

**NEEDS ASSESSMENT AND MANAGEMENT
DEVELOPMENT PLAN FOR THE
MANAGEMENT INFORMATION AND
CONTRACEPTIVE LOGISTICS SYSTEMS
FOR THE MATERNAL CHILD HEALTH
AND FAMILY PLANNING GENERAL
DIRECTORATE IN TURKEY**

21 NOVEMBER - 11 DECEMBER 1991

**Saul Helfenbein, Family Planning Management Development Project, MSH
Jack L. Graves, Division of Reproductive Health, CDC**

FAMILY PLANNING MANAGEMENT DEVELOPMENT

**Project No.: 936-3055
Contract No.: DPE-3055-C-00-0051-00
Task Order No.: NAI 20 TK**

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	1
II.	INTRODUCTION	5
III.	BACKGROUND	5
IV.	NEEDS ASSESSMENT PROGRAM AND METHODOLOGY	6
V.	DESCRIPTION OF THE MANAGEMENT INFORMATION AND CONTRACEPTIVE LOGISTICS SYSTEMS	7
VI.	MAJOR FINDINGS	12
VII.	NEEDS IDENTIFIED	14
VIII.	RECOMMENDATIONS	15
IX.	MANAGEMENT DEVELOPMENT PLAN	16
X.	CONCLUSION	20
ANNEX I	MIS QUESTIONNAIRE	
ANNEX II	PERSONS CONTACTED	
ANNEX III	PRINCIPAL MCHFP DATA COLLECTION FORMS	
ANNEX IV	CONTRACEPTIVE INVENTORY FORMS	

I. EXECUTIVE SUMMARY

The Family Planning Management Development Project (FPMD) and the Family Planning Logistics Management Project/Centers for Disease Control (FPLM/CDC) jointly carried out a Needs Assessment for the improvement of the Management Information and Contraceptive Logistics Systems of the MCHFP General Directorate. The Needs Assessment was conducted from 21 November to 11 December 1991. The Needs Assessment involved discussions with senior staff of the General Directorate of MCHFP and site visits to: Ankara, Cankiri, Izmir and Manisa provinces and to the regional warehouse in Izmir.

Major Findings: There is considerable interest and motivation at the MCHFP General Directorate in developing effective Management Information and Contraceptive Logistics Systems. The new Minister of Health and senior staff accord MIS development a high priority. The senior staff recognize the need to become more familiar with the basic concepts of MIS development and to ensure that efforts to make MIS more efficient and effective are approached systematically and comprehensively.

Major conclusions: The MIS initiative of the General Directorate needs:

- to orient senior staff to the basic concepts and use of MIS for program management and create a MIS technical team which can support and monitor the implementation of MIS development efforts.
- to be closely integrated with efforts to improve overall program management.
- to be carried out systematically and comprehensively.
- to institute a reporting system for Contraceptive Logistics and Family Planning Acceptors which is related to program management.

There is a need for a well coordinated, standardized and understood system which will work in conditions of frequent personnel changes and movements.

Major recommendations: The MIS development Initiative of the MCHFP General Directorate should:

- establish a MIS Technical Team to provide ongoing support to all aspects of developing and implementing the new systems.
- be closely integrated with the improvement of the Contraceptive Logistics System. The latter, which is the main management priority of the General Directorate, should spearhead the MIS development initiative.

- be implemented in stages, starting where provinces demonstrate concern for information management and have already begun to make significant innovations.
- begin with a series of workshops to orient senior staff to basic MIS concepts and to involve them actively in the planning of the MIS program.
- have a major training component for all MIS implementation activities.

Proposal for Family Planning MIS and Contraceptive Logistics System Development

General Goal:

To develop Management Information and Contraceptive Logistics Systems which will improve managers' capability to achieve the goals of the MCHFP General Directorate.

Specific Objectives:

- To ensure that information is timely, accurate and complete.
- To develop capabilities to analyze information in relation to goals, objectives, targets and strategies.
- To develop reporting systems supporting management decision making needs.
- To ensure that contraceptives are always available in all service units.

Planned Activities

Phase 1. Initial MIS and Logistics System Development Activities at MCHFP General Directorate

January - February 1992:

Identify and designate an in-house MIS Technical Team of 2-3 persons to serve as counterparts to the FPLM/CDC and FPMD consultants and be responsible for facilitating workshops, carrying out field surveys, helping prepare reports, and preparing documentation for workshops.

Complete an in-depth review of MIS by General Directorate Staff based on the MIS questionnaire and prepare a short written report based on the review.

Conduct a national inventory of all contraceptives being held at all program locations, including Central, Regional, and Provincial stores, and all program outlets. This information will be used

for evaluating the system and estimating future requirements for contraceptives. The inventory should be based on the forms prepared at the 9 December 1991 meeting with the senior staff of the General Directorate. Reports should be submitted to the MCHFP Directorate as soon after January 1, 1992 as possible. In any case, the data must be available not later than March 1992.

Phase 2. MIS Development Activities with MCHFP General Directorate

March 1992:

Based on the results of the contraceptive inventory and other information, forecasts for contraceptive needs will be prepared. The contraceptive logistics system will be reviewed and changes in procedures, if needed, will be determined. These changes will be implemented in the test region for three or more months before national implementation.

Hold a series of four weekly 2-day orientation and technical workshops to introduce the concept of MIS development for the MCHFP General Directorate and establish its goals and strategies, and its technical guidelines. The workshop programs, curricula, and training materials will be developed by the MIS Technical team in collaboration with the CDC/FPLM and FPMD consultants. The workshops will be facilitated by the MIS Technical team with the support of CDC/FPLM and FPMD consultants.

Phase 3. Regional/Provincial Level Activities

June 1992:

Initiate MIS development activities and new logistics procedures in a region of 6-8 provinces (Test Region).

Conduct a Regional 10-day workshop on MIS Development.

Conduct logistics training and implement the new logistics system in the test Region.

August - September 1992:

Introduce the improved MIS System beginning with the Contraceptive Logistics system the test Region.

