

TRIP REPORT

MANAGEMENT INFORMATION SYSTEMS

for the

CONTRACEPTIVE LOGISTICS MANAGEMENT DIVISION

and

MONITORING AND EVALUATION DIVISION

TECHNICAL DEPARTMENT  
NIGERIA FAMILY HEALTH SERVICES PROJECT

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Family Planning Logistics Management Project



Family Planning  
Logistics Management  
Project

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CONCEPT PAPER: Decentralizing FP MIS  
DATABASE DOCUMENTATION, CLM Division, FHS

## I. Summary

### Commendations:

It has been more than a year since this consultant has worked with FHS information systems. There has been notable progress during this period:

1. *ACCESS*. Data is much more available across divisional and departmental boundaries within FHS. People share.
2. *COMPLETENESS*. Previously, data were less used for managerial purposes, so the completeness of the data mattered less. Now it is used. Completeness is an issue to which officers attend. Consumption data has reached a level of completeness to have justified its use in the last CPTs.
3. *INDICATORS*. A year ago reports were mostly absolute numbers. Now, in addition to reporting absolute numbers, these numbers are converted into managerially significant indicators such as number of months of supply. Contraceptive requirements are calculated on the same form which collects ending balances. Distribution (CLM) and Consumption (NICARE) data are converted to common denominators and compared to identify discrepancies.

### Products:

Specific products resulting from this trip include:

- initiating periodic SDP stockout reporting,
- a zonal CLMD Reporting Package,
- design and data entry of a database for state warehouse inventory data,
- documentation and recommendations on CLMD databases.

### Recommendations:

1. Zonal offices should become the primary node for FHS MIS. Technical assistance from both CLMD and M&E should support this.
2. The UNFPA Global Initiative In Depth Study should occur this year in Nigeria.
3. CLMD databases should be adjusted according to the recommendations included in the attached document.

## **II. Background**

The Centers for Disease Control (CDC) began providing periodic short term technical assistance in contraceptive logistics management to Nigerian family planning programs in 1983. FPLM began collaborating with CDC in this effort in 1987.

Early CDC/JSI technical assistance is summarized in the Johnson, Atkinson, Blackburn trip report of September 1991. Recent CDC/JSI visits have focused on assumption by the FMOH of direct management responsibility for the contraceptive supply system, and second, for the start of the next phase of the USAID assistance to Nigeria's family planning program through the FHS II project.

This consultant has made three prior visits to Nigeria. The first two (June and August 1992) designed periodic FHS reporting on the adequacy of contraceptive supplies. The third visit a proposal, workplan and task definition for the FHS Monitoring and Evaluation Division.

A joint JSI/CDC CPT team was expected to arrive within two weeks after the completion of this consultant's visit.

## **III. Trip Objectives**

The objectives of this trip are specified in the scope of work composed jointly by the directors of the FHS Technical department divisions for Commodity Logistics Management and Monitoring and Evaluation. This Scope of Work identifies the following specific activities:

1. To examine and review the newly developed tools in CLMD and M&E divisions.
2. To provide TA backup to the CLMD and M&E staff on LMIS and MIS related issues.
3. Suggest other formats that may be useful in developing database in CLMD and M&E divisions.
4. To provide TA to a the CLMD and M&E divisions in the preparation and use of computerized graphic charts to illustrate reports based on data retrieved from the field.

## **IV. Activities**

Initial briefings were conducted with the AAO, the FHS coordinator, the Technical Department, and staff of both the Contraceptive Logistics Management and Monitoring and Evaluation Divisions.

FMOH and PHC Agency staff joined meetings with the CLM Division. The consultant joined the head of the CLM Division in a visit to the UNFPA country director.

The second week of the consultant visit coincided with the Nigerian Family Health Services Project Implementation Planning Meeting. The consultant participated in group sessions on CLMD and M&E. The consultant also participated in zonal group sessions with technical divisions.

**Contraceptive Logistics Management Division.** CLMD activities included review of the zonal reporting package with particular emphasis on:

- initiation of stockout reporting and revisions of the commodity tracking slip,
- innovative additions to the Commodity Tracking Slip,
- development of, and data entry for a State WHS database,
- CLMD database documentation, and
- development of a Zonal CLMD reporting package.

**Monitoring and Evaluation Division.** M&E division activities included:

- reviewing proposed evaluation tools,
- reviewing NICARE reporting, and
- participating in M&E sessions during the NFHS Implementation Planning Meeting.

