Technical Report 15:
Study of the Effects of Incorporating Selected Reproductive Health Services on Family Planning Services: A Case Study in the Eastern Region of Ghana

Produced by

Judith T. Fullerton, Ph.D., CNM, FACNM, Consultant, Principal Investigator
Kulmindar Johal, M.S., CNM, Consultant, Co-Investigator
Alfredo Fort, M.D., Ph.D., PRIME Director of Evaluation and Research

November, 1999

This publication was produced by INTRAH at the University of North Carolina at Chapel Hill for the PRIME project funded by the United States Agency for International Development contract #CCP-C-00-95-0005-00. The views expressed in this document are the responsibility of INTRAH and do not represent the policy of the U.S. Agency for International Development.

PRIME is a project for training and supporting primary providers of reproductive health services around the world. PRIME is implemented by INTRAH in collaboration with ACNM, Ipas, PATH, TRG, Inc., OMG Booksource and AMZCO, Inc.

INTRAH
School of Medicine
The University of North Carolina at Chapel Hill
1700 Airport Road, Suite 300
Chapel Hill, NC 27514, USA
Phone: 919-966-5636
Fax: 919-966-6816
Email: intrah@intrah.org
http://www.intrah.org

ACNM
818 Connecticut Avenue, NW
Suite 900
Washington, DC 20006 USA
Phone: 202-728-9860
Fax: 202-728-9897
Email: sps@acnm.org

Ipas
300 Market Street, Suite 200
Chapel Hill, NC 27516 USA
Suite 900
Washington, DC 20006
Phone: 919-967-7052
Fax: 919-929-0258
Email: ipas@ipas.org

PATH
1990 M Street, NW
Suite 700
Washington, DC 20036 USA
Phone: 202-822-0033
Fax: 202-457-1466
Email: eclancy@path-dc.org

TRG, Inc.
909 N. Washington Street
Suite 305
Alexandria, VA 22314 USA
Phone: 703-548-3535
Fax: 703-836-2415

TABLE OF CONTENTS

Contents **Page**

Acknowledgements i
List of Acronyms ii
List of Graphs, Tables and Charts iii
List of Appendices iv
Executive Summary v

I. Introduction 1
1. Background and problem statement 1
2. PRIME's intervention and role 2
3. Study purpose and objectives 3

II. Methodology 5
1. Study design 5
2. Sample 5
3. Study instruments 6
a. instrument development 6
b. training of research assistants 9
c. instrument field testing 10
4. Study procedures and timeframe 10
5. Data entry and data processing 10
6. Data analysis 10

III. Results 12
1. Statistical data 12
a. family planning service statistics 15
b. STD statistics 18
c. PAC statistics 20
2. Provider/Manager Interviews 22
a. training of providers for family planning, reproductive health and adult/child health services 22
b. reproductive health *Policy and Standards* 27
c. impact and effect of changes in facility organization and clinical services 27
d. facilitators and barriers to change 33
e. supervision and support 34
f. determination of priorities for expansion of reproductive health services 35
3. Client interviews 37

IV. Discussion and Recommendations 40
V. References 44

ACKNOWLEDGEMENTS

Our thanks are extended to the Ghana Ministry of Health, Health Research Unit, Accra (Dr. Sam Adjei, Ms. Mercy Abbey, Ms. Jane Cobbina), to the Eastern Regional Director of Health Services (Dr. Aaron Offei), the study Regional Coordinator (Dr. Gilbert Buckle) and to the Ghana Registered Midwives Association who provided administrative, logistic and professional support for this study.

We also thank PRIME Regional Office (Lome), INTRAH (Chapel Hill, NC) and the American College of Nurse-Midwives for the technical assistance and guidance they provided throughout this study.

