MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL

TO: William H. Foege, M.D.
Director, Center for Disease Control (CDC)
Through: Philip S. Brachman, M.D.
Director, Bureau of Epidemiology (BE)

DATE: April 25, 1979

FROM: Richard S. Monteith, M.P.H.
Anne Bailowitz, M.D.

SUBJECT: Foreign Trip Report (AID/RSSA): Implementation of Patient Flow Analysis, El Salvador: February 26-March 16, 1979

SUMMARY

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SUMMARY

Technical assistance was provided to the Maternal-Child Health and Family Planning Division of the El Salvador Ministry of Public Health (MOH) in the implementation of Patient Flow Analysis (PFA), a technique which documents personnel utilization and patient flow in individual family planning clinics. Our consultation was the first attempt to conduct PFA outside of the United States. Based on prior discussions with the MOH, it was our intent to implement PFA in 15-20 health establishments during our 3-week consultation. However, because necessary preparations to do field work were not completed before our arrival and MOH personnel scheduled to work on PFA were reassigned, only 2 health establishments were studied as a demonstration project before our departure. Also, although previous discussions with the MOH and USAID Mission indicated that improvement in clinic efficiency was the purpose of the study, the MOH changed their principle objective to "developing criteria of health care." PFA is not the mechanism to develop criteria of health care.

With this background, 2 clinics were studied, the PFA instruction manual and data collection forms were edited and translated into Spanish, and our counterparts trained in conducting PFA. The statistical output for the 2 study

clinics show that patients spent an average of 3 hours, 29 minutes and 3 hours, 38 minutes in the clinics while receiving only 33 minutes (16%) and 40 minutes (18%), respectively, of services.

Although it would have been better to implement PFA in several different types of clinics to determine if the system would serve the needs of the MOH, we agreed to provide technical assistance to the MOH in the study of 22 health establishments in June 1979. FPED/CDC will assist the MOH in training their personnel in the use of PFA and data collection, computer process the data, and assist in interpreting the output.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

El Salvador, February 26-March 16, 1979, at the request of USAID/El Salvador, AID/POP/OPS/LA, and AID/POP/FPSD, to provide technical assistance to the El Salvador Ministry of Public Health (MOH) in the implementation of Patient Flow Analysis (PFA), a system which documents personnel utilization and patient flow in family planning clinics. The consultation was provided by Richard S. Monteith and Anne Bailowitz of the Program Evaluation Branch, FPED/BE/CDC. This travel was in accordance with the Resource Support Services Agreement (RSSA) between the Office of Population, AID, and CDC/BE/FPED.

II. PRINCIPAL CONTACTS

A. USAID/El Salvador

1. Ms. Dale Gibb, Health and Population Officer
2. Ms. Carol Dabbs, Health/Population Advisor
3. Mr. Robert Haladay, Population Officer

B. El Salvador Ministry of Public Health (MOH)

1. Dr. Vilma de Aparicio, Director, Division of Maternal-Child Health and Family Planning (MCH/FP)
2. Dr. Carlos Huezo, MCH/FP
3. Sra. María Elena Claros, MCH/FP
4. Sr. René Cruz, MCH/FP

III. PATIENT FLOW ANALYSIS

Patient Flow Analysis (PFA) is a system which documents personnel utilization and patient flow in individual family planning clinics. (For a more detailed discussion of PFA, see J. L. Graves, "Computerized Patient Flow Analysis of Family Planning Clinics," presented at the American Public Health Association 106th Annual Meeting, Los Angeles, California, October 15-20, 1978.) Its use enables management to obtain data for statistical documentation and graphical

representation of a clinic session, which can be used to identify problems in patient flow, determine personnel and space needs, and document personnel costs per patient visit. Family planning programs using PFA can measure the performance of individual clinics, initiate improvements in the clinic pattern and/or personnel needs that will increase overall clinic efficiency, and measure the results at minimal cost. Specific anticipated benefits to be derived from the use of PFA may include reduction of patients waiting time (and frustration) in the clinic, a more equitable distribution of workload for each staff member during the workday, and reduction of personnel cost in the clinic. Additional patients may also be served for the same or even reduced costs.

Five forms (see Apendix A) are used for data collection, of which essentially only 1 form is used during the conduct of the clinic session. Therefore, data collection does not interrupt the clinic session to such a degree that clinic behavior is modified.

Data collection is relatively simple and processing of the data has been computerized to insure rapid turn-around of results; proper interpretation of the results requires training. Two types of output are produced by the computer programs written for PFA. One is a graphical representation of the clinic session created by an electro-mechanical plotter. The upper part of this graph illustrates the type, number, and length of each contact that the patient makes as the patient flows through the clinic and waiting time preceding each contact. The lower part of the graph displays the time occupied with patients and the time spent otherwise for each staff member. In addition to the graph, the PFA system produces 6 tables and a statistical summary. These tables include an analysis of: 1) patient arrival as related to appointment time; 2) patient service time as related to the patient's time in the clinic by visit type; 3) mean personnel cost per patient by visit type; 4) personnel utilization in the clinic by task; 5) time and cost for each clinic station by visit type and total visits; and, 6) an analysis of data that pertains to each person who worked in the clinic on an individual basis.

The graphical and statistical output are examined together. In order to comprehensively interpret the output, information on personnel policy, size and arrangement of the facility, other programs conducted at the same location, personnel skills, and number of patients normally served during the clinic session should be taken into account. In addition, interpretation of the output should be done in conjunction with the clinic personnel who worked during the clinic session that was studied. Their interpretation of the output should be handled tactfully, and if the data show problems in the flow of patients the initial assumption should always be that this is caused by some fault in the system rather than by the personnel providing the service.

PFA was developed by FPED/CDC as a management tool for use in family planning clinics in the United States. During the development phase, over 250 data sets were collected in 14 states and processed by CDC. This consultation in El Salvador was the first attempt to conduct PFA outside of the United States.

IV. IMPLEMENTATION OF PATIENT FLOW ANALYSIS IN EL SALVADOR

A. Background

In October 1978, the MOH in El Salvador requested technical assistance to improve patient flow through its family planning clinics. USAID/El Salvador identified the following activities as necessary to improve patient flow in the MOH clinics (USAID/El Salvador, Cable No. 05431 dated October 17, 1978):

1. "Identify major obstacles to the provision of efficient family planning services."

2. "Work with the MCH/FP Division and other service personnel of MOH to develop a plan to streamline the flow of patients and remove administrative barriers."

3. "Develop a scheme for nationwide implementation of plan."

In December 1978, Dr. Leo Morris, Chief, Program Evaluation Branch, FPED/CDC, who was in El Salvador consulting on the coding phase of the contraceptive prevalence survey with the Asociación Demográfica Salvadoreña (ADS), was asked by USAID/El Salvador to introduce the concept of PFA to personnel of the Maternal Child Health and Family Planning Division of the El Salvador MOH (since PFA addressed the activities outlined in the cable). During that meeting the utility of PFA for improving family planning clinic services was discussed, and it was agreed that a group of 15-20 clinics would be selected by the MOH for implementation of PFA in El Salvador. An implementation period of 3 weeks in February-March 1979, as requested in the cable, was scheduled. Two FPED/CDC consultants would travel to El Salvador to provide technical assistance to the MOH in conducting the study. Prior to the arrival of the consultants, regional MOH Health Directors were to be informed of the study and appropriate field preparations made. This advance preparation would enable field work to be scheduled shortly after the consultants' arrival. After data collection, FPED/CDC would process the data in Atlanta and later provide technical assistance to the MOH in the interpretation of the output.