## V. Findings and Recommendations

### A. Stockout Reporting

**Problem:** The most important indicator of the success of a contraceptive logistics system is availability of the contraceptives when the client is at the service delivery point. The commodity logistics division monitors the stock balances at national, zonal, and state warehouses. Form 3A reports to the FMOH and FHS the state-wide aggregate of clinic contraceptive balances; but there is no process through which Family Planning managers can identify stockouts at clinic levels.

**Solution:** Form 3 submitted by SDPs does (1) indicate brand specific stockouts current at month end, and (2) predicts stockouts likely to occur during the coming month if additional supplies do not arrive.

Zonal Population Officers (ZPOs) will review the available Form 3s during their visits to the States. This will be done together with the State Family Planning Coordinator. Completing this form will identify:

- clinics with end of period stockouts, and
- clinics at risk of stocking out within the next reporting period.

ZPOs will be encouraged to correct these stockouts during their state visits.

Recording the frequency and location, by state, of these stockouts will enable managers to:

- quantify progressive improvements in the contraceptive logistics system, and
- identify those states where stockouts and near-stockouts are most frequent.

This is an imperfect solution in that it does not identify short-term stockouts that occur between the beginning and end of the clinic reporting period. Neither does it identify stockouts at clinics that have not reported prior to the ZPOs visit.

The stockout reporting format and accompanying instructions were presented to ZPOs during the January 10 - 14, 1994 FHS Planning Meeting<sup>3</sup>. They are on the following pages.

## INSTRUCTIONS

### SDP STOCKOUT SITUATION

#### PURPOSE:

The contraceptive distribution system must assure the availability of contraceptives at service delivery points. Current reporting formats aggregate data in a way that masks the reporting of stockouts.

#### FILLING THE FORM:

Stockout information is taken from FORM 3 and 3A. From FORM 3A, the **STATE/LGA Summary Report of Family Planning Activities**, copy the number of clinics providing and the number of clinics reporting.

From the FORM 3s submitted by each facility, look across the ending balance line for each product brand. If the box is zero, it is one more added to the stockout column. If the number in the ending balance line is less than the quantity dispensed line (from the line above), it is one more added to the "less than one month supply" column for that brand.

#### TAKING ACTION:

When clinics report stockouts for contraceptives available in the state warehouse, discuss the problem with the Family Planning Coordinator, and solve the problem.

c:\nig\stockout.frm 07 Jan '93

# SDP STOCKOUT SITUATION

ZONE: \_\_\_\_\_ STATE: \_\_\_\_\_

REPORTING PERIOD: QTR \_\_\_\_\_ YEAR \_\_\_\_\_

a) # of SDPs Providing \_\_\_\_\_

b) # of SDPs Reporting \_\_\_\_\_ = \_\_\_\_\_ % reporting (b/a)

	Product Brand	# of clinics	
		stocked out (zero balance)	less than 1 month supply
Orals	<i>Lo-Femenal</i>		
	Microgynon		
	Neogynon		
	Other		
Injections	Depo provera		
	Noristerat		
IUDs	<i>Copper T</i>		
	other		
<i>Foaming Tablets</i>			
<i>Condoms</i>			
Other (specify) _____			

tracking officer:

name \_\_\_\_\_ title \_\_\_\_\_

signature \_\_\_\_\_ date \_\_\_\_\_

**B. State Warehouse Inventory Database.**

This database stores quarterly state warehouse inventory data. It was created, and data entered during this consultant visit. The data was moved from spreadsheet formats which in turn were generated from Quarterly Inventory Tracking Slip. Each specifies the beginning balance, receipts, distributions, and ending balances for a single product for a single state warehouse for a single quarter. The database currently includes 827 records for 1993 and 1992. The fields included in each record are:

STATE (NICARE CODES)  
ZONE  
QUARTER  
YEAR  
PRODUCT (condom, LoFem, CUT, VFT)  
BEGINNING BALANCE  
RECEIVED  
DISTRIBUTED  
ENDING BALANCE

**RECOMMENDATION:** The newly created State Warehouse Inventory database should be updated as new data arrives quarterly.

