculate the minimum/maximum stock level	Respondent
Order fill rate	Order records
Cost Recovery	
Percent of facilities reporting having a cash book for the CLMS or keep a record to manage cost recovery funds	Presence of cash book/record
Of those facilities with standard cash book/record, percent of ledger balances matching total commodity sales	Evidence of proper used in cash book/record
Percent with separate bank account	Respondent
Percent with difficulty withdrawing from account	Respondent
Percent of facilities reporting using CLMS funds strictly for CLMS	Respondent
Percent of facilities reporting using the margins	Respondent
Among facilities reporting using the margins, percent of ledgers/cash books showing the use of the margins according to the guidelines	Evidence of proper use
Reasons for not using the margins as described in the CLMS handbook	Respondent
Record Keeping	
Percentage of facilities with complete and accurate RIF/RIRFs	Evidence of proper use
Percentage of SDPs with last daily consumption record complete and accurate	Evidence of proper use
Percentage of stores with tally cards complete and accurate for the last six months	Evidence of proper use
Percentage of facilities with complete and accurate cost recovery records for the past six months	Evidence of proper use
Percentage of store personnel trained to complete the RIF/RIRFs for reporting	Respondent
Supervision	
Percent of stores conducting supervisory visits using the supervision checklist	Respondent
Percentage of personnel trained to complete the supervision checklist	Respondent
Time period of conducting last supervision	Respondent

Indicators	Data Source(s)
visit	
Percent of stores with supervision checklists on file	Presence of forms
Of those supervision checklists on file, percent that were complete and accurate	Evidence of proper use
Percent of facilities that report receiving supervision visits	Respondent
Items checked during last supervision visit	Respondent
Transportation	
Percent of stores/SDPs reporting they collected contraceptives for their facilities	Respondent
Method of transportation used	Respondent
Storage	
Percent of facilities that maintain acceptable storage conditions	Visual observation
Percent of facilities meeting individual storage conditions	Visual observation

Appendix C

Team Composition

Team No.	State	Data Collectors	Affiliation
01	Ogun	Esther O. Fadele*	NPHCDA
		O.O. Somoye	SMOH-Ogun
02	Oyo	Ralph Olayele*	FMOH
		Mojoyinola Ojediran	SMOH-Oyo
03	Edo	Judith U. Ononose*	FMOH
		Nekpen J. Agbonlahor	SMOH-Edo
04	Abia	Greg Izuwa*	FMOH
		Francisca M. Kalu	SMOH-Abia
05	Akwa Ibom	M.M. Lawal*	FMOH
		A.L.Umanah	SMOH-Akwa Ibom
06	Enugu	Sharon Simpa*	USAID DELIVER
		Frances Eze Jiofor	SMOH-Enugu
07	Lagos	Pauline Aribisala*	FMOH
		L.M. Ajibola	SMOH-Lagos
08	Nasarawa	E.O. Ladipo*	FMOH
		Maryam Buba	SMOH-Lafia
09	Sokoto	Timothy J. Obot*	FMOH
		Suleiman Salamatu	SMOH-Sokoto
10	Bauchi	Bashirat Giwa*	USAID DELIVER
		Hauwa A.A. Othman	SMOH-Bauchi
11	Borno	Gabriel I. Ortonga*	FMOH
		Malaram Moh'd	SMOH-Borno
12	Kano	Musa Odiniya*	FMOH
		James Abu	USAID DELIVER
		Ahmed Garba Zango	SMOH-Kano
13	FCT-Abuja	Liyatu P. Esubihi*	PH Dept/FCTA
		Timothy J. Obot	FMOH
		Gabriel I. Ortonga	FMOH
		Ralph Olayele	FMOH
		Greg Izuwa	FMOH
		Judith U. Ononose	FMOH

Survey Monitors		
Monitor	Site(s)	Affiliation
Dr. Bose Adeniran	Oyo, Akwa Ibom, Lagos, Bauchi, FCT-Abuja	FMOH
Pauline Aribisala	FCT-Abuja	FMOH
Joe Nwankpa	Abia, Borno	FMOH
Elizabeth Igharo	Ogun, Edo	USAID DELIVER
Bill Conn	Sokoto	USAID DELIVER
Elizabeth Bunde	Kano	USAID DELIVER
Xavier Tomsej	Kano	USAID/Washington
Kayode Morenikeji	Kano	USAID/Nigeria
Demola Olajide	Nasarawa, Kano	UNFPA
Chris Oyeyipo	Sokoto, Borno	UNFPA