B. Objectives and Problems Encountered

Upon our arrival in El Salvador, we found that the necessary preparations prior to field work had not been completed. In addition, we learned that our MOH counterpart, who met with Dr. Morris in December

and whom we believed would be assigned by the MOH to work with us during our 3-week consultation, was sent out of the country and would not return for a week. One day prior to our arrival this person had been replaced by a physician and a social worker, who were unfamiliar with PFA and who, we found out later, would not be available to work with us full-time.

Given these limitations and the realization that we would not split into teams and study more than 1 clinic a day as originally planned, 1 day would now be required per clinic studied, and more time than previously scheduled would be needed to train counterparts. Thus, we revised our timetable where 10 days would be devoted to field preparation, training MOH personnel in PFA, and translating data collection forms and an edited version of the instruction manual into Spanish, followed by 5 days devoted to data collection in 5 health establishments.

Early in our discussions with MOH personnel, we learned that their principal objective of doing PFA was not compatible with what the system is designed to do. The objective of the MOH in implementing PFA was to develop "criteria" of health care on a national scale from a study of 22 sample clinics. This objective was not stated either in the USAID/El Salvador October cable or during Dr. Morris' meeting with the MOH in December. We stressed that PFA is designed to study individual clinics per se, and even for its stated purpose only a very adequate sampling frame and careful sample design would enable one to go beyond the single clinic focus of PFA. Experience thus far in the United States has indicated that it is very difficult to define an adequate sampling frame in which a sample would be more efficient than a census of clinics.

We also pointed out that the 22 clinics that the MOH had selected for study were not a representative sample of MOH health establishments in the country, which would argue against the development of health care norms on a national scale, even if PFA could contribute toward the development of norms. In addition, we emphasized that although physical and organizational similarities may exist between facilities within a given type (i.e., hospital, health center, health unit, or health post) as MOH personnel argued they did, thus permitting generalization, personnel and patient dynamics unique to each facility may limit generalization beyong the single clinic under study.

Differences on how PFA should be conducted in the clinics and the way to interpret the output also became apparent during our discussions. Although PFA is designed to be conducted by clinic personnel themselves, the MOH felt that more reliable data would be obtained if outside personnel were employed. Although we explained the bias and the cost implications introduced by this procedure, the MOH insisted in using outside personnel for data collection. With respect to data interpretation, the MOH seemed reluctant to return to the study clinics to

discuss the output with clinic personnel. In our opinion, data interpretation only at the central level and without the involvement of clinic personnel would result in an incomplete analysis of the data and the possibility of reaching erroneous conclusions. Clinic staff are really the only ones to whom the results must be clear and lack of feedback at the clinic level would make improvement and change difficult.

Finally, sterilization clinics were not included among the proposed 22 study clinics selected by the MOH. Based on the October mission cable, Dr. Morris' discussions in December, and discussions with AID/POP/W, we anticipated implementing PFA in outpatient sterilization clinics and had made a special trip to the Johns Hopkins School of Public Health (Dr. Hugh Davis' clinic) in Baltimore Maryland in order to prepare ourselves for this task. The cable read, "With respect to VSC, the MOH has recognized that the present system also needs improvement and would expect consultants to focus on this aspect of the program also."

Because of the conceptual differences that existed between MOH personnel and ourselves and the apparent MOH "change in ground rules," we seriously considered terminating the consultation after the end of our first week in El Salvador. However, as a compromise, 5 health establishments (Unidades de Salud) were selected for study as a demonstration project. PFA would be conducted in these and the results analyzed to assess the degree of similarity between the clinics. If the results were similar, the MOH would continue with the 22 clinics originally chosen. If the results were not similar, a new method for developing national health care guidelines would be considered.

The 5 health units were selected on the basis of their proximity to San Salvador, type of care offered, i.e., family planning service only and integrated services, and number of family planning patient visits, i.e., 6 or more per day. The clinics chosen were Ciudad Delgado, Izalco, Lourdes, San Miguelito, and San Sebastian. The PFA manual and data collection forms were edited and translated into Spanish. In addition, training sessions for the entire study team were conducted prior to the first clinic visit.

Only 2 clinics--Ciudad Delgado and Izalco--were studied during our final week in El Salvador. Civil unrest in San Salvador and the unavailability of transportation precluded studying the remaining 3 clinics.

Ciudad Delgado, a health unit which provides family planning services during established hours by designated staff in addition to other health services, was the first facility studied. The second clinic was Health Unit Izalco, which provides family planning services in an integrated setting, i.e., no fixed hours for family planning or personnel assigned to provide these services. The only significant problem in studying

these clinics proved to be the inability to register all patients on data collection Forms No. 3 and No. 4 prior to their entering the clinic. This meant that the movements of some patients through the clinic went unrecorded. The use of a study team to record times of patients in contact with clinic personnel proved to be satisfactory. Nevertheless, the use of time recorders, and the fact that the patients' files were not always available at every station in the clinic the patients visited, meant that the patients had to hand carry PFA Form No. 3 from station to station. Ideally, Form No. 3 should be attached to the patient's file to insure its availability at every station in the clinic. In Izalco some patients left their Form No. 3 in the waiting room of the clinic when visiting some of the stations. If patients are to carry Form No. 3 as specified in the study protocol, greater coordination with patients and clinic personnel will be required to successfully record patient flow through the clinic.

C. Results

Prior to our departure, we manually graphed the clinic sessions that were studied, calculated some of the statistics that appear in the computer output, and discussed the findings with our MOH counterparts. A copy of the statistical output for the 2 clinics appears in Appendix B to this report. (Because of their size, the graphical output for the 2 study clinics are not attached to this report. However, copies of the graphical output were given to AID/POP/W as well as USAID/El Salvador.) No attempt will be made here to provide a detailed analysis of the data since such an analysis should always be done in conjunction with the clinic staff. However, a brief discussion of some of the findings is presented below. During a proposed follow-up visit of 2 FPED/CDC consultants in April 1979, it is hoped that it will be possible to analyze the output with MOH and clinic staff.

Izalco

The graphical output for this clinic shows a large disorganized clinic. There does not seem to be a standard pattern of care, and patients appear to be seen almost at random. For example, patient #44 only had the "charla" (health education talk), saw the receptionist and the pharmacist, but was in the clinic almost 6 hours; patient #46 arrived later, had the "charla," and saw an interviewer, a physician, and a pharmacist, yet was out of the clinic 3 hours earlier. The disorganization was such that the average patient's time in the clinic was 3 hours, 29 minutes, while only 33 minutes of services were received (16% of the time spent in the clinic). Also, 53% of personnel time was actually spent serving patients. Depending on type of personnel, the range was from 5% to 84% of time in contact with patients.

In addition to poor utilization of patient's time, there is also what appears to be gaps in utilization of personnel, especially person "A," a highly trained "maternal-infant nurse" and person "C," whose job is to interview the patient after the patient sees the physician (entrevista post-consulta).