**NOTE ON SOURCE DATA:** The CLM division wants to amend the data collection tool (i.e. the Quarterly Tracking Slip) to include new items:

- average monthly distribution (CLM data)
- average monthly consumption (NICARE Form 3 data)
- 6 mos forecasted requirements, and
- information on expirations and loss

**C. CLMD Database documentation**

This documentation reviews exiting databases available within CLMD and makes recommendations on needed adjustments. These comments and recommendations are summarized in a separate document in the appendix.

## **APPENDICES**

## DOCUMENTS REVIEWED

Atkinson, Brice, and Olson, Clifford, Contraceptive Logistics Management Assessment, FHS, FPLM/JSI, June 1992.

Comfort, Maureen, and Hurley, Suzanne, Logistics Management Training Assistance to FHS, FPLM/JSI/CDC, June 1993.

Holmgren, Bjorn, Draft Report, Logistics, ISTI, December 1993.

Kiragu, K. et al., The Use of Marketing Communications Techniques to Collect Health related Data in Nigeria, JHU/PCS, October 1993.

Nigeria, Family Planning Outlet Database, JHU/PCS, 1993.

Olson, Clifford, Trip Report, FHS Contraceptive Commodities MIS, FPLM/JSI, August 1992.

Saffitz Alpert & Associates, Nigerbus Family Planning Monitor, August 1993.

Society for Family Health, November Monthly Report, November 1993.

M&E Division, Clinic Situation Analysis Form.

M&E Division, Clinic Survey Form.

M&E Division, Integrated Quality of Care Assessment Tool.

Zone A, Quarterly Personnel Audit.

Zone A, Annual Clinic Profile.

## PERSONS CONTACTED

### USAID:

Mr. Eugene Chiavaroli, AID Affairs Officer  
Mr. Felix Awantang, HPN Officer  
Ms. Susan Ross, Program Advisor

### FHS:

Mr. John McWilliam, Project Administrator  
Dr. Akin Akinyami, Dpty Proj Administrator & Head Tech Dept  
Ms. Susan Krenn, Technical Department Director  
Dr. Ifeanyi Ibe, Head, Commodity Logistics Management Division  
Dr. Uch Azie, Program Department Director  
Mr. Fred Adeoye, Data Analyst, CLM Division  
Mr. Chris Ogedemge, M&E Division

### UNFPA:

Dr. Andrew Arkutu, Country Director

### Planned Parenthood Federation of Nigeria (PPFN):

Mr. John Harris, Technical Advisor  
Ms. Susan Aadeon, MSH/FPMD

## ATTACHMENTS

## BACKGROUND

The analysis of family planning service delivery data is most beneficial when it takes place close to where services are provided. Historically, much of FMOH/FHS analysis has occurred in Lagos. Such analysis has now reached a level of sophistication to suggest its replication at decentralized levels. Whereas in the past, Zonal offices have been responsible for collecting complete reports in a timely manner, it is now time for zonal offices to assume greater:

- responsibility for the analysis of family planning information, and
- selecting programmatic initiatives in response to this analysis.

## PRODUCT

There are three phases to this MIS decentralization initiative.

- PHASE I: Zonal offices analyze and report to FMOH/FHS indicators (in addition to absolute numbers),
- PHASE II: Zonal offices train States to analyze and report family planning indicators, and
- PHASE III: State train LGAs and SDPs to analyze and report family planning indicators.

The indicators remain constant throughout, both horizontally across time and vertically between administrative levels. The indicators are generated from FMOH targets and FHS program objectives. Sample indicators for the Zonal offices might include:

- INDICATOR: Contraceptive Prevalence<sup>1</sup> by State.
- INDICATOR: Contraceptive Prevalence across time.
- INDICATOR: Method Mix by state.
- INDICATOR: Method Mix across time.

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<sup>1</sup> For these purposes Contraceptive Prevalence Rates will be estimates generated from commodity distribution (tracking slip) and consumption data (FORM 3A).

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**RIS and Targeted SDPs.** Indicators for Resource Intensive States and Targeted SDPs will be reported separately. RIS will be compared to other states in their zone. Targeted SDPs will be compared to Statewide results. Both RIS and Targeted SDPs will be compared across time.

## PROCESS

**PHASE I:** Implementation of Phase I will involve the following steps:

1. Consultative meetings with the FMOH and officers of FHS\M&E and FHS\CLMD.
2. On-site discussions with zonal staff and a sample of state family planning coordinators. Travel will include staff from M&E and CLMD.
3. Presentation of draft Zonal Profile formats and procedures to the Technical and Program Departments for review and approval.
4. Development of Zonal Profiles by the Zones.
5. Presentation of Zonal Profiles at a NFHS Implementation planning Meeting. This presentation will emphasize use of the indicators to support programmatic interventions.