Data Entry Officers

Dr. Usman Kolapo (Principal Investigator)

Albert Telimoye

I.B. Timi

Ayinde Segun

Uthman Abdulazeez

* Denotes Team Leader

Appendix D

Supplementary Tables

Table D1. Management of contraceptive products by facility type

Type of Contraceptive	Management of Contraceptive by Store					Management of Contraceptive by SDP				
	No		Yes		Total	No		Yes		Total
	Number	%	Number	%	Number	Number	%	Number	%	Number
Female Condom	8	11.8	60	88.2	68	42	21.6	152	78.4	194
Male Condom	1	1.5	67	98.5	68	18	9.3	176	90.7	194
Depo-Provera	2	2.9	66	97.1	68	1	0.5	193	99.5	194
Exluton/Microlut	5	7.4	63	92.6	68	20	10.3	174	89.7	194
lucd	11	16.2	57	83.8	68	52	26.9	141	73.1	193
Lo-Femenal	3	4.4	65	95.6	68	12	6.2	182	93.8	194
Microgynon	6	8.8	62	91.2	68	25	12.9	169	87.1	194
Noristerat	1	1.5	67	98.5	68	3	1.5	191	98.5	194
Implanon	58	85.3	10	14.7	68	185	96.9	6	3.1	191

Table D2. Months of stock on hand

Contraceptive Product	Store	Sdp
Female Condom	2.4	0.9
Male Condom	4.5	2.0
Depo-Provera	2.1	2.3
Exluton	2.2	0.6
lucd	2.1	10.0
Lo-Femenal	7.1	0.8
Microgynon	1.5	1.5
Noristerat	7.1	1.0
Implanon	0.0	0.0
Gloves	29.6	6.3
Syringes	0.7	0

Appendix E

Logistics Indicator Assessment Tool (LIAT)

CLMS/LIAT ASSESSMENT 2007

Facility Identification

Instructions:

- Record the name of the facility, location and facility type information.
- Complete the Facility Identification Code on each page of the instrument.

Name of Facility: _____

State: _____

LGA: _____

City/Town: _____

Facility Type (1=Store; 2=SDP)

If SDP, mark the type of facility
(1=Tertiary Hospital; 2=Secondary Hospital; 3=PHC;
4=Other)

If Store, mark the level of store
(1=Central; 2=State; 3=LGA)

Contact Information:

Working telephone number: _____

Alternative telephone number: _____

E-mail: _____

State Code

..

LGA Code

Facility Code

..

SDP Type

Store Type

..

Information About Interview

Date

DAY/	MONTH/	YEAR
<input type="text"/>	<input type="text"/>	<input type="text"/>

Interviewer:

Team Code:

Introduction

Introduction:

- Introduce all team members
- Ask facility representatives to introduce themselves
- Explain the objectives of the survey
- Obtain consent to continue the survey

Good day. My name is _____. My colleagues and I are representing the Federal and the State Ministries of Health. We are conducting a survey regarding the Contraceptive Logistics Management System. We are looking at the availability of contraceptives, about how you order and receive these products, level of understanding of the CLMS forms and the status of the cost recovery system. We are visiting selected health facilities throughout the country; this facility was randomly selected to be in the survey. The primary objectives of the survey are to collect current information on logistics system performance and stock status of contraceptives.

The results of this national survey will provide important information to make decisions about the current system and to make changes to promote improvements where needed. The survey is being conducted to measure changes in the logistics system since the redesign of the system.

This is an assessment of the CLMS and not a staff performance review.

If we may, we would like to ask you a few questions and count the contraceptives you have in stock today and observe the general storage conditions. Do you have any questions?