It is difficult to recommend specific improvements without input from the staff. However, areas of possible change are:

1. Staggering schedules of patient arrival
2. Numbering patients so they do not get "forgotten"
3. Defining what stops are needed for various types of visits
4. An additional "maternal-infant nurse," or some other staff member
5. Redefining some tasks, e.g., let a nurse or other employee gather certain information which would make the physician's job easier and faster

Ciudad Delgado

In this clinic, although other types of patients were seen during the day, only the family planning patients were followed. Most of the patients arrived well before 7:00 A.M. and had a "charla" (health education session) and then waited until almost 10:00 A.M. to receive the rest of their services. Because of this long wait, the patients spent an average of 3 hours, 38 minutes in the clinic while receiving only 40 minutes of services (18% of the time spent in the clinic). Between 8:00 A.M. and 10:00 A.M., the clinic saw another group of patients (non-family planning). Thus, it seems that it would be better to have family planning patients come in at 9:00 A.M. or 9:30 A.M. and eliminate 2 hours of waiting time.

Although 46% of personnel time was spent with patients (range: 3%-69%), it is difficult to assess whether personnel were well utilized without further input from clinic staff.

V. FUTURE ACTIVITIES

On March 15, 1979, a meeting was held with Dra. de Aparicio, Ms. Dabbs, and our MOH counterparts to discuss future activities related to PFA in El Salvador. Although conceptual differences still existed over what PFA can do and cannot do, and the needs of the MOH, it was agreed that 22 clinics would be studied.

It was proposed that CDC/FPED consultants will return to El Salvador in April to assist the MOH in the interpretation of the data processed for Ciudad Delgado and Izalco. Before their arrival, MOH personnel are to have developed a detailed instruction manual on the implementation and conduct of PFA, which will be reviewed by the CDC/FPED consultants. USAID/El Salvador should advise FPED/CDC of progress made in the development of the instruction manual.

In June 1979, the remaining 3 of 5 clinics, not studied as scheduled in March, will be studied as part of a 1-week training course in PFA for MOH personnel. Immediately following training, the 22 clinics originally

selected will be studied. These will include at least 1 health post, health unit, health center, and hospital-based family planning clinic from each of the 5 MOH health regions in the country. A CDC/FPED consultant will assist the MOH in the training, and CDC/FPED will computer process the data collected from these 25 clinics.

VI. CONCLUDING COMMENTS

We would like to repeat that the principal focus of PFA is to improve clinic efficiency specific to those clinics studied. Generalizations beyond clinics under study may not be valid because of the reasons stated earlier in this report. Although we consistently emphasized this point during our consultation, the MOH persisted in its wish to study a non-random sample of 22 clinics in order to develop national criteria of health care. Realizing that we could not change the MOH position, we urged that before the MOH developed national norms of health care based on PFA, they repeat the PFA study in the originally selected 22 clinics to assess the quality of their analysis and the impact of their recommendations. This will not be done; the MOH felt that this would require more time than was available to develop norms. (NOTE: If the MOH would elect to allow clinic personnel to collect data on themselves rather than hire a team of "timers" for this purpose, 2 studies could be conducted in each of the 22 clinics in a relatively short period of time.)

The results of the 2 clinics studied in April show that there are real problems in the flow of patients in these clinics, and that improvement is indeed needed. The fact that the average patient time spent in each clinic was about 3-1/2 hours provides documentation that supports poor continuation rates found in earlier studies. These problems, as well as others, may exist in other MOH health establishments. It is obvious that dependence on only clinic distribution of contraceptives will not provide the services needed to reach national goals.

Because the MOH is interested in improving the efficiency of its clinics, we are willing to assist it in implementing the PFA technique, even though conceptual differences still exist. It is our hope that during the implementation of PFA in El Salvador the MOH will reconsider its present position. In any event, the study of the 22 clinics should provide MOH officials valuable insights into the problems its clinics are experiencing and suggest ways to improve patient flow and personnel utilization.

RS Monteith

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ANALISIS DE FLUJO DE PACIENTES
REGISTRO DE CLINICA

1

1. UBICACION DEL ESTABLECIMIENTO DE SALUD

Departamento..... (Código) (1-2)

Localidad.....(Código) (3-5)

Establecimiento.....(Código) (6-7)

2. ESTUDIO NUMERO..... (8)

3. TIPO DE ESTABLECIMIENTO.....(Código) (9-14)

4. FECHA

Mes..... (15-16)

Día..... (17-18)

Año..... (19-20)

5. LAS HORAS REGULARES DE ADMISION DE PACIENTES

	Hora	Min.	A/P	
Comenzando a.....				(21-25)
Terminando a.....				(26-30)

6. NUMERO DE PACIENTES CITADOS..... (31-33)

7. ANOTE AQUI LA HORA MAS TEMPRANA DE LOS SIGUIENTES DATOS (VEASE CASILLAS 21-25 DE (ESTE FORMULARIO) CASILLAS 12-15 EN EL (Registro de Personal) CASILLAS 13-16 EN EL (Registro de Pacientes).

Hora	Min.	A/P	
			(34-38)

8. LA HORA MAS TARDIA (VEASE CASILLAS 26-30 DE ESTE FORMULARIO Y CASILLA 48-51 EN EL REGISTRO DE PERSONAL)

			(39-43)

9. ESTACIONES PROGRAMADAS EN LA CLINICA

Número de estaciones exigidas a todos los pacientes

Tipo de Visita	R	L	H	A	C	E	S	O	D	
Inscripción										(44-52)
Subsecuente/problemas medicos										(53-61)
Reabastecimiento										(62-70)
Otro: Método quirurgico u otros servicios en clínica integrada.										(71-79)

1 (80)

ANALISIS DE FLUJO DE PACIENTES
REGISTRO DE PERSONAL

2

PREFIX: (1-8)

1. LETRA PERSONAL DE IDENTIFICACIÓN (Ver Formulario 5).....(Código) (9)
2. PROFESION (Ver Formulario 5).....(Código) (10)
3. TAREA ASIGNADA EN LA CLINICA (Ver Formulario 5).....(Código) (11)
4. DESCRIPCION DE LA TAREA _____

Hora Min.

5. LA HORA PROGRAMADA PARA INICIAR CONTACTO CON PACIENTE.... : (12-15)

6. TIEMPO FUERA DE LA SESION:

PERIODOS DE TIEMPO, QUE EXCEDEN A 15 MINUTOS EN LOS QUE INTERRUMPA SU TRABAJO PARA: ALMUERZO U OTRAS ACTIVIDADES NO RELACIONADAS DIRECTAMENTE CON SU TRABAJO.