Conduct an evaluation of the test of the new logistics procedures. Modifications will be made, if needed, and the supply manual will be revised to reflect the changes. Training courses in contraceptive logistics management for Provincial and outlet personnel will be prepared, trainers will be trained, and a schedule of regional logistics training courses/logistics system implementation will be prepared.

October - December 1992:

Introduce modifications in other aspects of the Family Planning MIS, including introduction of computer programs, data analysis based on performance objectives, and reporting procedures to the General Directorate.

Phase 4. Field Testing, Monitoring and Evaluation of MIS and Logistics Systems

February - March 1993:

Conduct preliminary evaluations of the new MIS and Contraceptive Logistics systems in the Test Region.

Train senior logistics staff of the MCHFP Directorate in contraceptive forecasting and using contraceptive logistics data for program management purposes.

April - June 1993:

Finalize computer based and Manual MIS documentation and instructional manuals.

September - October 1993

Conduct a final evaluation of the systems and make plans for extending them to other regions and integrating them with other MCHFP program components.

November 1993

Begin phased implementation of the MIS and Logistics Systems throughout the country

Monitor the systems continuously.

II. INTRODUCTION

Turkey is one of the priority countries of the AID Office of Population in the new "Big Country Strategy" under which countries with large populations will benefit from a significant increase in available resources to help improve the effectiveness of their Family Planning Programs. The Office of Population will make resources available to Turkey through various US Cooperating Agencies (CAs) who will provide technical assistance and other resources to the Ministry of Health and other governmental and non- governmental organizations delivering family planning services.

Among those CAs designated to contribute resources to Turkey's family planning programs are the Family Planning Logistics Management/Division of Reproductive Health of the Centers for Disease Control and the Family Planning Management Development Project of Management Sciences for Health (MSH). They will provide technical assistance in a joint effort to develop the MIS and Contraceptive Logistics Systems as means of improving the overall managerial effectiveness of the MCHFP General Directorate of the Ministry of Health. CDC/FPLM and FPMD will coordinate their activities and resources in order to ensure maximum impact and integration of both systems. Previously, CDC/FPLM has assisted the MCHFP in estimating contraceptive requirements. In 1989 MSH through the Family Planning Management Training Project prepared a MIS Development Initiative in collaboration with the MCHFP General Directorate, which unfortunately could not be implemented at that time.

The present Needs Assessment is being conducted concurrent with several other MIS initiatives. The World Bank is launching a major MIS initiative for the Ministry of Health. The World Health Organization and United Nations Children's Fund (UNICEF) have also shown interest in MIS. CDC/FPLM and FPMD are committed to the need to coordinate MIS development initiatives with these and perhaps other agencies in order to avoid duplication of effort and ensure compatible, complementary and comprehensive system development.

III. BACKGROUND

The purpose of the MIS and Contraceptive Logistics systems development is to enable the MCHFP General Directorate to achieve its goals of increasing utilization of effective family planning methods and reducing maternal and infant mortality. Analyses of the family planning and maternal and child health components of the MCHFP General Directorate programs are to be found in a number of assessments and reports prepared by the General Directorate and by AID. Major obstacles to achieving goals are the lack of adequately functioning management information and contraceptive logistics systems. These systems are needed to plan, monitor and evaluate goals, objectives and strategies and to forecast contraceptive requirements and ensure that service delivery units throughout the country are adequately supplied to meet client demand.

As an initial step in the development of the integrated management information and contraceptive logistics systems, FPMD and CDC/FPLM jointly carried out this needs assessment which focused on the family planning component of the MCHFP Program. It involved discussions with senior staff of the MCHFP General Directorate, and site visits to four provinces and one regional contraceptive warehouse.

These visits and interviews provided a general overview of the MIS and contraceptive logistics systems from Central, regional, provincial, and service delivery perspectives. Interviews with Department Heads at the MCHFP General Directorate, MCHFP Center Directors, and Health Center doctors and midwives elucidated the functions of the different levels in the family planning program and the collection, flow, reporting, analysis and utilization of information in both systems. This report presents the findings, conclusions and recommendations of this Needs Assessment.

IV. NEEDS ASSESSMENT PROGRAM AND METHODOLOGY

The following sites were visited:

- MCHFP General Directorate
- Urban MCHFP Centers in Ankara and Izmir
- Provincial Directorates in Cankiri, Izmir, Manisa Provinces
- Regional Contraceptive Warehouse in Izmir
- MCHFP Provincial Offices in Cankiri, Izmir and Manisa
- Health Centers in Cankiri, Izmir and Manisa
- Health Houses in Cankiri, Izmir and Manisa

The purpose, uses and needs for MIS were reviewed with the MCHFP General Directorate senior staff. These discussions followed a questionnaire (See Annex I) given to the staff to prepare them for the discussion. The staff provided a national perspective of the operation of the management information and contraceptive logistics systems. We interviewed computer operators who enter family planning and contraceptive logistics information into various programs, examined the program capabilities, and reviewed data forms. Currently, there is a program for Family Planning acceptor data written in COBOL, a simple program written in DBase III for the Control of Diarrheal Diseases (CDD), and an spreadsheet using Quatro for the Acute Respiratory Infections (ARI) Program. A contraceptive logistics program written in Dbase III+ is under review.

Field visits were limited to the four provinces mentioned above, including the Izmir regional warehouse. The visits were organized by the General Directorate. We were accompanied on our visits by a senior staff from the General Directorate and a junior staff member who served as translator. The Provincial Directorates also designated senior staff to join the visits.

During these visits, interviews were conducted with midwives in Health Houses (the village based service delivery points), doctors and midwives in the Health Centers, and directors and other personnel in the MCHFP Centers. The visits included urban MCHFP centers and Provincial MCHFP centers which have provincial managerial responsibility as well as delivering services or providing technical training.

Annex II lists all sites visited and persons interviewed.