Received permission to continue the interview:

Yes.....I

No.....0

If NO, End Interview

Comments:

Section I: Facility and Interviewee Information

No.	Question	Code Classification	Skips
101.	Is there electricity in this facility?	Yes.....1 No.....0	If NO, SKIP to Q103.
102.	If yes, what is the main source of available electricity?	PHCN.....1 Generator.....2 Rural electricity.....3 Solar.....4 Other.....8	

Section I: Facility and Interviewee Information

No.	Question	Code Classification	Skips
103.	What is the main source of water supply for this facility?	Pipe borne water.....1 Bore hole.....2 Well.....3 Water Vendor.....4 Other.....8	
104.	Is there a functional phone at this facility?	Yes.....1 No 0	
105.	Does this facility manage contraceptives?	Yes.....1 No 0	If NO, End Interview
106.a	What year did this facility begin implementation of the redesigned CLMS?	2003 1 2004 2 2005 3 2006 4 Don't Know 9	
106.b	What year did this facility begin implementation of the streamlined CLMS (Kano, Nasarawa, Bauchi)	2006 1 2007 2 Don't Know 9	

Section I: Facility and Interviewee Information

No.	Question	Code Classification	Skips
107.	What is the title of the principal person managing contraceptives at this facility?	FP/RH Coordinator.....1 Nurse/Midwife 2 CHO 3 CHEW 4 Medical Officer ..5 Pharmacy Technician ..6 Store Manager ..7 Other (specify) ..8	

INTERVIEWER: Get the principal person managing contraceptives at this facility to answer the remaining segments.

108.	Are you the principal person managing contraceptives?	Yes.....1 No.....0	
109.	How long have you worked at this facility?	Years..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/> Weeks..... <input type="text"/> <input type="text"/> Days..... <input type="text"/> <input type="text"/>	

Section I: Facility and Interviewee Information

No.	Question	Code Classification	Skips
I10.	Have you been trained in Family Planning (4-6 weeks training)?	Yes.....1 No.....0	
I11.	Have you been trained on CLMS (for example, through a formal training, on-the-job training, self learning, etc.)?	Yes.....1 No.....0	If NO, SKIP to Q201.
I12.	If yes, how?	During the formal CLMS training.....1 On-the-job training.....2 On-the-job (self-learning)....3 Other (specify).....4	

INSTRUCTIONS TO THE INTERVIEWER:

Ask the following questions of the person in-charge of managing contraceptives at the facility or provides family planning services. After asking all of the questions, visit the warehouse, storeroom, or storage area where the contraceptives are managed.

If you are referred to another staff member for the stocktaking exercise, introduce the survey goals and objectives as you did during the introduction.

Ask the interviewee to bring all of the records for contraceptives and the CLMS handbook.

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
201.	What are the sources of contraceptives to your facility? MULTIPLE RESPONSES POSSIBLE; MAY CIRCLE MORE THAN ONE	Central Store.....1 State Store.....2 LGA Store.....3 Commercial Sources.....4 Others (specify).....5	
202.	Do you have a copy of the CLMS handbook/job aid?	Yes.....1 No.....0	
203.	Do you have all the CLMS forms you need to manage contraceptives?	Yes.....1 No.....0	
204.	INTERVIEWER: Ask to see if the CLMS forms are available: 0=No 1=Yes	DCR..... <input type="checkbox"/> RIF/RIRF..... <input type="checkbox"/> CRR..... <input type="checkbox"/> Tally Cards..... <input type="checkbox"/> Cash book/exercise book..... <input type="checkbox"/>	

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
205.	Where do you get the RIF/RIRF you need for ordering?	From the Central Store.....1 From the State Store.....2 From the LGA Store.....3 Other (specify).....8	
206.	How often do you order from the higher level?	Never.....0 Every 2 months.....1 Every 3 months.....2 Every 4 months.....3 Annually4 Other.....8	
207.a	INTERVIEWER: Ask to see completed RIF/RIRF for the past 6 months (State=1 RIRF; LGA=2 RIRF; SDP=3 RIRF). Put in number cited.	<input data-bbox="976 1325 1073 1398" type="text"/>	If 0, SKIP to Q208
207.b	INTERVIEWER: Assess the last RIF/RIRFs completed within the past 6 months and select one of the following codes: 1=Form complete and accurate 2=Form complete but inaccurate 3=Form are incomplete	Code..... <input data-bbox="1094 1556 1192 1629" type="text"/>	