	Hora	Min.		Hora	Min.	
de	:		a	:		(16-23)
de	:		a	:		(24-31)
de	:		a	:		(32-39)
de	:		a	:		(40-47)

7. LA HORA EN QUE SE CONCLUYE ESTA TAREA..... : (48-51)

8. SI UD. TIENE QUE VIAJAR PARA TRABAJAR EN ESTA CONSULTA, RECIBE REEMBOLSO POR LOS GASTOS DE VIAJE:
   A. Kilómetros viajados (ida y vuelta)..... (52-54)
   B. Reembolso por kilómetro (redondeado al próximo número entero)..... (55-56)
   C. Tiempo de ida y vuelta (en minutos)..... (57-59)
9. LA FUENTE DE FONDOS PARA SU SUELDO.....(Código) (60)

Colones y Centavos Por

10. SUELDO COMPLETO..... . (61-68)
    MAS..... . (69-73)
11. NUMERO DE DIAS DE AUSENCIA POR ENFERMEDAD, VACACIONES Y DIAS FERIADOS..... (74-75)
12. QUE PORCENTAJE DE SU SUELDO RECIBE COMO AGUINALDO..... (76-77)
13. NUMERO DE HORAS QUE TRABAJA A LA SEMANA (Cifra aproximada)... (78-79)

2 (80)

ANALISIS DE FLUJO DE PACIENTES
REGISTRO DE PACIENTES

3

Prefix: (1-8)

1. PACIENTE NUMERO (Ver Formulario 4)..... (9-10)
2. MOTIVO DE CONSULTA.....(Código) (11)
3. METODO DE PLANIFICACION FAMILIAR.....(Código) (12)

	Hora	Min.	
4. HORA DE LLEGADA AL ESTABLECIMIENTO DE SALUD.....	:	:	(13-16)
5. HORA DE CITA (de acuerdo con el registro de la clinica y/o tarjeta de cita).....	:	:	(17-20)

6. TIEMPO DE SERVICIO AL PACIENTE:

	CODIGO PERSONAL		Inicio del Servicio Hora	Min.		Servicio Completado Hora	Min.	
Primer contacto.....		de	:		a	:		(21-29)
Segundo contacto.....		de	:		a	:		(30-38)
Tercer contacto.....		de	:		a	:		(39-47)
Cuarto contacto.....		de	:		a	:		(48-56)
Quinto contacto.....		de	:		a	:		(57-65)
Sexto contacto.....		de	:		a	:		(66-74)

3 (80)

PREFIX: (1-8)

7. PACIENTE NUMERO..... (9-10)

NUMERO DE TARJETA..... 2 (11)

	Código		Hora	Min.		Hora	Min.	
Septimo contacto.....		de	:		a	:		(12-20)
Octavo contacto.....		de	:		a	:		(21-29)
Noveno contacto.....		de	:		a	:		(30-38)
Décimo contacto.....		de	:		a	:		(39-47)
Undécimo contacto.....		de	:		a	:		(48-56)
Duodécimo contacto.....		de	:		a	:		(57-65)
Décimo tercero contacto.....		de	:		a	:		(66-74)

3 (80)

ANALISIS DE FLUJO DE PACIENTES
REGISTRO DE PACIENTES

PREFIX: (1-8)

8. PACIENTE NUMERO..... (9-10)

NUMERO DE TARJETA..... 3 (11)

	Código		Hora	Min.		Hora	Min.	
Decimo cuarto contacto.....		de	:		a	:		(12-20)
Decimo quinto contacto.....		de	:		a	:		(21-29)
Decimo sexto contacto.....		de	:		a	:		(30-38)
Decimo septimo contacto.....		de	:		a	:		(39-47)
Decimo octavo contacto.....		de	:		a	:		(48-56)
Decimo noveno contacto.....		de	:		a	:		(57-65)
Veinteavo contacto.....		de	:		a	:		(66-74)

3 (80)

PREFIX: (1-8)

9. PACIENTE NUMERO..... (9-10)

NUMERO DE TARJETA..... 4 (11)

	Código		Hora	Min.		Hora	Min.	
Veinte y un contacto.....		de	:		a	:		(12-20)
Veinte y dos contacto.....		de	:		a	:		(21-29)
Veinte y tres contacto		de	:		a	:		(30-38)
Veinte y cuatro contacto.....		de	:		a	:		(39-47)
Veinte y cinco contacto.....		de	:		a	:		(48-56)
Veinte y seis contacto.....		de	:		a	:		(57-65)
Veinte y siete contacto.....		de	:		a	:		(66-74)

3 (80)

HOJA DE REGISTRO DE PACIENTES

Número de página: _____

ESTABLECIMIENTO _____ FECHA: _____ HORA: _____

PACIENTE NUMERO	N O M B R E	HORA DE	
		Llegada	Cita
1			
2			
3			
4			
5			
6			
7			
8			
9			
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
0			

ANALISIS DE FLUJO DE PACIENTES. LISTA DE PERSONAL

ESTABLECIMIENTO DE SALUD: FECHA: HORA: NUMERO DEL ESTUDIO

NOMBRE	Código	PROFESION	Código	TAREA ASIGNADA	Código	SUELDO		Por	DIAS LIBRES	% SUELDO AGUINALDO	HORAS SEMANALES DE TRABAJO

IZALCO

TABLE 1 - SUMMARY

PATIENT FLOW ANALYSIS
STATE CODE FC - COUNTY CODE 921
BUILDING CODE 01 - STUDY NO. 1
MAR 13, 1979 - 07:00 A.M. - 02:00 P.M.

DATA SET CODE: FC-921-01-1

CLINIC TYPE: GENERAL, MEDICAL SERVICES ONLY, INTEGRATED CLINIC CONDUCTED IN A(N) URBAN FREESTANDING CLINIC DURING CONVENIENCE HOURS

95 % CONFIDENCE INTERVAL		
		INTRODUCTION
	10	APPOINTMENTS WERE MADE (SEE TABLE 1)
	30	PERCENT OF APPOINTMENTS WERE KEPT
	10	FAMILY PLANNING PATIENTS WERE SERVED (SEE TABLE 3)
	62	NON-FAMILY PLANNING PATIENTS WERE SERVED
	1	PATIENTS REGISTERED BUT RECEIVED NO SERVICES (SEE TABLE 2)
	42	SCHEDULED STATION STOPS WERE MISSED (SEE TABLE 4, ITEM 11)
	10	UNSCHEDULED STATION STOPS WERE MADE (SEE TABLE 4, ITEM 12)
	11	PERSONNEL WERE SCHEDULED TO WORK IN THIS CLINIC (SEE TABLE 4, ITEM 1)
	11	PERSONNEL WORKED IN THIS CLINIC (SEE TABLE 4, ITEM 2)
	6:10	WAS THE DURATION OF THIS CLINIC - FIRST TO LAST PATIENT (HOURS:MINUTES)
		PATIENT ORIENTED DATA
14 - 17	16	PERCENT OF THE AVERAGE PATIENT'S TIME IN THE CLINIC WAS SPENT IN CONTACT WITH CLINIC PERSONNEL (SEE TABLE 2)
29 - 36	33	MINUTES WERE SPENT BY THE AVERAGE PATIENT IN CONTACT WITH CLINIC PERSONNEL (SEE TABLE 2)
189 - 230	209	MINUTES WERE SPENT BY THE AVERAGE PATIENT IN THE CLINIC (SEE TABLE 2)
		PERSONNEL ORIENTED DATA
35 - 71	53	PERCENT OF PERSONNEL TIME AVAILABLE WAS SPENT SERVING PATIENTS (SEE TABLE 4, ITEM 7)
	15	MINUTES OF PERSONNEL TIME WERE SPENT WITH THE AVERAGE PATIENT (SEE TABLE 4, ITEMS 5 AND 8)
	28	MINUTES OF PERSONNEL TIME WERE AVAILABLE PER PATIENT SERVED (SEE TABLE 4, ITEMS 3 AND 8)
	19	PERCENT OF AVAILABLE PERSONNEL TIME WAS CLERICAL (SEE TABLE 4, ITEM 4)
	12	PERCENT OF PERSONNEL TIME SPENT WITH PATIENTS WAS CLERICAL (SEE TABLE 4, ITEM 6)
		COST DATA
	$ 7.08	WAS THE AVERAGE PERSONNEL COST FOR AN INITIAL VISIT (SEE TABLE 3)
	0.0	WAS THE AVERAGE PERSONNEL COST FOR AN ANNUAL VISIT (SEE TABLE 3)
	1.11	WAS THE AVERAGE PERSONNEL COST FOR A MEDICAL PROBLEM VISIT (SEE TABLE 3)
	0.66	WAS THE AVERAGE PERSONNEL COST FOR A RESUPPLY VISIT (SEE TABLE 3)
	2.14	WAS THE AVERAGE PERSONNEL COST FOR OTHER TYPES OF FAMILY PLANNING VISITS (SEE TABLE 3)
	2.61	WAS THE AVERAGE PERSONNEL COST FOR NON- FAMILY PLANNING VISITS
	0.0	WAS THE PERSONNEL COST TO BUDGET CODE A
	0.0	WAS THE PERSONNEL COST TO BUDGET CODE B
	0.0	WAS THE PERSONNEL COST TO BUDGET CODE C
	0.0	WAS THE PERSONNEL COST TO BUDGET CODE D
	0.0	WAS THE PERSONNEL COST TO BUDGET CODE E
	183.40	WAS THE TOTAL PERSONNEL COST FOR THIS CLINIC
	0.0	WAS THE TOTAL TRAVEL COST FOR THIS CLINIC