At each site information was collected on the following areas related to the operation of the management information and contraceptive logistics systems: activities of the centers: staff qualifications for family planning activities; routine information gathering and reporting requirements; methods of filling out family planning user and contraceptive logistics registers and forms; contraceptive inventory by age; reporting procedures; utilization of information for planning monitoring, supervision and evaluation. Accuracy and consistency were checked. Capabilities of computer programs instituted at the Izmir Regional warehouse and the Manisa Provincial Directorate were reviewed.

We recognize limitations of the present assessment, i.e. narrow geographic scope, insufficient time to review all information or see more than a few examples at each level, and misunderstanding because of the communication factor, etc. Despite these limitations, the assessment identified issues which are relevant to the operation of the MIS and contraceptive logistics systems whose resolution is vital to ensuring that they operate effectively and that they serve the needs of family planning and maternal and child health managers.

Important aspects of the management information system such as personnel and finance were not addressed by this Needs Assessment. These are larger Ministry of Health concerns which will undoubtedly be addressed by the World Bank's Management Information System Initiative.

V. DESCRIPTION OF THE MANAGEMENT INFORMATION AND CONTRACEPTIVE LOGISTICS SYSTEMS

This section describes the principal information for family planning acceptors and contraceptive logistics collected by and for the MCHFP General Directorate and the way this information is collected, analyzed and used. Annex III contains copies of the forms referred to in this section.

Over the past few years the General Directorate has made efforts to improve its family planning information system. A new form was introduced in 1988. A computerized data processing unit was introduced for family planning and other MCH programs. In addition, the Maternal Health and Family Planning Department employs three full time computer operators to enter data and produce reports.

Several persons have been trained in Management Information Systems who work with spread sheet, data base and graphics programs. One staff at the MCHFP General Directorate and two

persons from Bilkent University were trained at Management Sciences for Health in 1989 as part of the then effort to initiate an MIS Development Program with the MCHFP General Directorate.

A. Collecting, Consolidating and Reporting Data: an Overview

Each program of the MCHFP Directorate has a key form used to collect data at service delivery points. These serve as the reports submitted to the General Directorate through the Provincial Health Directorate.

Each form has its accompanying register where clients and the services they receive are noted down. Registers are not filled out uniformly. Interpretation of the required information varies; for example in "elapsed time between pregnancies." Also there is confusion about what information certain columns should contain, for example, age, or "0" pregnancies. Some units use one register for condoms and orals and another for IUDs. Others use one register for all three methods, including menstrual regulation (MR) and sterilization. In rural areas where midwives usually provide services via home visits, registers are sometimes filled out when the midwife returns to her Health House or her home.

Register design does not facilitate tabulation or consolidation onto the required report forms. Consolidating the data (counting) from the registers is not difficult when the number of acceptors are few, but presents problems when the number of clients is large.

The Health Houses and Health Centers appear to have the same information collection responsibilities. The Health Centers also consolidate the reports from the Health Houses and submit them to the Provincial Directorate. The urban MCHFP Centers which are mainly service providers collect and report considerable amounts of data. They submit at least 13 separate reports covering administration, special programs, functional activities, and disease incidence. The MCHFP centers which are mainly management units in the Provincial Directorate appear to be responsible only for the main family planning forms discussed below. Other forms go to other departments in the Provincial Health Directorate.

The Health Houses and Urban MCHFP centers have a non-program data collection burden. Midwives conduct an annual midyear Household Survey of all houses within their area. This was initiated in the early 1960s as part of the socialization program in underdeveloped areas in Turkey. It has since been extended to the whole country. For urban MCHFP Centers which cover relatively large populations, conducting the survey can take up to 3 months using most of the midwives full time. The expense in time and service delivery for Health Houses is much less; the midwives interviewed take about three days to complete a household survey.

Household survey data do not appear to be used except for two purposes. Some urban MCHFP centers use age data results to make population pyramids. However, comparing annual pyramids suggests considerable problems with the data.

The other use of the Household survey is more important. The midwives use the charts to extract information to fill out another form for their maternal health activities. This form, called "15-49 Yas Evli Kadin Isleme Formu," (15-49 Age Group for Married Women) form was introduced in 1987. It contains fertility and contraceptive status data on all married women of ages 15-49 in the zone which the midwife covers. It is updated quarterly. The basic census data need to be regularly revised as well. This form probably contains more accurate information than the Household survey about this group.

Each midwife keeps one form for all the clients in the zone for which she is responsible. For many midwives and Health Center personnel this form is the key source of information for antenatal follow-up and for deciding which women to visit for family planning education.

B. Information on Family Planning Acceptors

The Maternal Health Family Planning Department oversees the collection of information on family planning. The backbone of its information system is the monthly "Aile Planlamasi Yontemi Kullananlara AIT Bilgi Formu" (Family Planning Information System Form). This form contains 8 boxes of information about clients receiving Family Planning services: pregnancy and fertility status, outcome of last pregnancy, time between last 2 pregnancies, age group, educational level, contraceptive method being used, MR and sterilization received, and current contraceptive status (new users, revisits and dropouts).

This form is completed by midwives at the Health House Level from data consolidated from the daily Register "Aile Planlamasi Poliklinik Defteri" (Family Planning Polyclinic Register). Midwives will take their registers to the Health Center and the Health Center midwife or doctor helps her fill out the form. The Health Center then consolidates the midwives reports into its monthly report using the same form and sends it on to the MCHFP center at the Provincial Directorate.

Health Centers and MCHFP Centers occasionally use the number of contraceptive visits to make tables or graphs to show family planning service activity for the three main contraceptives used by the family planning program: IUD, pills and condoms. Some report looking at other information to obtain a profile of family planning users or to determine where to emphasize family planning educational efforts. How this information is used is not explained. MCHFP centers sometimes create their own forms to monitor midwife activity and to facilitate supervision.

The General Directorate's Maternal Health and Family Planning Department has a computer unit for its data processing. The three operators currently working with one computer (two are in disrepair) enter monthly the data from all the 12,000 + service delivery units (Health Houses, Health Centers, MCHFP Centers, Hospitals, NGO programs, etc.) into a Family Planning computer program developed in 1989. The General Directorate does not accept provincial consolidated reports. With all three computers working, the three operators can enter data from about 2000 forms a week. Data from this form has only been entered for through February of

1991. Currently data entry has been delayed because two of the three computers are not working and because the staff is now working on the manual consolidation of the MCHFP Center Activity report.