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
208.	How often do you use RIF/RIRF?	Never.....0 Every Order.....1 Some Orders.....2	
209.	Do you order according to your minimum and maximum stock levels?	Yes.....1 No.....0	
210.	Who calculates the minimum/maximum stock levels?	The State Store.....1 The LGA Store.....2 The Service Delivery Point...3 Don't Know.....9	
211.	Were you trained to calculate the minimum/maximum stock level?	Yes.....1 No.....0	If NO, SKIP to Q213.
212.	How did you learn to calculate your minimum/maximum stock level?	Never learned.....0 During the national CLMS training.....1 On-the-job training2 On-the-job (self-learning)3 Others (specify).....8	
213.	Have you ordered from the next higher level in the last 6 months?	Yes.....1 No.....0	If YES, SKIP to Q215.

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
214.	<p>If NO, what are the reasons for not ordering from the next higher level in the last 6 months?</p> <p>(Fully stocked=not less than minimum stock/maximum stock)</p>	<p>Fully stocked.....1</p> <p>Transportation problems....2</p> <p>Other (specify).....8</p>	
215.	<p>How many emergency orders have you placed in the last six months?</p>	<p>None.....0</p> <p>One.....1</p> <p>Two.....2</p> <p>Three.....3</p> <p>More than three.....4</p>	
216.	<p>How are contraceptives transported to your facility?</p>	<p>Higher level delivers.....1</p> <p>This facility collects.....2</p> <p>Other (specify).....8</p>	

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
217.	What type of transportation is most often used?	Facility vehicle1 Public transportation2 Private vehicle3 Motorcycle4 Bicycle5 On foot6 Other (specify)8	
218.	On average, approximately how long does it take between ordering and receiving products?	Upon request or presentation of the RIF.....1 Less than 2 weeks.....2 2 weeks to 1 month.....3 Between 1 and 2 months.....4 More than 2 months5	
INTERVIEWER: Ask Q219 and Q220 to STORES only			
219.	Have you developed a distribution schedule for the facilities you issue to?	Yes.....1 No.....0	If NO, SKIP to Q301

Section 2: Ordering and Issuing

No.	Question	Code Classification	Skips
220.	<p>INTERVIEWER: Ask to see the distribution schedule and select one of the following codes:</p> <p>0=Not sighted 1=Sighted</p>	<p>Code..... <input data-bbox="1096 363 1192 438" type="text"/></p>	

Section 3: Record Keeping

No.	Question	Code Classification	Skips
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INTERVIEWER: Ask Q301 and 302 to SDPs only

301.	<p>Have the Daily Consumption Record been completed for the past 6 months (Dec 2006 – May 2007)?</p> <p>0=No 1=Yes</p>	<p>December..... <input data-bbox="1079 779 1153 831" type="text"/></p> <p>January..... <input data-bbox="1079 846 1153 898" type="text"/></p> <p>February..... <input data-bbox="1079 919 1153 972" type="text"/></p> <p>March..... <input data-bbox="1079 987 1153 1039" type="text"/></p> <p>April..... <input data-bbox="1079 1066 1153 1119" type="text"/></p> <p>May..... <input data-bbox="1079 1150 1153 1203" type="text"/></p>	
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302.	<p>INTERVIEWER: Assess the last daily consumption record and select one of the following codes:</p> <p>1=Didn't have forms 2=Forms complete and accurate 3=Forms complete but inaccurate 4=Forms are incomplete</p>	<p>Code .. <input data-bbox="1027 1297 1123 1373" type="text"/></p>	
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INTERVIEWER: Ask Q303 and 304 to STORES only

303.	<p>Ask to see RIF/RIRFs from higher and lower levels. Has the tally card for each contraceptive been filled for the past 6 months (Dec 2006 – May 2007)?</p>	<p>Yes.....1</p> <p>No.....0</p>	
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Section 3: Record Keeping