LIST OF ACRONYMS

AIDS	acquired immune deficiency syndrome
EOC	emergency obstetric care
EPI	expanded program of immunization
FP	family planning
GRMA	Ghana Registered Midwives Association
HIV	human immunodeficiency virus
HSV	herpes simplex virus
HPV	human papilloma virus
HRU	Health Research Unit
ICPD	International Conference on Population and Development
IEC	information, education and communication
IMR	infant mortality rate
INTRAH	Program for International Training in Health
IPAS	International Projects Assistance Services
IUD	intrauterine device
LAM	lactational amenorrhea method
LSS	life saving skills
MMR	maternal mortality rate
MOH	Ministry of Health
MVA	manual vacuum aspiration
NFPP	National Family Planning Program
NPC	National Population Council
PAC	post abortion care
PPAG	Planned Parenthood Association of Ghana
PRIME	The Primary Providers' Training and Education in Reproductive Health
RA	research assistant
RH	reproductive health
RRT	regional resource teams
SA	situation analysis
STD	sexually transmitted disease
SDP	service delivery point
TFR	total fertility rate
USAID	United States Agency for International Development
VSC	voluntary surgical contraception

LIST OF GRAPHS, TABLES AND CHARTS

Tables:

		Page
1.	Facility personnel	13
2.	Facility equipment and supplies	14
3.	New and continuing family planning clients	17
4.	Training in adult and child health services	25
5.	Additional training requested	26
6.	Services enabled or enhanced by addition of new equipment	30
7.	Perceptions of the practice	32
8.	Supervisory visits	35
9.	Planning and preparation for new services	37
10.	Client interviews	37

Figures:

1.	FP Total number of clients seen	16
2.	FP Average number of clients seen	16
3.	STD Total number of clients seen	19
4.	STD Average number of clients seen	19
5.	PAC Total number of clients seen	21
6.	PAC Average number of clients seen	21
7.	Association between receipt of training and the introduction of services into the practice setting (GRMA midwives)	24

LIST OF APPENDICES

A. Figure A — Map of Ghana's Eastern Region
B. Figure B — Sample as studied
C. Figure C — Facility size, provider (respondent(s)) training in RH, and facility size
D. Study instruments and Question by Question Guide
   - D1: Statistical data tool
   - D2: Provider manager interview guide
   - D3: Client interview guide
   - D4: Question by question guide
E. Study Personnel (Ghana)
F. Service statistics
   - F1: Family planning demographic and service statistics
   - F2: STD demographic and service statistics
   - F3: PAC demographic and service statistics
G. Table G-1 — Initial (I) or Refresher (R) Training Received in Reproductive Health Services
H. Table H-1 — *National Reproductive Health Policy and Standards*
I. Table I-1 — Changes in facility organization
J. Table J-1 — Client interviews: services requested/services received

EXECUTIVE SUMMARY

This study was designed to assess the effects that might occur within family planning service delivery settings when family planning providers were trained also to provide a wider scope of reproductive health (RH) services. The RH services of specific interest to this study were sexually transmitted disease (STD) prevention and control and post-abortion care (PAC), which were the specific set of services which were within the scope of PRIME's work in Ghana in the recent five year period.

A case study was selected. This design facilitated the retrospective review of statistical records (quantitative data collection) and enabled a qualitative assessment of the process of changes that occurred when new RH services were introduced into FP settings. The case study design also allowed an assessment of the satisfaction of providers/managers, and their clients, with provision and receipt of expanded/integrated RH services (provider and client interviews).

Twenty-four (24) case facilities were selected, representing government hospitals, health centers, clinics and posts, and private maternity homes. These facilities were located in three districts of Ghana's Eastern Region in which specific STD and PAC provider training had occurred. The case facilities were compared to 19 similar control service delivery points (SDP), located in five Eastern regional districts which had not been the target of training interventions.

Service statistics for each of three study years (1996, 1997 and 1998) demonstrated that absolute numbers of clients provided family planning, STD and PAC services were consistently higher for case SDPs and the total number of clients served for FP and STD increased over time. The total number of visits (new and continuing clients combined) was not statistically significantly different between case and control, for any study year. The differences between numbers of new clients, year-to-year, was not statistically significantly different for either case and control groups (between group analysis). However, a statistically significant increase in continuing clients was demonstrated for case facilities (within group analysis).

Interviews conducted with providers and managers in these settings indicated strong support for receipt of training to provide these integrated services, and a request for additional training in an even broader array of RH and adult/child services. Providers were advantaged by a strong system of supervision and support, including the dissemination of the *National Reproductive Health Service Policy and Standards.* Providers perceived the benefits of integrating RH services into FP services to be not only increasing client load, but, as importantly, the opportunity to provide services both needed and wanted by the clients in their communities.

Clients also perceived the benefit of additional RH services, and a broader mix of contraceptive methods now available at their FP service delivery site. They requested that even more services be made available.