The computer program is very simple and has limited consistency checks and reporting capabilities. The program appears to mainly speed up simple manual tabulations rather than increase analytic capability. It is written in COBOL and the programmer cannot be located so modification and improvement are not readily feasible. The program does a simple accuracy check for three totals out of the 8 information areas. It rejects the form if there is an inconsistency. The operators therefore have to make adjustments in the data in order to enter the form. About 50% of the unit reports have errors that need on the spot correction. About 1% of the reports have no unit identification, and these are not entered. Without doubt, the number of forms entered per week would be substantially increased if there were fewer errors or if the program would accept erroneous data.

The program produces 10 types of reports: Contraceptive users by outlet by month; Total acceptors (visits) by province per month; a special report on the 17 province UNFPA project; annual national and provincial consolidation of the form presented in the same format; contraceptive users at MCHFP centers; number of MRs and sterilizations; contraceptive users in MOH hospitals; Annual Provincial Report by all reporting health centers; national summary by type of outlet with bi-annual comparisons; Provincial Summary by type of outlet with bi-annual summary.

In general, there is little analysis to differentiate new from continuing acceptors, the trends in method switching, etc. The Department has recently begun to require data on IUD dropouts, but this is not yet uniformly reported.

C. The Contraceptive Logistics Information System

Contraceptive Logistics is the responsibility of the Deputy Director for Administration and Logistics. There are two main departments under this Direction which share responsibility for contraceptive Logistics. The Contraceptive Logistics system is a fairly complex operation. The major supplier of the three main contraceptive commodities has been AID, and CDC has worked over the past years to assist the General Directorate in estimating its needs.

The main problem encountered in these estimations has been the absence of information on inventory and usage at the service delivery level. Estimates have been made on the basis of periodic inventories of commodities held at the central, regional and provincial warehouses; issues from provinces to service delivery level have been used as surrogates for use. CDC visits have generally been the principal motivation to collect inventory information.

The contraceptive logistics system has an operational manual, but the extent to which instructions are relevant and/or followed has not been evaluated. Visits to the various levels involved in the logistics system indicate that there are no uniform policies or guidelines concerning maintenance

of commodity levels or procedures for issuing commodities to the service delivery units. There also appears to be little supervision or control so that stockouts and expired commodities can be found.

Commodities are issued from central to regional to provincial warehouses all on instruction from the General Directorate. Central and regional warehouses have no management responsibilities. The General Directorate monitors stock levels at the central and regional warehouses. In the past, issues from provincial to the service delivery level was on an informal basis.

The Provincial Directorate requests contraceptives by letter to the General Directorate. There is no policy based on minimum-maximum requirements for determining how much stock should be maintained or when requests should be made. Sometimes written requests are followed by telephoned requests because of mail delays. The Regional Warehouse has computerized its operation. Receipts for issuances are maintained at the regional and provincial depots.

Provincial distribution systems to service delivery units are not uniform. Some distribute monthly, some quarterly. Record keeping varies as well. Distribution appears to be based on convenience rather than policies on meeting client need. Contraceptives can be fetched by the provider during visits to the Health Center or to the MCHFP center, distributed during commodity support for other programs such as EPI, or brought to Health Centers or Health Houses during supervisory visits. Usually some record is maintained regarding issuance and receipt.

Unlike the Family Planning Acceptor Form, the Contraceptive Logistics System has not succeeded in institutionalizing a standard procedure for moving information from the service delivery unit to the General Directorate. In recent years, CDC has worked with those in charge of the contraceptive logistics system to rationalize reporting procedures so that forecasting contraceptive requirements and management of the system can be improved.

The General Directorate recently introduced two new forms: a monthly service delivery commodity usage and balance form and a semester consolidation form for use by provinces. The first is called "Kontraseptif Malzeme Aylik Sarf Cizelgisi" (Monthly Contraceptive Consumption Report.) It is used for the three main contraceptives: condoms, Orals and IUDs. Each service delivery unit is to report monthly opening balances, commodities received, amounts used and end of month balances.

The second is the "Donemsel Kontraseptif Malzeme Sarf Ve Istek Cizelgesi" (Semester Contraceptive Issuance and Balance Form). This has data on beginning balance, received commodities, amounts used (or issued), ending balance, average monthly consumption for the semester, and the amount required for the next semester.

These forms are not uniformly submitted. During the present Needs Assessment, two new forms were designed for a one time use to conduct an inventory and survey of contraceptive use down to the family planning service unit. The purposes of this inventory are for use in updating the contraceptive needs forecast and for evaluating inventory levels throughout the system.

VI. MAJOR FINDINGS

A. General Directorate

■ There is considerable interest and motivation at the MCHFP General Directorate for developing effective Management Information and logistics systems. The new Minister of Health and senior staff accord MIS and logistics management development as high priorities. The senior staff recognize the need to become more familiar with the basic concepts of MIS development and to ensure that efforts to make MIS more efficient and effective are approached systematically and comprehensively.

■ There is a basic MIS system in place to collect information. While the key elements for data collection (registers and forms) are adequate, the data are not fully exploited to the benefit of program management. Information goes unanalyzed and unused to greatest local advantage in the MCHFP Centers and the Health Centers. The current lack of significant data processing and analytic capacity in the General Directorate further impedes effective utilization of the information on a timely basis.

■ Despite the existence of a basic reporting system, accuracy and late reporting remain significant problems. There are no particular patterns for inaccurate or late reporting. Some provinces tend to submit forms which are always accurate and some submit forms with many inaccuracies. Supervisory visits often serve as motivation to improve timeliness and accuracy, though provinces relapse several months after the supervisory visits. At present the computer program does not control for all inaccuracies. The computer program does not identify the extent of inaccurate reporting so the degree of error in national annual reports is unknown.