PHASE I Summary Timeline			
	Quarters, 1994		
	II	III	IV
1. MTGs: FMOH, M&E, CLMD.	X		
2. SITE Visits	X		
3. Draft Zonal Profile for approval.	X		
4. First Zonal Profiles completed by Zones.		X	
5. Presentation of Zonal Profiles NFHS			X

PHASE II will follow the same sequence, but will be replicated within each zone. Zonal staff will serve as trainers. Phase II will require one year.

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  - 3.4 PROJECTS EXPENDITURE
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  - 3.6 SPNL MONTHLY SALE BY DEPOT
  - 3.7 WHSSTATE

## LIST OF RECOMMENDATIONS

(regarding CLMD databases)

- RECOMMENDATION: The unused inventory database should be deleted or moved to PAF. (2)
- RECOMMENDATION: The fields in the NIGCOM database should be altered to match those in the current spreadsheet after review by the incoming CPT team. Data already in the database should be maintained under the appropriate revised field names. (3)
- RECOMMENDATION: The private sector commodity database should be either archived or moved to PSI. (3)
- RECOMMENDATION: The projects expenditure database should be either moved to PAF or archived. (4)
- RECOMMENDATION: The Public sector distribution database should be altered to (1) use NICARE state codes, (2) stipulate and include source of shipment. Then it should be updated for current use. (5)
- RECOMMENDATION: The SPNL Monthly Sale by Depot data is not relevant to public sector CLM and should be archived. (5)

## 1.0 INTRODUCTION

The following text documents the current state of MIS for the CLM division. Many of the databases currently residing in the division should be shifted to other divisions or archived. Other needed databases are absent or are currently being entered.

This document will:

- identify the objectives of a CLM MIS,
- list and annotate the tools required to accomplish these objectives,
- compare what's needed to what exists, and
- propose activities to achieve an efficient and effective system.

## 2.0 CLM MIS OBJECTIVES

At a minimum, a contraceptive logistics management information system in Nigeria should:

- enable forecasting of requirements,
- monitor maldistribution,
- identify stockouts,
- promote self-assessment,
- assess leakage, and
- diminish expirations.

In Nigeria, additional attention is required for assuring:

- institutionalization within the FMOH, and
- integration with other Primary Health Care (PHC) services.

### 3.0 ANNOTATED LIST OF DATABASES

The Alpha 4 database software used in the CLM Division includes the following databases:

- |   |
|---|
| <ul style="list-style-type: none"><li>3.1 INVENTORY</li><li>3.2 NIGCOM</li><li>3.3 PRIVATE SECTOR COMMODITY FORM</li><li>3.4 PROJECTS EXPENDITURE</li><li>3.5 PUBLIC</li><li>3.6 SPNL MONTHLY SALES BY DEPOT</li><li>3.7 WHSSTATE</li><li>3.8 SDP STOCKOUTS</li></ul> |
|---|

#### 3.1 INVENTORY

This database is used to monitor non-consumable inventory. The fields include:

- item
- brand
- quantity
- unit cost
- total cost
- purchase date

This database includes only 11 records, dated between April 1989 and November of 1990. Presumably this function was assumed by PAF.

**RECOMMENDATION:** The unused inventory database should be deleted or moved to PAF.

### 3.2 NIGCOM

This database monitors the ordering, shipping, and receiving of commodities, mostly contraceptives. There are 255 entries, the first in March of 1988, the last in July/August of 1992. The fields include:

ACCTN  
ARN  
DATEAR  
DATSHP  
RECCTY  
COMMODITY  
QUANTITY  
DOLLARAMT  
SECT (ie. either private or public)

**Alternate:** The CLM Division now produces a spreadsheet that serves the same function of tracking incoming shipments of contraceptives. This new system has the advantage of using fields that better match categories of information used by offices initiating shipments in the US (ie. Panalpina and NEWVERN). It has the disadvantage of being a spreadsheet rather than a database and therefore allowing (1) less flexibility in the use of the data and (2) less cross-tabulation with other contraceptive commodity databases.

**RECOMMENDATION:** The fields in the NIGCOM database should be altered to match those in the current spreadsheet after review by the incoming CPT team. Data already in the database should be maintained under the appropriate revised field names.