DEFINITIONS:

95% CONFIDENCE INTERVAL: UNDER SIMILAR CLINIC CIRCUMSTANCES AND WITH THE SAME NUMBER OF PATIENTS AND STAFF, THE TRUE VALUE WOULD FALL WITHIN THE GIVEN RANGE IN 95 OUT OF 100 TRIALS

PAGE 2 - PATIEN. SUMMARY

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DATA SET CODE: FC-921-01-1

TABLE 1 ---------- PATIENT TIME OF ARRIVAL IN THE CLINIC RELATIVE TO APPOINTMENT TIME (MINUTES)

	EARLY > 45	EARLY 16-45	ON TIME +/- 15	LATE 16-45	LATE > 45	PATIENTS WITH APPOINTMENTS
FAMILY PLANNING						
NO. OF PATIENTS	1	0	1	0	0	2
PERCENT OF TOTAL	50%	0%	50%	0%	0%	100 %
NON-FAMILY PLANNING						
NO. OF PATIENTS	0	0	1	0	0	1
PERCENT OF TOTAL	0%	0%	100%	0%	0%	100 %

TABLE 2 ---------- AVERAGE PATIENT TIME IN THE CLINIC (MINUTES) / PATIENT TIME RECEIVING SERVICES (MINUTES) / PROPORTION OF PATIENT TIME RECEIVING SERVICES

VISIT TYPE	MEAN	95 % CONF. INTERVAL	RANGE MAX	RANGE MIN	MEAN	95 % CONF. INTERVAL	RANGE MAX	RANGE MIN	PERCENT RECEIVING SERVICES	95 % CONF. INTERVAL
INITIAL	230	*** - ***	230	230	49	*** - ***	49	49	21 %	** - **
ANNUAL	0	*** - ***	0	0	0	*** - ***	0	0	0 %	** - **
MEDICAL	192	1 - 459	213	171	41	1 - 212	54	27	21 %	** - **
RESUPPLY	76	1 - 164	159	43	11	1 - 21	17	3	15 %	1 - 38
OTHER	145	1 - 355	227	58	24	17 - 30	26	21	16 %	1 - 99
TOTAL FP	135	1 - 365	230	43	25	1 - 59	54	3	18 %	1 - 42
NON-FP	221	200 - 243	365	19	34	31 - 38	76	1	15 %	14 - 17

TABLE 3 ---------- NUMBER OF PATIENTS / COST PER PATIENT SERVED BY VISIT TYPE AND FAMILY PLANNING METHOD

VISIT TYPE	PILL NO/ $	IUD NO/ $	FOAM/CON NO/ $	DIAPH. NO/ $	OTHER NO/ $	NONE NO/ $	UNKNOWN NO/ $	ALL METH NO/ $	PERCENT PTS. BY VIS. TP	PATIENTS WITH APPT BY VIS TP
INITIAL	1/ 7.08	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	1/ 7.08	10 %	0
ANNUAL	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0 %	0
MEDICAL	0/ 0.0	1/ 1.54	1/ 0.68	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	2/ 1.11	20 %	1
RESUPPLY	4/ 0.66	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	4/ 0.66	40 %	1
OTHER	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	3/ 2.14	0/ 0.0	3/ 2.14	30 %	0
TOTAL FP PATIENTS	5	1	1	0	0	3	0	10	----	2
PERCENT BY METHOD	50 %	10 %	10 %	0 %	0 %	30 %	0 %	100 %	100 %	---

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PAGE 3 - PERSONNEL SUMMARY

TABLE 4 ---- PERSONNEL STATISTICS BY TASK

DATA SET CODE: FC-921-01-1

	TASK											
	RECEP	LAB WORK	MED HIST	ASST CLIN	CLIN	EDUC	SOC WORK	OTHER HLTH	OTHER CLERK	PHYS.	ADMIN	TOTAL
1. NO. OF PERSONNEL SCHEDULED	1	1	1	0	1	1	2	1	1	2	0	11
2. NO. OF PERSONNEL WHO WORKED	1	1	1	0	1	1	2	1	1	2	0	11
3. PERSONNEL MINUTES AVAILABLE	218	60	79	0	239	30	482	239	170	485	0	2002
4. PERCENT OF TOTAL PERSONNEL MINUTES AVAILABLE	11 %	3 %	4 %	0 %	12 %	1 %	24 %	12 %	8 %	24 %	0 %	100 %
5. PERSONNEL MINUTES IN PATIENT CONTACT	122	19	66	0	114	12	181	170	9	368	0	1061
6. PERCENT OF TOTAL TIME IN PATIENT CONTACT	11 %	2 %	6 %	0 %	11 %	1 %	17 %	16 %	1 %	35 %	0 %	100 %
7. PER. NT OF AVAILABLE TIME IN PAT. CONTACT (#5/#3)	56 %	32 %	84 %	0 %	48 %	40 %	38 %	71 %	5 %	76 %	0 %	53 %
8. NO. OF PATIENTS SERVED	33	5	48	0	11	54	28	61	8	43	0	72
9. AVERAGE WAITING TIME PRECEDING THIS STATION	85	32	31	0	51	25	34	24	43	84	0	176
10. 95 % CONF. INTERVAL	67-104	1- 63	27- 36	***-***	15- 86	22- 28	20- 48	16- 31	1- 84	69- 99	***-***	157-196
11. SCHEDULED STOPS MISSED BY VISIT TYPE												
INITIAL	1	1	0	2	0	2	0	0	1	—	—	7
ANNUAL	0	0	0	0	0	0	0	0	0	—	—	0
MEDICAL	0	0	0	2	0	0	2	0	0	—	—	4
RESUPPLY	4	0	3	6	4	7	1	0	4	—	—	31
12. UNSCHEDULED STOPS MADE BY VISIT TYPE												
INITIAL	0	0	0	0	0	0	0	1	0	—	—	1
ANNUAL	0	0	0	0	0	0	0	0	0	—	—	0
MEDICAL	2	0	2	0	2	2	0	1	0	—	—	9
RESUPPLY	0	0	0	0	0	0	0	0	0	—	—	0