■ While the General Directorate is making efforts to develop its MIS, these efforts are not being sufficiently coordinated. Computer programs are being developed at the central and provincial levels without consideration for analytic capabilities or specific management needs or for eventual integration and modification as changes in the health program occur. The current needs assessment is the first step in an overall plan for the development of a MIS and the creation of in-house capabilities to ensure it is used to maximum advantage for program management.

B. Contraceptive Logistics System

■ The contraceptive stock reporting system is not integrated into a systematic process for supplying, monitoring and forecasting contraceptives requirements either at the national, provincial or health center levels. Not all units use the monthly consumption reports or the semester consumption consolidation report. Provinces may or may not develop their own systems, some more adequate than others. Inadequate supplies, oversupply, stock outs, and out of date oral contraceptives were found. The establishment of stock levels based on usage and fixed schedules for routine delivery of contraceptives to provinces and outlets has not yet been fully institutionalized. Data on contraceptive supplies are not compared with data on contraceptive usage. The recent (June 30, 1991) provincial stock inventory has not been analyzed.

C. Provincial Level

■ Interest in improving information systems is growing in the provinces as well as in individual MCHFP centers and health centers. However, this interest is not coordinated. Some MCHFP centers develop specific systems to improve supervision, individuals collect data for special research interests, other provincial directorates modernize information management by installing computers, or computer networks and contracting with local software program developers to develop programs to meet their needs. The goals of computerization appear to emphasize the storage and retrieval of information rather than the improvement of analytic capabilities or management effectiveness.

■ One of the main reasons for the underutilization of data is the absence of annual program plans which state clear, immediate, and measurable performance objectives. Without specific goals, objectives, targets and/or strategies which need to be regularly monitored and evaluated, the information collected is simply passed on to the next level.

■ The provincial MCHFP centers do not have a clear or significant role in the utilization of data. Their reporting responsibilities are limited to passing on relatively raw data to the General Directorate. Provincial Directorates are not required to consolidate data from the health centers. As a result reporting on the family planning program does not begin until data reach the General Directorate. Because of the delays in processing at the General Directorate, reports are seldom useful for monitoring progress or for evaluating the effectiveness of provincial programs.

D. Service Delivery Level

■ At the service delivery units (Health House, Health Center and MCHFP centers), information is mainly used for organizing individual work and direct supervision of midwives. Some use the information to monitor level of activity. However, there does not seem to be consistent understanding of the purpose of all the data and the relationships of one type of data to another.

■ Few personnel have had training in data analysis or management. Personnel, including midwives, seem to be acquainted with the method for checking accuracy in the family planning report form. However, the forms are seldom checked for complete accuracy, and, as a result, there are many errors which get reported. Often Health Center senior personnel do not provide the support to ensure appropriate use of information for analysis and program management.

■ Inconsistencies between data reported on contraceptive users, data reported on contraceptive stock levels in the service delivery sites, and actual stocks can be found. Personnel do not compare the data from different sources. The two interrelated contraceptive user and contraceptive stock systems are treated independently of each other. Feedback is given in the form of individual supervision. However, in relation to information, it appears to be directed toward correcting forms rather than relating the information to the progress of the family planning program.

VII. NEEDS IDENTIFIED

On the basis of these findings, the Needs Assessment identifies several major needs for the Development of an effective MIS for the MCHFP program.

- **A Management Information Systems (MIS) initiative needs to orient top level and senior staff to the basic concepts and use of MIS for program management and needs to create a technical team which can support and monitor the implementation of MIS development efforts.**

Orientation programs for top level and senior staff will enable them to determine the appropriate support and resources needed for a successful MIS initiative. Both General Directorate and Provincial Directorate senior staff need similar orientation to ensure coordination and compatibility of all MIS development activities. Orientation should include basic principles of MIS, relationship of MIS to program management, effective reporting to facilitate planning, monitoring and evaluation, and compatibility between reporting needs and data collection systems.

- **A MIS development initiative needs to be closely integrated with efforts to improve overall program management.**

While the General Directorate needs to strengthen its data processing and analytic capabilities, it needs to strengthen staff skills and knowledge in using the new software programs and to take advantage of the computer's analytic capabilities. These capabilities need to be developed both in the General Directorate and in Provincial Directorates so that information is always and consistently used for management purposes. Procedures for effective and systematic program planning, monitoring and evaluation need to be instituted at all levels to integrate information with decision making.

- **A MIS development initiative needs to be carried out systematically and comprehensively.**

The MIS initiative needs to begin with a detailed analysis of program management needs. The detailed analysis should also include analysis of all data requirements, ways of simplifying collection and tabulation (consolidation); instructions for analyzing forms and preparing reports; ways of reducing collection and processing tasks; ways of eliminating unnecessary and superfluous data collection.

- **A MIS development initiative needs to institute a reporting system which is related to program management.**

Currently reporting consists of transmitting forms from one level to another with some elementary tabulations of sums. Reporting systems for each level need to be developed along with appropriate types of analyses so that service providers

and managers are able to compare results with objectives, determine the effectiveness of program strategies and direct supervisory efforts and resources to where they are most needed.

- **There is a need for well coordinated, standardized and understood systems which will work in conditions of frequent personnel changes and movements.**

The MIS initiative will be constrained by the frequent movement of personnel at the peripheral service delivery levels. Therefore it is important to compensate for these changes by systems which can be easily learned and which help personnel to be more effective by making their work more interesting and rewarding.

VIII. RECOMMENDATIONS

- The MIS Development Initiative should establish a MIS Technical Team to provide ongoing support to all aspects of developing and implementing the new systems. The members of the Technical Team should have English language capability, knowledge of basic Management Information and Contraceptive Logistics systems concepts and development, and knowledge and experience in working with computer programs.

- The MIS Development initiative should be implemented in several phases. It should start by implementing improvements in the Contraceptive Logistics System as contraceptive supply is the most critical management need. It should then be extended to cover other aspects of family planning program management. Subsequently, the same principles and approaches should be extended to other components of the MCHFP General Directorate. As experience is gained in one area, development of MIS, operations in other areas will be facilitated and expedited.