### 3.3 PRIVATE SECTOR COMMODITY FORM

This database records the distribution of commodities, mostly contraceptives, from the central warehouse to private sector recipients between May 1989 and February 1993. There are 455 records with the following fields:

NUMBER  
PROJECT  
CONSIGNEE  
REQDATE  
FPIADATE  
SPNLDATE  
CONTRACEPTIVE PRODUCT (X 23)  
CYP

RECOMMENDATION: The private sector commodity database should be either archived or moved to PSI.

### 3.4 PROJECTS EXPENDITURE

As the name implies, this database tracks expenditures by project. Entries commence in April, 1988. The last entry is for March 1991. There are 359 entries. Data fields include:

PROJECT #	DATE
FUNDING PERIOD	DOLLAR OBLIGATION
START	NAIRA OBLIGATION
END	DOLLAR DISTRIBUTION
TYPE OF DISBURSEMENT	NAIRA EXPENDITURE
CODE	NAIRA UD
NAIRA AMT	START
REPORTING PERIOD	END

RECOMMENDATION: The projects expenditure database should be either moved to PAF or archived.

### 3.5 PUBLIC

This is a current database. It records shipments of contraceptives to state warehouses. There are 436 records which commence June 1989. The most recent entry is for October 1993. (NOTE: the software recognizes over 700 records. The file seems to have been copied on itself and needs cleaning.) The fields are:

LOGNO  
CONSIGNEE  
REQDATE  
FPFIA DATE  
SPNL DATE  
SULTANCOL  
CXNOLOGC  
LOFEM  
OVRETTE  
CONCEPTROL  
FLOWERLOGO  
COPPERT  
CYP

Source data for this database are the documentation that authorize these shipments.

NOTE: The consignee field is completed with the name of the state. The use of state codes would facilitate the compatibility of data in this database with both WHSSTATE and NICARE.

NOTE: This database does not stipulate whether the source is the national warehouse or one of the zonal warehouses.

RECOMMENDATION: The Public sector distribution database should be altered to (1) use NICARE state codes, (2) stipulate and include source of shipment. Then it should be updated for current use.

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### 3.6 SPNL MONTHLY SALE BY DEPOT

This database includes 513 records entered between 1988 and July 1992. Each record includes the following fields:

AREA  
LOCATION  
DATE  
CONTRACEPTIVE COMMODITY CATEGORIES (X 18)  
CYP

RECOMMENDATION: The SPNL Monthly Sale by Depot data is not relevant to public sector CLM and should be archived.

### 3.7 WHSSTATE

This database stores quarterly state warehouse inventory data. It was created and data entered during this consultant visit. The data was moved from spreadsheet formats which in turn were generated from Quarterly Inventory Tracking Slip. Each specifies the beginning balance, receipts, distributions, and ending balances for a single product for a single state warehouse for a single quarter. The database currently includes 827 records for 1993 and 1992. The fields included in each record are:

STATE (NICARE CODES)  
ZONE  
QUARTER  
YEAR  
PRODUCT (condom, LoFem, CUT, VFT)  
BEGINNING BALANCE  
RECEIVED  
DISTRIBUTED  
ENDING BALANCE

RECOMMENDATION: The newly created State Warehouse Inventory database should be updated as new data arrives quarterly.

NOTE ON SOURCE DATA: The CLM division wants to amend the data collection tool (i.e. the Quarterly Tracking Slip) to include new items:

- average monthly distribution (CLM data)
- average monthly consumption (NICARE Form 3 data)
- 6 mos forecasted requirements, and
- information on expirations and loss

One sample proposed format is attached

QUARTERLY INVENTORY TRACKING SLIP

Quarter =   
 Year =

TRACKING OFFICER   
 STATE/LGA/SDP:

Condoms	PILLS			IUDs	INJECTABLES		VFT	Others
	Lo Fem	Micro	Neog	CuT 380	Depo provera	Noris-terate	Conceperol	

SECTION I: HISTORY

Beginning Balance								
Received								
Distributed								
Ending Balance								
6 mos (distributed x 6)								
Qty Required (6 mos - End Bal)								

SECTION II: CURRENT STOCK STATUS REVIEW

Bin Card Balance								
Physical Inventory								
Variance amt								
%								
Qty Expiring (next 6 mos)								