INTRODUCTION

1. Background and problem statement

The government of Ghana has long recognized that population is among the nation's most valuable resources. However, in 1993 the infant mortality rate (IMR) stood at 66 per 1000 live births, the maternal mortality rate (MMR) was 214 per 100,000 live births, the total fertility rate (TFR) stood at 5.5 and the contraceptive prevalence rate was 10.1%. The causes of morbidity and mortality were mainly from preventable factors (Ghana Demographic and Health Survey, 1994).

One of Ghana's strategies for reducing IMR, MMR and TFR rates is ensuring universal access to quality, basic, reproductive health services. Ghana's family planning movement began in the 1960's. In 1970, the government developed the population policy and established the National Family Planning Program (NFFP). The NFFP facilitated the creation of the National Population Council (NPC) in 1992. The national population policy was revised in 1994. Reproductive health services had, in the past, concentrated on family planning with little attention given to the other components of reproductive health (Ghana MOH, 1997) . The revised policy was expanded from a focus on population concerns to include the promotion of reproductive health. Reprioritization of health services was identified as a strategy to address the objectives of the Ministry of Health's (MOH) medium term health strategy

Ghana, is estimated to have a population of approximately 20 million people by the year 2000, given its current population growth rate of 2.13% per year (Republic of Ghana, 1999). Reproductive health objectives established for the year 2000 include a targeted reduction in the total fertility rate from 5.5 to 5.0 (1997/2001) and a reduction of the maternal mortality rate by half. Priority health service interventions include increased provision of family planning, essential and emergency obstetric care services, and the management of sexually transmitted disease (MOH, 1996).

Historically, most public and private health clinics in Ghana offered FP services in a vertical service arrangement or linked only with postpartum services. In response to the 1994 International Conference on Population and Development (ICPD) Program of Action, which endorsed a comprehensive, client-centered view of reproductive health (RH) and the promotion of integrated RH services the Ghana Ministry of Health (MOH) adopted an integrated model for reproductive health services. The National Safe Motherhood Program was inaugurated in 1996. The MOH works closely with private sector partners, with support from several donor agencies, to achieve the program's objectives. The decentralized services model uses Regional Resource Teams (RRT) of service providers. These providers act as resource personnel in each of Ghana's ten regions to provide training and supervision in reproductive and maternal health services. The new integrated and decentralized model was supported by development and dissemination of revised *National Reproductive Health Service Policy and Standards in* November, 1997

2. PRIME's various contributions in Ghana

PRIME and several of its project partners (ACNM, INTRAH, Ipas) have been working in Ghana for over a decade in programs designed to promote expansion and reinforcement of reproductive health skills within family planning training programs. A focused domain of reproductive health (RH) topics, such as postabortion care (PAC), safe motherhood (SM) and prevention of sexually transmitted diseases (STD) was selected, in cognizance of country-specific health indicators, in order better to address the needs of clients. PRIME also pursued the objective of the expansion and improvement of both family planning (FP) and RH services, by expanding the range of providers who offer family planning and by specifically targeting for initial training a number of family planning providers who were not previously offering expanded RH services to clients. Follow-on programs were focused on reinforcement of provider knowledge and skills, and the strengthening of abilities in supervision, evaluation and continuous quality improvement. (PRIME action plan, 1999) PRIME has accomplished the following specific activities during this timeframe:

- provided support for efforts to develop, finalize, disseminate and apply the national RH policies, standards and protocols (*National Reproductive Health Policy and Standards)*
- assisted the Ministry of Health, the Ghana Registered Midwives Association (GRMA) and the Planned Parenthood Association of Ghana (PPAG) to provide training in PAC, Life Saving Skills (LSS) and prevention of STDs for nurses, midwives and physicians in several regions of the country
- assisted the MOH and GRMA in three regions (including Eastern Region) to decentralize, strengthen and integrate RH training, supervision and referral capacity and capability (especially for emergency obstetric care (EOC) and PAC services) to the regional level in order to increase the availability of integrated LSS, EOC and PAC services provided by midwives and other primary providers
- expanded and adapted the focus of these education programs better to prepare providers to meet the special technical and communication needs of vulnerable population groups, such as adolescents
- participated in and/or facilitated follow-on evaluations that addressed efficiency, effectiveness and quality of both the training programs that were facilitated by PRIME and also of the services that were subsequently provided by those who had participated in these education sessions (among others, and as example, a study of the effects of technical supervision training on community based distribution supervisor's performance in seven regions of Ghana, 1999).