- The MIS Development Initiative should begin with a series of workshops to orient senior staff to basic MIS concepts and to involve them actively in the planning of the MIS program. Such workshops should be held for both senior staff in the MCHFP General Directorate and senior staff in the Provincial Directorates.

- The institutionalization of improved management information and contraceptive logistics systems should be implemented in stages. If possible it should begin in provinces where there is concern for information management and where significant innovations in information systems are underway. A possible region to start the program would be the eight province area served by the Izmir Regional warehouse which has introduced a computerized inventory system which covers all commodities including contraceptives.

- Training should be a major component of all MIS implementation activities. Training should extend to Health Center and Health House Personnel, particularly in how to use information for program management and how to prepare reports related to objectives and strategies.

IX. MANAGEMENT DEVELOPMENT PLAN

General Goal:

To Develop Management Information and Contraceptive Logistics Systems which will improve managers' capabilities to achieve the goals of the MCHFP General Directorate.

Specific Objectives:

- To ensure that information is timely, accurate, and complete.
- To develop capabilities to analyze information in relation to goals, objectives, targets and strategies.
- To develop reporting systems supporting management decision making needs.
- To ensure that all contraceptives are always available in all service units.

The Management Information and Contraceptive Logistics systems development initiative will be carried out in four phases, as described below:

Phase 1. Initial MIS and Logistics Systems Development Activities at General Directorate Level

January - February 1992 - Responsibility: MCHFP General Directorate

Identify and designate in-house MIS and Logistics Technical Teams of 2-3 persons who will serve as counterparts to the CDC/FPLM and FPMD consultants and who will be responsible for facilitating workshops, carrying out field surveys, preparing reports, preparing documentation for workshops and implementing the results.

Complete an in-depth review of MIS by General Directorate Staff based on the MIS questionnaire. The questionnaire is in Annex I. Each Deputy Director and Department Head should prepare a short written report based on the review. The Reports will serve as documentation for orientation and technical workshops for the General Directorate and Senior staff to start in March 1992.

Conduct a national inventory of all contraceptives being held at all program locations, including Central, Regional, and Provincial stores, and all program outlets such as Health Centers, MCHFP Centers, Hospitals, Health Houses and any and all locations that take their contraceptive supplies from the MCHFP logistics system. The inventory should use the two forms prepared in the 9 December 1991 meeting between MCHFP Directorate staff and FPMD and CDC/FPLM (see Annex 4). It should be counted on December 31, 1991 and cover the period from January 1 to December 31, 1991. Provincial Offices should consolidate reports

from their outlets into one report with a separate line for the Provincial store. Both reports should be submitted to the MCHFP Directorate as soon after January 1, 1992 as possible. In any case the reports should be available and summarized on the second form by March 1992. The MCHFP General Directorate should consolidate the inventory reports to show the quantities of each contraceptive that were issued or dispensed in 1991 and that remain in storage on December 31, 1991 with separate entries for Central, Regional, Provincial, and outlet stores. This information will be used for evaluating the logistics system and estimating future requirements for contraceptives.

Phase 2. MIS Development Activities with MCHFP General Directorate

February/March 1992 - Responsibility: MCHFP General Directorate, FPMD and CDC/FPLM

Identify local MIS experts or company to develop computer software for the management information and contraceptive logistics systems. The computer software will be designed to be readily and easily modifiable and compatible with other software being developed.

Explore possibilities of developing a subcontract with the local software developer.

Based on the results of the contraceptive inventory and other information, prepare forecasts for contraceptive needs.

Review the contraceptive logistics system and determine changes in procedures, if needed. These changes will be implemented in a test region for three or more months before national implementation.

Conduct a series of weekly 2-day orientation and technical workshops to introduce the concept of MIS development for the MCHFP General Directorate to establish its goals and strategies and its technical guidelines. The workshop programs, curricula, and training materials will be developed by the MIS Technical team in collaboration with the CDC/FPLM and FPMD consultants. The workshops will be facilitated by the MIS Technical Team with the support of CDC/FPLM and FPMD consultations. A suggested schedule is given below.

2-3 March 1992

Orientation to MIS development for MCHFP General Directorate senior staff: The workshop will familiarize staff with basic concepts of MIS and their application to the MCHFP program and the methods and resources needed to develop an effective MIS.

9-10 March 1992

Follow-on Technical workshop to Define Operational Goals and Strategies of the MCHFP program: The workshop will review, analyze and refine long term goals and strategies and lead to recommendations for realistic intermediate goals and define specific intermediate strategies.

16-17 March 1992

Follow-on Technical Workshop on performance objectives and managing the MCHFP program using performance objectives: This workshop will consider the role of performance objectives (indicators) in Management Information Systems, how to define performance objectives, how to use performance objectives to determine information needs, how to use performance objectives in decision making. The workshop will lead to recommendations for key performance objectives to use in planning, monitoring and evaluating intermediate goals and objectives.

23-24 March 1992

Follow-on Technical Workshop on data collection: This workshop will review definitions of data terms in the family planning program, review current registers and forms and other data collected in the MCHFP program, and the reporting requirements and data analysis. The workshop will lead to recommendations for maintaining or modifying registers or forms and reporting requirements and data analyses in order to facilitate timeliness, accuracy and completeness and usefulness to managers.

April 1992 - Responsibility: MCHFP Directorate

On the basis of the recommendations from the above workshops, the MIS technical team will begin to make any modifications needed in data collection and will work with the software program developers on improving computer programs for the General Directorate.

Phase 3. Regional/Provincial Level Activities

June 1992 - Responsibility: MCHFP General Directorate, FPMD, CDC/FPLM

Initiate MIS Development Activities in a test region of 6-8 provinces.

Conduct a regional 10-day workshop on MIS Development similar in content to the series of workshops held for the General Directorate, but with a provincial/local focus. These will be held primarily for the heads of the MCHFP centers and Provincial Health Director or designate rather than the entire staff of the Provincial Directorate.

August - September 1992 - Responsibility: MCHFP General Directorate, FPMD, CDC/FPLM

Introduce the new MIS System beginning with the Contraceptive Logistics system in Test Region.