No.	Question	Code Classification	Skips
304.	<p>INTERVIEWER: Ask to see the tally cards for the last six months and select one of the following codes:</p> <p>1=Didn't have tally card 2=Tally card complete and accurate 3=Tally card complete but inaccurate 4=Tally card are incomplete 5=Tally card not completed at all</p>	<p>Code <input data-bbox="1027 352 1125 428" type="text"/></p>	
<p>INTERVIEWER: Ask the remaining questions of both Stores and SDPs</p>			
305.	<p>Ask to see the RIF/RIRF for the past six months. Have the requisition, issue and report forms been completed and submitted for the past 6 months (Dec 2006 – May 2007)?</p> <p>0=No 1=Yes</p>	<p>December..... <input data-bbox="1079 724 1154 779" type="text"/></p> <p>January..... <input data-bbox="1079 808 1154 863" type="text"/></p> <p>February..... <input data-bbox="1079 892 1154 947" type="text"/></p> <p>March..... <input data-bbox="1079 976 1154 1031" type="text"/></p> <p>April..... <input data-bbox="1079 1060 1154 1115" type="text"/></p> <p>May..... <input data-bbox="1079 1144 1154 1199" type="text"/></p>	
306.	<p>INTERVIEWER: Assess the last RIF/RIRF for completeness and accuracy. Select one of the following codes:</p> <p>1=Didn't have forms 2=Forms complete and accurate 3=Forms complete but inaccurate 4=Forms are incomplete 5=Forms not complete at all</p>	<p><input data-bbox="885 1304 1034 1379" type="text"/></p>	
307.	<p>Have the Cost Recovery Records been completed for the past 6 months (Dec 2006 – May 2007)?</p> <p>Yes=1 No=0</p>	<p>December..... <input data-bbox="1079 1654 1154 1709" type="text"/></p> <p>January..... <input data-bbox="1079 1738 1154 1793" type="text"/></p> <p>February..... <input data-bbox="1079 1822 1154 1877" type="text"/></p> <p><input data-bbox="1079 1906 1154 1961" type="text"/></p>	

Section 3: Record Keeping

No.	Question	Code Classification	Skips
		March..... April..... <input type="checkbox"/> May..... <input type="checkbox"/>	
308.	<p>INTERVIEWER: Check if the monthly total from the DCR or tally card matches the entry on the cost recovery record and select one of the following codes:</p> <p>Yes=1 No=0</p>	December..... <input type="checkbox"/> January..... <input type="checkbox"/> February..... <input type="checkbox"/> March..... <input type="checkbox"/> April..... <input type="checkbox"/> May..... <input type="checkbox"/>	

Section 4: Reporting

No.	Question	Code Classification	Skips
Interviewer: Ask questions 401 – 407 for STORES only. If you are at a SDP, Skip to SECTION 5			
401.	How many facilities are supposed to send RIF/RIRFs to this facility? (Interview: Insert the number in the box to the right)	<input type="text"/> <input type="text"/> <input type="text"/>	
402.	How many facilities submitted all required RIF/RIRFs for the past 6 months (Dec 2006 – May 2007)? <i>Interviewer: Required RIF/RIRFs to be submitted are</i> State = 1 RIF LGA = 2 RIF SDP = 3 RIF	<input type="text"/> <input type="text"/> <input type="text"/>	

Section 4: Reporting			
No.	Question	Code Classification	Skips
403.	Were you trained to complete the RIF/RIRFs for reporting?	Yes.....1 No.....0	
For Kano, Bauchi and Nasarawa States SKIP to SECTION 5			
404.	Were you trained to complete the store distribution report?	Yes.....1 No.....0	
405.	Ask to see the store distribution report. Do you send the store distribution report to the higher level?	Yes.....1 No.....0	If NO, SKIP to SECTION 5
406.	How often do you send the store distribution reports to the higher level?	Never.....0 Every 3 months.....1 Every 4 months.....2 Every 6 months.....3 Other (specify).....8	
407.	INTERVIEWER: Ask to see the completed distribution reports for the last twelve months and select one of the following codes: 1=Forms complete and accurate 2=Forms complete but inaccurate 3=Forms are incomplete	Code..... <input type="text"/>	

Section 5: Management of Cost Recovery Funds			
No.	Question	Code Classification	Skips