  The following training interventions of specific interest to this study had been conducted in Eastern Region:
  - Life –saving skills (entire Eastern Region since 1993-1994)
  - Post-abortion care (pilot efforts in selected districts since 1996)
  - Family planning/sexually-transmitted disease training and updating (pilot efforts in selected districts since 1998).

3. Study purpose and objective

The deliberations that have ensued in the period following the ICPD call for action have focused on the strategic set of reproductive health services that can generate the most effective benefit. What *is presently unknown* is the "best mix", i.e., the synergy of RH services, their "best fit" within the context of health indicators for individual countries, and the determination whether integration is an appropriate model for strengthening FP programs and better meeting clients' needs.

The PRIME mandate is "to incorporate STD prevention and control, safe motherhood, and other selected interventions into FP training in order to enable primary providers to reach new client groups and increase the quality and utilization of FP services." and "to integrate selected RH case interventions into FP training programs in order to respond better to clients' RH needs." (c.f. PRIME/USAID contract). PRIME has offered both initial and follow-on training to physicians, nurses and midwives. PRIME's training programs focus on essential primary personnel who reach clients at the most basic level of service delivery in order to respond better to clients' reproductive health needs..

PRIME is committed to the documentation of the impact (effect) of its programs that link family planning to other selected reproductive health services and, with the assistance of a USAID task force, is creating a common analytical framework for that purpose. The ***purpose*** of the present study was to assess the impact (effect) of linking FP to STD and PAC, the specific set of services which were the priority focus of PRIME's work in Ghana in the recent five year period.

For the purposes of this study, the definition of an integrated reproductive health service site is a site where a) providers regularly assess the range of a client's needs when the client presents for any RH service and b) providers regularly offer or provide FP and at least one of the following two services: PAC and STD treatment, prevention or referral services, at the same visit.

The ***objective*** of the study was to document the effect of integrating these selected reproductive health services on family planning service use in the Eastern Region of Ghana. The following specific research questions were developed (as expressed either in the original proposal, or as the study protocol evolved) to study the effects of this training on the provision of client services:

After family planning providers had received training to provide a broader mix of reproductive health services, what changes could be documented in

- the number of FP new acceptors or continuing users?
- FP and RH user characteristics (age, sex, marital status) ?
- FP method mix?
- case load for other RH services?
- number and types of providers offering FP?

- the expansion of access to FP/RH services (e.g., extended hours and proximity of services and the availability of multiple services during a single provider session)?
- qualitative indicators reflecting the process of change, such as the preparation for inauguration of new services (e.g. changes in the facility itself, changes in supervisory and record keeping systems and introduction of the newly disseminated *National Reproductive Health Policy and Standards)*
- qualitative indicators reflecting the outcomes of change, such as provider/manager and client satisfaction with services.

METHODOLOGY

1. Study Design

A case study of the Eastern Region was designed as the most effective strategy, given the requirement that this review be conducted retrospectively. The case study approach offers the advantage that the real-life experiences of program managers, providers/staff and clients can be documented in a way that enables a description of the *process* of change. The Eastern Region was selected for the case study for two reasons: a) it represented one of the Regions within which PRIME had undertaken training activities over a period of time sufficient to allow comparative assessments (pre- and post training, and/or trend data), and b) the training activities had been targeted to residents of selected districts within the region, allowing the opportunity for case and control comparisons of the effects of this training.

The study was designed to maximize the use of quantitative data (service statistics) that were determined to be available in the various public and private service settings that would be included in the sample. The design also incorporated in-person interviews, in order to add richness and context (qualitative narrative) for understanding and interpretation of the numerical data.

2. Sample

There are 15 districts in Ghana's Eastern Region. (Appendix A, Figure A) Fourteen of these regions were considered for inclusion in the sample. (Kwahu North, a.k.a. Afram Plains was determined to be too geographically remote and inaccessible) Seven of these districts had been targeted for training interventions in LSS, PAC, and STD (as early as 1996) and were considered eligible to be considered for selection as case districts.