October - December 1992 - Responsibility: MCHFP General Directorate, FPMD, CDC/FPLM

Introduce modifications in other aspects of the Family Planning Management Information System, including introduction of computer programs, data analysis based on performance objectives, and reporting procedures to the General Directorate.

The MIS Provincial training team will introduce the MIS concepts to the Health Center and Urban MCHFP center staff.

Phase 4. Field Testing, Monitoring and Evaluation of MIS and Logistics Systems

February - March 1993 - Responsibility: MCHFP General Directorate, FPMD, CDC/FPLM

Commence preliminary evaluations of the new Management Information and Contraceptive Logistics Systems.

Train senior logistics staff of the MCHFP Directorate in contraceptive forecasting and using contraceptive logistics data for program management.

Evaluate the test of the new logistics procedures, make adjustments and revise the supply manual to reflect the changes. Training courses in contraceptive logistics management for Provincial and outlet personnel will be prepared, trainers will be trained, and a schedule of regional training courses will be prepared.

April - June 1993 - Responsibility: MCHFP General Directorate

Conduct continuous monitoring of the systems and finalize computer-based and manual documentation and instructions.

September - October 1993 Responsibility: MCHFP General Directorate, FPMD, CDC/FPLM

Conduct final evaluation of the systems and make recommendations for extending the systems to other regions and integrating them with other MCHFP programs.

November 1993 - Responsibility: MCHFP General Directorate

Begin phased implementation of the MIS and Logistics Systems throughout the country

Monitor the systems continuously.

X. CONCLUSION

Copies of sections I-IX of this report were given to Mr. Caytana and the Department heads on December 10, and the contents were discussed. Mr. C aytana said that they were committed to improving their MIS and logistics systems and that they would study the report and inform us of their acceptance and/or suggested changes by the first week of January 1992. Also, Dr. Pinar Senlet, Population Officer, US Embassy was given a copy and debriefed on our work on December 11, 1991.

ANNEX I

To: Deputy Directors and Heads of Department, Directorate of MCHFP
From: Jack Graves and Saul Helfenbein
Subj: Management Information Systems in the Directorate of MCHFP
Date: 25 November 1991

1. We look forward to meeting you on Tuesday to discuss how information is collected, analyzed and used in your work as Heads of Departments in the Directorate of MCHFP.
2. In order to help you prepare for our meeting we would appreciate it if you could think about the 9 questions that are asked below. It is not necessary to answer these questions in writing. The questions are meant to help you begin to think about the way information is used and how you benefit from the information.
3. We thank you in advance for your time and effort in working with us on analyzing the information system of the Directorate of MCHFP.

QUESTIONS

1. As a Head of a Department, how do you use information to carry out your responsibilities? Where do you get the information and how is it presented to you?
2. What information do you use for planning, monitoring and evaluation? How do you use this information in planning, monitoring and evaluation? What information is missing and what information is superfluous?
3. Could you trace for us the flow of information you use from the place where it is collected until it gets to you? Could you explain to us what forms are used to collect the information, and what forms and reports are used to transmit the information to you?
4. What kind of information do you transmit to your colleagues, to your supervisors, and to provincial offices? How do you transmit this information?
5. How long does it take from the time information is collected from a service delivery unit until the time it takes to get to you? What do you do if information comes in late?
6. How do you determine if the information is accurate? If information is not accurate what do you do?
7. How do you determine if the information is complete? If information is not complete what do you do?
8. What are the differences in the information you receive from different regions in the country? What are the differences in the information you receive from different types of service delivery units?
9. What suggestions do you have to improve the way information is collected, analyzed and used in order to help you better carry out the responsibilities of your position?

**ANNEX II
PERSONS CONTACTED**

U.S. Embassy

Dr. Pinar Senlet, Population Advisor

Directorate of Maternal Child Health and Family Planning, Ministry of Health

Dr. Tomris Turmen, Director General

Mr. Ugur Aytac, Deputy Director, Maternal Health and Family Planning

Mr. Munip Ustandag, Deputy Director, Child Health and Training

Mr. Mehmet Çatana, Deputy Director, Administration and Logistics

Ms. Gulfidan Cosar, Chief Maternal Health Department

Ms. Nuran Ustunogly, Chief, I.E.C. Department

Dr. Dilek Haznedaroglu, Chief, Child Health Department

Mr. H. Ibrahim Somyurek, Chief, Communications and Media Production Department

Mr. Sanasi Ozgun, Logistics Training Coordinator

Dr. Ruhi Selcuk Tabak, Video Program Director

Dr. Ersin Topcuoglu (Translator)

Dr. Aykut Kingir (Translator)

Provincial Health Directorates and Family Planning Service Sites

Ankara

Dr. Ulkil Ayberk, Director, Kayas MCHFP Center

Dr. Necdet Birgen, Inçirli MCHFP Center

Cankiri Province

Dr. Necdet Baglar, Director Provincial Health Directorate

Ms. Kadriye Gogulu, Midwife, Tunay Health House

Dr. Yegana Buyru, Director, Eldivan Health Center

Dr. Dilsat Cebeci, Director, MCHFP Center

Izmir

Dr. Kuntur Perim, Director, Provincial Health Directorate

Dr. Ahmed, Assistant Director

Mr. Nufit, Cetin, Directorate, Regional Warehouse

Ms. Nazifa Toklur, Kaynaklar Health House

Dr. Hasan Barin, Ismet Akman Health Center

Dr. Hulya Oztufekci, Director, Dogancay Health Center

Dr. Saadet Yardim, Director, MCHFP Center

Manisa

Dr. Ismal Nardat, Director, Provincial Health Directorate

S. Bozkoy, Health House,

Dr. Ergun, Karaoglani Health Center

Dr. Susan Bozkoya, MCHFP Center

World Bank

Dr. Serdar Savas, Health Project Coordinator

Dr. Meltem Caylan, MIS Project Coordinator

Mr. Louis Vassillou, Sr. Operations Officer, Population and Human Resources

ANNEX III
SAMPLE FORMS

AİLE PLANLAMASI

YÖNTEMİ KULLANANLARA AİT

BİLGİ FORMU

Monthly Report from
Client Register

YIL: Year

AY: Month

İLİN ADI: Province

KURULUŞUN ADI: Clinic

T.C.
S.S.Y.B.
Form No.