Section 5: Management of Cost Recovery Funds

No.	Question	Code Classification	Skips
501.	Do you have a standard cash book for the CLMS or keep a record to manage cost recovery funds?	Yes.....1 No.....0	IF NO, SKIP to Q503
502.	<p>INTERVIEWER: Check the cash book to see if the total sales match incomes and expenditures for the past six months and select one of the following codes:</p> <p>0=Didn't match 1=Matched</p>	Code..... <input type="text"/>	
503.	Do you know the use of the margins as described in the CLMS handbook?	Yes.....1 No.....0	If NO, SKIP to Q505
504.	<p>What are the uses of the margins as described in the CLMS handbook?</p> <p>DO NOT READ OUT THE CHOICES.</p> <p>MULTIPLE RESPONSES POSSIBLE; CIRCLE ALL THAT APPLY</p>	Supervision.....1 Transportation.....2 Incentives.....3 Administrative Costs.....4 Other (specify).....8	
505.a	Does this facility use the margins?	Yes.1 No.....0	If YES, SKIP to Q506

Section 5: Management of Cost Recovery Funds

No.	Question	Code Classification	Skips
505.b	If NO, what are some of the reasons this facility has not used the margins?	Doesn't understand the use.....1 Have no control over use.....2 Has no access to use the margins.....3 Other (specify).....8	<p>For any answer, SKIP to Q509</p>
506.	What does this facility use the margins for?	. Supervision.....1 Transportation.....2 Incentives.....3 Administrative Costs.....4 Other (specify).....8	
507.	<p>INTERVIEWER: Check to see if the cash book shows the use of the margins according to the CLMS handbook and select one of the following codes:</p> <p>0=Margins not according to handbook 1=Margins according to handbook</p>	Code..... <input data-bbox="1029 1356 1125 1430" type="text"/>	<p>If "1", SKIP to Q509</p>

Section 5: Management of Cost Recovery Funds

No.	Question	Code Classification	Skips
508.	What are some of the reasons this facility has not used the margins as described in the CLMS handbook?	Doesn't understand the use.....1 Have no control over use.....2 Has no access to use the margins.....3 Other (specify).....8	
509	Have any CLMS funds been used for other programs?	Yes.....1 No.....0	
INTERVIEWER: Ask the remaining questions of Central, State and LGA Stores only			
510.	Have you opened a separate bank account for contraceptives?	Yes.....1 No.....0	If YES, SKIP to Q512
511.	If NO, what are the reasons a bank account has not been opened? LIST REASONS MENTIONED		
512.	Does approval to withdraw from the account for the re-supply of contraceptives pose a problem?	Yes.....1 No.....0	If NO, GO TO SECTION 6

Section 5: Management of Cost Recovery Funds

No.	Question	Code Classification	Skips
513.	What problems have been encountered?	Change of bank.....1 Change of signatories.....2 Change of officers.....3 Distressed bank.....4 Lack of cooperation.....5 Other (specify).....8	

Section 6: Monitoring and Supervision

No.	Question	Code Classification	Skips
601.	Were you trained to complete the supervision check list?	Yes.....1 No.....0	
602.	When did you receive your <u>last</u> supervision visit?	Never received.....0 Within the last 4 months.....1 Within the last 6 months.....2 More than 6 months ago.....3 Other (specify).....8	If “Never received”, SKIP TO Q606

Section 6: Monitoring and Supervision

No.	Question	Code Classification	Skips
603.	During your last supervision visit, which of the following were checked? MULTIPLE RESPONSES POSSIBLE; CIRCLE ALL THAT APPLY	Tally cards or daily consumption records.....1 RIF/RIRFs.....2 Cost Recovery Record.....3 Store Distribution Report.....4 Cash book.....5 Storage guidelines.....6 Commodities/removal of expired/damaged stock.....7	
604.	Was the Supervision Check List used for the supervision?	Yes.....1 No.....0	
605.	Who conducted the last supervision visit? MULTIPLE RESPONSES POSSIBLE; CIRCLE ALL THAT APPLY	FMOH.....1 SMOH.....2 LGA.....3 Partner/Donor.....4	
INTERVIEWER: Ask the following questions for STORES only			
606.	Have you conducted any supervisory visits using the supervision checklist since 2004?	Yes.....1 No.....0	If YES, SKIP to Q608