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PAGE 4 - PERSONNEL SUMMARY (CONTINUED)

DATA SET CODE: FC-921-01-1

TABLE 5 --- TIME (MINUTES) AND COST PER PATIENT SERVED BY TASK AND VISIT TYPE

TASK	VISIT TYPE	PAT. SERVICE MINUTES TOTAL	PAT. SERVICE MINUTES MEAN	95 % CONF. INTERVAL	COST TOTAL	COST MEAN PER PATIENT
RECEPTIONIST	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	2	1	1 - 1	0.11	0.06
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	13	13	*** - ***	0.72	0.72
	TOTAL FP	15	5	1 - 22	0.83	0.28
	NON-FP	138	5	4 - 6	7.61	0.25
	DIST COST				0.0	0.0
LAB WORK	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	0	0	*** - ***	0.0	0.0
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	4	4	*** - ***	0.56	0.56
	TOTAL FP	4	4	*** - ***	0.56	0.56
	NON-FP	15	4	1 - 10	2.09	0.52
	DIST COST				0.0	0.0
MEDICAL HISTORY	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	40	20	1 - 249	0.22	0.11
	RESUPPLY	9	9	*** - ***	0.05	0.05
	OTHER	7	4	1 - 10	0.04	0.02
	TOTAL FP	56	11	1 - 30	0.31	0.06
	NON-FP	568	13	10 - 16	3.17	0.07
	DIST COST				0.0	0.0
CLINICIAN	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	14	7	1 - 58	1.77	0.88
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	23	12	[illegible] - 145	2.90	1.45
	TOTAL FP	37	9	1 - 24	4.67	1.17
	NON-FP	81	12	2 - 21	10.22	1.46
	DIST COST				0.0	0.0
EDUCATION	INITIAL	12	12	*** - ***	0.03	0.03
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	24	12	12 - 12	0.07	0.03
	RESUPPLY	12	12	*** - ***	0.03	0.03
	OTHER	12	12	*** - ***	0.03	0.03
	TOTAL FP	60	12	12 - 12	0.17	0.03
	NON-FP	582	12	12 - 12	1.69	0.03
	DIST COST				0.0	0.0

PAGE 5 - PERSONNEL SUMMARY (CONTINUED)

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DATA SET CODE: FC-921-01-1

TABLE 5 --- TIME (MINUTES) AND COST PER PATIENT SERVED BY TASK AND VISIT TYPE

TASK	VISIT TYPE	PAT. SERVICE MINUTES TOTAL	PAT. SERVICE MINUTES MEAN	95 % CONF. INTERVAL	COST TOTAL	COST MEAN PER PATIENT
SOCIAL SERVICES	INITIAL	10	10	*** - ***	0.85	0.45
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	0	0	*** - ***	0.0	0.0
	RESUPPLY	23	8	1 - 26	2.55	0.85
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	33	8	1 - 19	3.40	0.65
	NON-FP	186	3	5 - 10	26.62	1.11
	DIST COST				0.0	0.0
OTHER HEALTH	INITIAL	6	6	*** - ***	0.32	0.32
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	1	1	*** - ***	0.05	0.05
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	5	3	1 - 9	0.27	0.13
	TOTAL FP	12	3	1 - 6	0.64	0.16
	NON-FP	186	3	3 - 4	9.91	0.17
	DIST COST				0.0	0.0
OTHER CLERICAL	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	0	0	*** - ***	0.0	0.0
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	1	1	*** - ***	0.34	0.34
	TOTAL FP	1	1	*** - ***	0.34	0.34
	NON-FP	8	1	1 - 1	2.74	0.39
	DIST COST				0.0	0.0
PHYSICIAN	INITIAL	21	21	*** - ***	5.87	5.87
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	0	0	*** - ***	0.0	0.0
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	6	6	*** - ***	1.57	1.57
	TOTAL FP	27	14	1 - 109	7.44	5.72
	NON-FP	361	9	7 - 10	97.97	2.39
	DIST COST				0.0	0.0
ALL TASKS	INITIAL	49	49	*** - ***	7.08	7.08
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	81	41	1 - 212	2.22	1.11
	RESUPPLY	44	11	1 - 21	2.63	0.66
	OTHER	71	24	17 - 30	6.43	2.14
	TOTAL FP	245	25	13 - 36	18.36	1.84
	NON-FP	2125	34	31 - 38	162.04	2.61
	DIST COST				0.0	0.0

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PAGE 6 - PERSONNEL SUMMARY (CONTINUED)

DATA SET CODE: FC-921-01-1

TABLE 6 ------ INDIVIDUAL PERSONNEL DATA

PERSONNEL CODE	OFFICIAL DESIGNATION CODE	TASK ASSIGNED CODE	COST RATE $/MIN.	NO. OF PATIENTS SEEN	TIME WITH PATIENTS (MINUTES) MEAN	MAX	MIN	TOTAL	TOTAL TIME IN CLINIC (MINUTES)	PERCENT OF TIME WITH PATIENTS
A	P	E	.062	54	0	12	6	12	30	40 %
A	P	C	.062	11	10	32	1	114	239	48 %
C	N	S	.062	11	4	11	1	47	262	18 %
G	D	P	.224	18	11	21	5	201	269	75 %
H	D	P	.210	25	7	14	2	167	216	77 %
L	L	L	.044	5	4	10	1	19	60	32 %
O	L	H	.044	48	1	42	1	65	79	84 %
O	L	O	.044	61	3	12	1	170	239	71 %
T	N	S	.062	19	7	28	3	134	220	61 %
V	D	D	.018	8	1	2	1	9	170	5 %
Z	C	R	.039	33	4	15	1	122	218	56 %

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APPENDIX B

PAGE 1 - SUMMARY

PATIENT FLOW ANALYSIS

DATA SET CODE: FC-911-01-1

STATE CODE FC - COUNTY CODE 911
BUILDING CODE 01 - STUDY NO. 1
MAR 12, 1976 - 07:00 A.M. - 11:00 A.M.
CLINIC TYPE: GENERAL, MEDICAL SERVICES ONLY, FAMILY PLANNING CLINIC CONDUCTED IN A(N)
URBAN FREESTANDING CLINIC DURING REGULAR BUSINESS HOURS

INTRODUCTION

95 % CONFIDENCE INTERVAL		
	3	APPOINTMENTS WERE MADE (SEE TABLE 1)
	88	PERCENT OF APPOINTMENTS WERE KEPT
	15	FAMILY PLANNING PATIENTS WERE SERVED (SEE TABLE 3)
	1	NON-FAMILY PLANNING PATIENTS WERE SERVED
	0	PATIENTS REGISTERED BUT RECEIVED NO SERVICES (SEE TABLE 2)
	17	SCHEDULED STATION STOPS WERE MISSED (SEE TABLE 4, ITEM 11)
	30	UNSCHEDULED STATION STOPS WERE MADE (SEE TABLE 4, ITEM 12)
	6	PERSONNEL WERE SCHEDULED TO WORK IN THIS CLINIC (SEE TABLE 4, ITEM 1)
	9	PERSONNEL WORKED IN THIS CLINIC (SEE TABLE 4, ITEM 2)
	4:42	WAS THE DURATION OF THIS CLINIC - FIRST TO LAST PATIENT (HOURS:MINUTES)