1	DOĞURGANLIK ÖZELLİKLERİ	YOK	KADIN SAYISI				
			1	2	3	4	5 +
11	Doğurduğu Çocuk Sayısı # births						
12	Yaşayan Çocuk Sayısı # living children						
13	Düşük Sayısı # MR						
14	Toplam Gebelik Sayısı Total preg						

2	SON GEBELİĞİN NASIL SONUÇLANDIĞI of last preg	KADIN SAYISI
21	Kendi kendine düşük (spontan) Miscarriage	
22	Kürtaj + MR MR	
23	Ölü Doğum stillbirth	
24	Canlı Doğum live birth	

3	Time b/w last 2 pregnancies SON GEBELİK ARALIĞI	KADIN SAYISI
31	1 ve 1 yıldan az	
32	2 - 3 Yıl	
33	4 - 5 Yıl	
34	6 +	

4	YAŞ GRUBU Age Group	KADIN SAYISI
41	- 19	
42	20 - 34	
43	35 - 49	
44	50 +	

5	Education ÖĞRENİM DURUMU	KADIN SAYISI
51	Okur - Yazar Değil	
52	Okur yazar	
53	İlkokul	
54	Orta - Lise	
55	Yüksek	

6	SON ÜÇ AY İÇİNDE KULLANDIĞI YÖNTEM FP Method	KADIN SAYISI
61	Kullanmıyor Not practicing	
62	RIA IUD	
63	HAP Pill	
64	KONDOM Condom	
65	GERİ ÇEKME	
66	DİĞER	

7	Services YAPILAN İŞLEM Provided	KADIN SAYISI
71	MR	
72	Diğer yöntemlerle yapılan rahim tah.	
73	Kadında sterilizasyon	
74	Erkekde sterilizasyon	

8	YÖNTEM KULLANAN KADINLARDAN			
	Yönteme	Yeni Başlayan	Devam Eden	Bırakan
	Yöntemin Adı	Sayı	Sayı	Sayı
81	RIA IUD			
82	HAP Pill			
83	KONDOM Condom			
84	TOPLAM Total			

New users

Re-visits

Drop-outs

AÇIKLAMA. Her ay sonu aile planlaması poliklinik defterinden yöntem kullanıcılarının özellikleri çıkarılarak bu form doldurulmaktadır.

T. C.
SAĞLIK BAKANLIĞI
(1) Province... İLİ
SAĞLIK MÜDÜRLÜĞÜ

KONTRASEPTİF MALZEME AYLIK SARF ÇİZELGESİ
Monthly Contraceptive Consumption Report
(Clinics)

(2) Kuruluşun Adı :
Clinic name

(3) Ait Olduğu Ay ve Yıl : / 19.....
Month/year

Malzemenin Adı	Malzeme Hareketleri			Malzeme Sarfı	
	Gecen Aydan Devreden Miktar (4)	Bu ay Gelen Miktar (5)	TOPLAM (6)	Kullanılan Miktar (7)	Kalan Miktar (8)
KONDOM (adet olarak)	Beg. Bal	Rec'd	Total	Used	End Bal
HAP (adet olarak)					
RAHİM İÇİ ARAÇ (adet olarak)	Bakırlı				
	Plastik				

(9) Düzenleyenin Who Produced

Adı Soyadı

..... / / 19...

İmza

(10) TASDİK OLUNUR Approved

Adı Soyadı

..... / / 19...

İmza/R. Mühür

Not : Arka sayfadaki açıklamalara göre doldurulacaktır.

(Semester Report for Outlets)

T. C.
SAĞLIK BAKANLIĞI
(1) (province) İLİ
SAĞLIK MÜDÜRLÜĞÜ

DÖNEMSEL KONTRASEPTİF MALZEME
SARF VE İSTEK ÇİZELGESİ

(2) Ait Olduğu Dönem

1. Dönem, Ocak - Haziran : Jan-June

2. Dönem, Temmuz - Aralık : July-Dec

Malzemenin Adı	Dönem Başı	Dönem İçinde			Dönem Sonu	Ortalama Aylık Sarf Adedi (8)	İstenilen Malzeme Adedi (9)
	Mevcut Malzeme Adedi (3)	Gelen Malzeme Adedi (4)	Toplam Malzeme Adedi (5)	Sarfolunan Malz. Adedi (6)	Kalan Malzeme Adedi (7)		
KONDOM (adet olarak)	Beg Bal	Received	Total	Used	End Bal	AMC #6/6	Required
HAP (adet olarak)							
RAHİM İÇİ ARACI	Bakırlı (adet olarak)						
	Plastik (adet olarak)						

(10) Düzleyeninin
Adı/Soyadı

...../...../ 19
İmza

(11) TASDİK OLUNUR
Adı/Soyadı

...../...../ 19...
İmza - R. Mühür

Not :

1. Arka sayfadaki açıklamalara göre doldurulacaktır.

(2) Bir aylık hap bir adet olarak belirtilecektir.

**ANNEX IV
CONTRACEPTIVE INVENTORY FORMS**

37

Annual Stock Report for Contraceptive Warehouse
1.1.1991-31.12.1991 TARİHLERİ ARASI KONTRASEPTİF MALZEME DURUMU

YER	HAP		RİA		KONDOM	
	1991 YILI TÜKETİMİ	MEVCUT	1991 YILI TÜKETİMİ	MEVCUT	1991 YILI TÜKETİMİ	MEVCUT
İLLER						
ANA DEPO						
ADANA BÖLGE DEPOSU						
DİYARBAKIR BÖLGE DEPOSU						
ERZURUM BÖLGE DEPOSU						
İSTANBUL BÖLGE DEPOSU						
İZMİR BÖLGE DEPOSU						
TOPLAM						