Section 6: Monitoring and Supervision

No.	Question	Code Classification	Skips
607.	If No, why have these visits not taken place?	Lack of transportation.....1 Time commitments.....2 Unable to schedule.....3 Other (specify).....8	<p>Any answer GO TO SECTION 7</p>
608.	How many such supervision visits using the Supervision Checklist have you conducted since the implementation of CLMS from 2004?	One.....1 Two.....2 Three.....3 Four or more.....4	
609.	When did you conduct your last supervision visit?	Within the last month.....1 Within the last 3 months.....2 Within the last 6 months.....3 More than 6 months ago.....4 Other (specify).....5	
610.	Do you have all your supervision checklists on file?	Yes.....1 No.....0	

Section 6: Monitoring and Supervision

No.	Question	Code Classification	Skips
611.	<p>INTERVIEWER: Ask to see the completed supervision checklist and select one of the following codes:</p> <p>1=Didn't have forms 2=Forms complete and accurate 3=Forms complete but inaccurate 4=Forms are incomplete</p>	<p>Code..... <input data-bbox="1029 352 1125 428" type="text"/></p>	

Thank you for you time and information. You have been very helpful. Our remaining questions will require looking at products in the storeroom and speaking with the person who oversees the store.

Items 701-715 should be assessed for all facilities for products that are ready to be issued or distributed to lower levels or dispensed to clients. Select 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.

Section 7: Storage Conditions			
No.	Question	Code Classification	Comments
701.	All products are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.	<p>Yes.....1</p> <p>No.....0</p>	
702.	All products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO).	<p>Yes.....1</p> <p>No.....0</p>	
703.	Cartons and products are in good condition, not crushed. 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 all products).	<p>Yes.....1</p> <p>No.....0</p>	
704.	The facility has separated damaged and/or expired products from usable products and removed them from inventory.	<p>Yes.....1</p> <p>No.....0</p>	

Section 7: Storage Conditions			
No.	Question	Code Classification	Comments
705.	All products are protected from direct sunlight.	Yes.....1 No.....0	
706.	Cartons and products are protected from water and humidity.	Yes.....1 No.....0	
707.	Storage area is visually free from harmful insects and rodents. (Check the storage area for traces of rodents [droppings or insects].)	Yes.....1 No.....0	
708.	Storage area is secured with a lock and key.	Yes.....1 No.....0	
709.	If provider in charge of CLMS is absent, another staff person has access to the key	Yes.....1 No.....0	
710.	Products are stored at the appropriate room temperature.	Yes.....1 No.....0	
711.	Roof is maintained in good condition to avoid sunlight and water penetration.	Yes.....1 No.....0	
712.	Storeroom is maintained in good condition (clean, all trash removed, sturdy shelves, organized boxes).	Yes.....1 No.....0	

Section 7: Storage Conditions			
No.	Question	Code Classification	Comments
713.	The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for foreseeable future).	Yes.....1 No.....0	
714.	Fire safety equipment is available and accessible (any item identified as being used to promote fire safety should be considered).	Yes.....1 No.....0	
715.	Products are stored separately from insecticides and chemicals.	Yes.....1 No.....0	
716.	Products are stacked at least 10 cm off the floor.	Yes.....1 No.....0	
717.	Products are stacked at least 30 cm away from the walls and other stacks.	Yes.....1 No.....0	
718.	Products are stacked no more than 2.5 meters high.	Yes.....1 No.....0	

Table E1: Stock Status (Dec 1st 2006 – May 31st, 2007, and the Day of Visit)

Column:

1. Name of all authorized products that will be counted
2. Unit of count for the product
3. Whether or not the product is managed at this facility, answer 1 for YES and 0 for NO.
4. Check if the tally card/DCR is available, answer 1 for YES and 0 for NO.
5. Check if the tally card/DCR had been updated within the last 30 days, answer 1 for YES and 0 for NO. Note: If the stock card was last updated with the balance of 0 and the facility has not received any re-supply, consider the tally card up-to-date.
6. Record the balance on the tally card/DCR.
7. Record if the facility has had any stockouts during the most recent 6 full months before the survey, answer 1 for YES and 0 for NO.
8. Record how many times the product stocked out during the most recent full 6 months before the survey according to tally cards, if available, or to a key informant if not. Note source information.
9. Record the total number of days the product was stocked out during the target period before the survey.
10. Record the quantity of product dispensed to users or issued from the storeroom during the target period before the survey. Note: If the answer to column 4 is NO, check RIRF/RIF from lower level to this facility or clinic register.
11. Record the number of months of data available.
12. Record the quantity of usable product in the storeroom (physical inventory).
13. Record if the facility is experiencing a stockout of the product on the day of the visit, *according to the physical inventory*, answer 1 for YES and 0 for NO.
14. Record the quantity of expired products. Count all expired products on the day of the visit.
15. Use the reasons codes to note any reasons for a stockout on the day of visit if applicable.