PATIENT ORIENTED DATA

95 % CONFIDENCE INTERVAL		
14 - 22	18	PERCENT OF THE AVERAGE PATIENT'S TIME IN THE CLINIC WAS SPENT IN CONTACT WITH CLINIC PERSONNEL (SEE TABLE 2)
33 - 56	43	MINUTES WERE SPENT BY THE AVERAGE PATIENT IN CONTACT WITH CLINIC PERSONNEL (SEE TABLE 2)
188 - 249	218	MINUTES WERE SPENT BY THE AVERAGE PATIENT IN THE CLINIC (SEE TABLE 2)

PERSONNEL ORIENTED DATA

95 % CONFIDENCE INTERVAL		
18 - 25	42	PERCENT OF PERSONNEL TIME AVAILABLE WAS SPENT SERVING PATIENTS (SEE TABLE 4, ITEM 7)
	16	MINUTES OF PERSONNEL TIME WERE SPENT WITH THE AVERAGE PATIENT (SEE TABLE 4, ITEMS 5 AND 8)
	34	MINUTES OF PERSONNEL TIME WERE AVAILABLE PER PATIENT SERVED (SEE TABLE 4, ITEMS 3 AND 8)
	19	PERCENT OF AVAILABLE PERSONNEL TIME WAS CLERICAL (SEE TABLE 4, ITEM 4)
	5	PERCENT OF PERSONNEL TIME SPENT WITH PATIENTS WAS CLERICAL (SEE TABLE 4, ITEM 8)

COST DATA

$ 2.35	WAS THE AVERAGE PERSONNEL COST FOR AN INITIAL VISIT (SEE TABLE 3)
0.0	WAS THE AVERAGE PERSONNEL COST FOR AN ANNUAL VISIT (SEE TABLE 3)
2.27	WAS THE AVERAGE PERSONNEL COST FOR A MEDICAL PROBLEM VISIT (SEE TABLE 3)
0.40	WAS THE AVERAGE PERSONNEL COST FOR A RESUPPLY VISIT (SEE TABLE 3)
0.0	WAS THE AVERAGE PERSONNEL COST FOR OTHER TYPES OF FAMILY PLANNING VISITS (SEE TABLE 3)
3.34	WAS THE AVERAGE PERSONNEL COST FOR NON- FAMILY PLANNING VISITS
0.0	WAS THE PERSONNEL COST TO BUDGET CODE A
0.0	WAS THE PERSONNEL COST TO BUDGET CODE B
0.0	WAS THE PERSONNEL COST TO BUDGET CODE C
0.0	WAS THE PERSONNEL COST TO BUDGET CODE D
0.0	WAS THE PERSONNEL COST TO BUDGET CODE E
36.50	WAS THE TOTAL PERSONNEL COST FOR THIS CLINIC
0.0	WAS THE TOTAL TRAVEL COST FOR THIS CLINIC

DEFINITIONS:

95% CONFIDENCE INTERVAL: UNDER SIMILAR CLINIC CIRCUMSTANCES AND WITH THE SAME NUMBER OF PATIENTS AND STAFF, THE TRUE VALUE WOULD FALL WITHIN THE GIVEN RANGE IN 95 OUT OF 100 TRIALS

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PAGE 2 - PATIENT SUMMARY

DATA SET CODE: FC-911-01-1

TABLE 1 ---------- PATIENT TIME OF ARRIVAL IN THE CLINIC RELATIVE TO APPOINTMENT TIME (MINUTES)

	EARLY > 45	EARLY 16-45	ON TIME +/- 15	LATE 16-45	LATE > 45	PATIENTS WITH APPOINTMENTS
FAMILY PLANNING						
NO. OF PATIENTS	0	3	0	0	0	3
PERCENT OF TOTAL	0%	100%	0%	0%	0%	100 %
NON-FAMILY PLANNING						
NO. OF PATIENTS	0	0	0	0	0	0
PERCENT OF TOTAL	0%	0%	0%	0%	0%	100 %

TABLE 2 ----------

VISIT TYPE	AVERAGE PATIENT TIME IN THE CLINIC (MINUTES) MEAN	95 % CONF. INTERVAL	RANGE MAX	RANGE MIN	PATIENT TIME RECEIVING SERVICES (MINUTES) MEAN	95 % CONF. INTERVAL	RANGE MAX	RANGE MIN	PROPORTION OF PATIENT TIME RECEIVING SERVICES PERCENT RECEIVING SERVICES	95 % CONF. INTERVAL
INITIAL	142	108 - 175	298	73	53	27 - 80	66	16	28 %	24 - 32
ANNUAL	0	*** - ***	0	0	0	*** - ***	0	0	0 %	** - **
MEDICAL	234	194 - 275	282	124	32	20 - 44	45	7	14 %	11 - 17
RESUPPLY	173	*** - ***	170	170	36	*** - ***	36	36	21 %	** - **
OTHER	0	*** - ***	0	0	0	*** - ***	0	0	0 %	** - **
TOTAL FP	216	[illegible]	282	73	39	29 - 50	66	7	18 %	14 - 22
NON-FP	257	*** - ***	257	257	42	*** - ***	42	42	16 %	** - **

TABLE 3 ---------- NUMBER OF PATIENTS / COST PER PATIENT SERVED BY VISIT TYPE AND FAMILY PLANNING METHOD

VISIT TYPE	METHOD: PILL NO/ $	IUD NO/ $	FOAM/CON NO/ $	DIAPH. NO/ $	OTHER NO/ $	NONE NO/ $	UNKNOWN NO/ $	ALL METH NO/ $	PERCENT PTS. BY VIS. TP	PATIENTS WITH APPT BY VIS TP
INITIAL	5/ 2.55	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	5/ 2.55	33 %	3
ANNUAL	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0 %	0
MEDICAL	5/ 1.98	1/ 1.99	2/ 2.53	0/ 0.0	0/ 0.0	1/ 3.45	0/ 0.0	9/ 2.27	60 %	0
RESUPPLY	1/ 0.40	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	1/ 0.40	7 %	0
OTHER	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0/ 0.0	0 %	0
TOTAL FP PATIENTS	11	1	2	0	0	1	0	15	----	3
PERCENT BY METHOD	73 %	7 %	13 %	0 %	0 %	7 %	0 %	100 %	100 %	---