Product	Unit of count	Managed by the facility? No=0 Yes=1	Tally card/DCR available? No=0 Yes=1	Tally card/DCR updated? No=0 Yes=1	Balance on tally card/DCR	Stockout most recent 6 months No=0 Yes=1	# of times facility stocked out in last 6 months	Total number of days of stockout in target period	Total issued (in target period)	# of months of data available	Physical inventory	Stockout today? No=0 Yes=1	Quantity of expired/ unusable	Reason for stockout
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Condom female	Piece													
Condom male	Piece													
Depo Provera	Vial													
Exluton/ Microlut	Cycle													
IUCD	Piece													
Lo-femenal	Cycle													
Microgynon	Cycle													
Noristerat	Amp													
Implanon	Set													
Gloves	Pair													
Syringe	Unit													

Stock out Reason Codes: 1=Higher level didn't send products; 2=Did not go pick up products; 3=Did not request the right amount; 4=Transportation unavailable; 5=Unexpectedly high demand; 8=Other (specify)

Note: For any product that experienced a stockout in the last 6 months (including the day of visit), please note reasons (by product).

Table E2. Comparison of Quantity Ordered and Quantity Received

Column:

1. List of products.
2. Enter the last quantity ordered for which products have been received.
3. Enter the date the order was placed (DD/MM/YR)
4. Enter the quantity received in the last order.
5. Enter the date the order was received (DD/MM/YR)
6. Note comments.

Product	Quantity Ordered for Last Order Period	Date Order Placed	Quantity Received in Last Order/Procurement	Date Order Received	Comments
1	2	3	4	5	6
Condom female					
Condom male					
Depo Provera					
Exluton/Microlut					
IUCD					
Lo-femenal					
Microgynon					
Noristerat					
Implanon					

Table E3: Order Fill Rate – For State and LGA Stores Only

Instructions

Obtain RIF/RIRF received by this store/warehouse during the period prior to the beginning month of the current survey (i.e. December 1st 2006 to May 31st 2007). Obtain forms corresponding to each lower-level facility to be visited during the survey and complete a separate table for each lower-level facility.

- In the appropriate space at the top of each table, write in the name of the lower-level facility that made an order to this issuing facility during the same 6 month period (column 1)
- Fill in all products ordered per ordering facility (column 2).
- Under each ordering facility, enter the quantity of product that was ordered by the lower level (columns 3a, 4a, 5a) and the amount that was supplied or issued by this facility (columns 3b, 4b, 5b).
- Note the comments on each RIF/RIRF for difference between the quantity ordered and the quantity supplied.
- Use as many pages as needed to collect data for all store facilities to be visited during the assessment.

Periods

States – 4 months (will be able to complete one period)

LGA – 3 months (will be able to complete two periods)

SDP – 2 months (will be able to complete three periods)

Name of Ordering Facility	Product	Period 1		Period 2		Period 3	
		<i>Quantity ordered</i>	<i>Quantity supplied</i>	<i>Quantity ordered</i>	<i>Quantity supplied</i>	<i>Quantity ordered</i>	<i>Quantity supplied</i>
I	2	3a	3b	4a	4b	5a	5b
	Condom female						
	Condom male						
	Depo-Provera						
	Exluton/Microlut						
	IUCD						
	Lo-femenal						
	Microgynon						
	Noristerat						
	Implanon						

Ask the person/people you interviewed if they want to ask you any questions or give you any information they believe could be helpful for improving the logistics system. (i.e. what is working well/not working well; suggestions for improvements; change over the last several years; comments on the job aids or CLMS handbook; etc.)

Comments or general observations:

Thank the person/people who talked with you. Reiterate how they have helped the program achieve its objectives, and assure them that the results will be used to develop improvements in logistics system performance.

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

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