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PAGE 3 - PERSONNEL SUMMARY

DATA SET CODE: FC-911-01-1

TABLE 4 ---- PERSONNEL STATISTICS BY TASK

	TASK											
	RECEP	LAB WORK	MED HIST	ASST CLIN	CLIN	EDUC	SOC WORK	OTHER HLTH	OTHER CLERK	PHYS.	ADMIN	TOTAL
1. NO. OF PERSONNEL SCHEDULED	1	0	1	1	0	2	1	1	1	1	0	9
2. NO. OF PERSONNEL WHO WORKED	1	0	1	1	0	2	1	1	1	1	0	9
3. PERSONNEL MINUTES AVAILABLE	13	0	38	71	0	75	67	118	94	75	0	551
4. PERCENT OF TOTAL PERSONNEL MINUTES AVAILABLE	2 %	0 %	7 %	13 %	0 %	14 %	12 %	21 %	17 %	14 %	0 %	100 %
5. PERSONNEL MINUTES IN PATIENT CONTACT	9	0	26	51	0	49	46	20	3	51	0	255
6. PERCENT OF TOTAL TIME IN PATIENT CONTACT	4 %	0 %	10 %	20 %	0 %	19 %	18 %	8 %	1 %	20 %	0 %	100 %
7. PERCENT OF AVAILABLE TIME IN PAT. CONTACT (#5/#3)	69 %	0 %	68 %	72 %	0 %	65 %	69 %	17 %	3 %	68 %	0 %	46 %
8. NO. OF PATIENTS SERVED	3	0	16	15	0	12	15	8	2	15	0	16
9. AVERAGE WAITING TIME PRECEDING THIS STATION	6	0	**	42	0	18	10	4	8	0	0	179
10. 95 % CONF. INTERVAL	1- 16	***-***	90-135	30- 55	***-***	2- 35	5- 14	1- 6	1- 39	1- 0	***-***	152-205
11. SCHEDULED STOPS MISSED BY VISIT TYPE												
INITIAL	2	0	0	0	0	1	0	0	5	--	--	8
ANNUAL	0	0	0	0	0	0	0	0	0	--	--	0
MEDICAL	9	0	0	0	0	0	0	0	0	--	--	9
RESUPPLY	0	0	0	0	0	0	0	0	0	--	--	0
12. UNSCHEDULED STOPS MADE BY VISIT TYPE												
INITIAL	0	0	0	0	0	4	0	1	0	--	--	5
ANNUAL	0	0	0	0	0	0	0	0	0	--	--	0
MEDICAL	0	0	0	0	9	6	0	6	1	--	--	22
RESUPPLY	0	0	2	0	0	1	0	0	0	--	--	3

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PAGE 4 - PERSONNEL SUMMARY (CONTINUED)

DATA SET CODE: FC-511-01-1

TABLE 5 --- TIME (MINUTES) AND COST PER PATIENT SERVED BY TASK AND VISIT TYPE

TASK	VISIT TYPE	PAT. SERVICE MINUTES TOTAL	PAT. SERVICE MINUTES MEAN	95 % CONF. INTERVAL	COST TOTAL	COST MEAN PER PATIENT
RECEPTIONIST	INITIAL	9	3	3 - 3	0.52	0.17
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	0	0	*** - ***	0.0	0.0
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	9	3	3 - 3	0.52	0.17
	NON-FP	0	0	*** - ***	0.0	0.0
	DIST COST				0.0	0.0
MEDICAL HISTORY	INITIAL	21	4	2 - 7	0.35	0.07
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	61	7	4 - 10	1.01	0.11
	RESUPPLY	10	10	*** - ***	0.17	0.17
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	92	6	4 - 8	1.53	0.10
	NON-FP	9	9	*** - ***	0.15	0.15
	DIST COST				0.0	0.0
ASST. CLINICIAN	INITIAL	16	3	1 - 6	0.98	0.20
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	33	4	2 - 6	2.03	0.23
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	49	4	2 - 5	3.01	0.22
	NON-FP	2	2	*** - ***	0.12	0.12
	DIST COST				0.0	0.0
EDUCATION	INITIAL	196	45	49 - 49	2.80	0.70
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	156	26	26 - 26	1.40	0.23
	RESUPPLY	26	26	*** - ***	0.23	0.23
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	378	34	27 - 42	4.44	0.40
	NON-FP	26	26	*** - ***	0.23	0.23
	DIST COST				0.0	0.0
SOCIAL SERVICES	INITIAL	18	4	3 - 4	1.63	0.33
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	26	3	2 - 4	2.36	0.25
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	44	3	3 - 4	3.99	0.29
	NON-FP	2	2	*** - ***	0.18	0.18
	DIST COST				0.0	0.0

CIUDAD DELGADO

PAGE 5 - PERSONNEL SUMMARY (CONTINUED)

DATA SET CODE: FC-911-01-1

TABLE 5 --- TIME (MINUTES) AND COST PER PATIENT SERVED BY TASK AND VISIT TYPE

TASK	VISIT TYPE	PAT. SERVICE MINUTES TOTAL	PAT. SERVICE MINUTES MEAN	95 % CONF. INTERVAL	COST TOTAL	COST MEAN PER PATIENT
OTHER HEALTH	INITIAL	7	7	*** - ***	1.40	1.40
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	12	2	1 - 5	2.40	0.40
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	19	3	1 - 5	3.60	0.54
	NON-FP	1	1	*** - ***	0.20	0.20
	DIST COST				0.0	0.0
OTHER CLERICAL	INITIAL	0	0	*** - ***	0.0	0.0
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	1	1	*** - ***	0.76	0.76
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	1	1	*** - ***	0.76	0.76
	NON-FP	2	2	*** - ***	1.52	1.52
	DIST COST				0.0	0.0
PHYSICIAN	INITIAL	16	3	1 - 6	5.06	1.01
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	33	4	2 - 6	10.44	1.16
	RESUPPLY	0	0	*** - ***	0.0	0.0
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	49	4	2 - 5	15.50	1.11
	NON-FP	2	2	*** - ***	0.63	0.63
	DIST COST				0.0	0.0
ALL TASKS	INITIAL	263	57	30 - 83	12.75	2.55
	ANNUAL	0	0	*** - ***	0.0	0.0
	MEDICAL	322	36	24 - 48	20.40	2.27
	RESUPPLY	36	36	*** - ***	0.40	0.40
	OTHER	0	0	*** - ***	0.0	0.0
	TOTAL FP	641	43	32 - 53	33.55	2.24
	NON-FP	44	44	*** - ***	3.04	3.04
	DIST COST				0.0	0.0

CIUDAD DELGADO

PAGE 6 - PERSONNEL SUMMARY (CONTINUED)

DATA SET CODE: FC-911-01-1

TABLE 6 ------- INDIVIDUAL PERSONNEL DATA

PERSONNEL CODE	OFFICIAL DESIGNATION CODE	TASK ASSIGNED CODE	COST RATE $/MIN.	NO. OF PATIENTS SEEN	TIME WITH PATIENTS (MINUTES) MEAN	MAX	MIN	TOTAL	TOTAL TIME IN CLINIC (MINUTES)	PERCENT OF TIME WITH PATIENTS
A	O	O	.024	2	2	2	1	3	94	3 %
B	O	O	.034	8	3	7	1	20	118	17 %
C	L	H	.044	16	2	12	1	26	38	68 %
C	L	A	.044	15	3	6	1	51	71	72 %
F	N	E	.062	12	2	26	26	26	45	58 %
H	O	P	.215	15	3	8	1	51	75	68 %
M	M	E	.062	4	6	23	23	23	30	77 %
M	N	S	.062	15	3	5	1	46	67	69 %
Z	C	R	.040	3	3	3	3	9	13	69 %