Several alternative strategies for selection of the control districts (those not specifically targeted for training interventions) were deliberated. Consideration was given to selecting control districts on the basis of a) geographic proximity (neighbor pairs), b) population density, or c) random assignment. However, a corollary consideration was that the control districts should be similar to case districts in terms of availability of public facilities and the presence of private sector midwives, and, accordingly, three districts were eliminated from the sample frame. (Fanteakwa and Birim North did not have government hospitals; too few midwives were identified as residing in the Yilo Krobo district.) The sampling design derived on the basis of information initially available for deliberation would have allowed comparison of 33 public and private service delivery points (SDP) (hospitals, health centers, health clinics and posts, and GRMA midwives) as cases and 29 similar SDPs as controls. These facilities would be located within the *randomly selected* 3 (out of 7) case and 3 (out of 4 remaining) control districts.

Subsequent efforts were expended to verify the current operating status of the public facilities, and, in particular, the district of residence of GRMA midwives. The sampling frame was substantially revised as a result of these verification efforts, in the effort to

maximize the number of comparisons between case and control districts. One case district was substituted because there were no GRMA midwives resident in the district originally randomly selected. The one district not originally randomly selected as a control district had to be included in order to promote parallelism in the public facility sample. The GRMA midwives resident in still a fifth control district had to be included in order to achieve better balance in total case/control sample size.

The refashioned sampling frame called for comparison of 3 case and 4 control districts, with the following distribution: public hospitals (3 case/3 control), health centers (3/0), health clinics and health posts (6/7) and GRMA midwives (13/9) for a total of 46 comparison observations (25/21). The facility sample that was finally achieved in the study was absent three (3) GRMA midwives (two facilities had closed, and one could not be contacted) for a final total of 43 observations (24 case and 19 control). The final composition of the sample is presented in Appendix B (Figure B).

Additional limitations on the sample include the findings that *some midwives in the case sample* ***did not*** have the training that they were believed to possess, and *some providers assigned to the government facilities in the control group* ***did*** have some training in STD or PAC services (although the great majority of this training was obtained in 1998 or 1999). The sample was drawn on the basis of best available information, and these discrepancies were not anticipated. The training received by providers and managers who were interviewed in these facilities is depicted in Appendix C (Figure C). A total of 48 interviews were conducted, 26 in case and 22 in control facilities.

3. Instruments

a. instrument development

Three data collection instruments were specifically developed for this study. The instruments were designed to reflect the constructs and domains represented within the analytical framework for evaluation, as developed by PRIME and the USAID task force. This framework emphasizes assessment of both clinical and client-focused factors that impact access to and quality of care (Bruce, 1990, PRIME/MAQ, 1999).

The instruments were designed to reflect a methodology for data collection that is commonly used in case study research design, i.e., a review of available data and reports and in-depth interviews with individuals involved in the supervision or provision of client services. The instruments also reflected, wherever possible, domains of inquiry that were parallel to those contained in the several situation analysis (SA) studies (Miller et al, 1998) in order to generate data that could be compared to results already available from several African countries. The study instruments went beyond the SA in that the instruments developed for this study address factors relating to the process of implementation of integration. (Neither cost/benefit considerations nor assessments of training and provider performance were addressed in the present study.)

- **statistical data tool**

The statistical data tool was designed to accommodate the collection of service statistics. A site visit was made in March, 1999 to one of each type of SDP that would be included in the present study (government hospital, government health clinic and private maternity home.) Examples of daily service statistical logs and monthly report forms were reviewed to determine those demographic and service statistics of specific interest to the study that were commonly recorded and readily available in the majority of service settings. Providers and managers were interviewed to elicit their perceptions of other data elements that might also be easily accessible and available from other sources, such as individual client records.

Information obtained from the site visits was combined with information gleaned from a review of existing measurement instruments, in particular, the "situation analysis" (SA) data collection forms (Miller et al, 1997), and with items relevant to the specific interests of the present study. The "statistical data form" was designed not only to maximize the use of variables also found in the SA measurement tools, but also to reflect the layout (page orientation, font type and size, variable names) of the SA instruments, thereby enhancing face validity. It was intended that the newly developed instrument would convey a sense of familiarity to anyone who had previous experience (and facility) with the use of the situation analysis data collection tools.

Content validity of *each* of the tools developed for this study was assured through review of the document by project stakeholders, both at PRIME (U.S. and West Africa offices) and the Ghana Ministry of Health, Health Research Unit. Minor modifications and additions were made to the instrument following their review and critique.

The statistical data instrument contains the following elements:

- identification variables (several of which were repeated in the two other study tools, in order to enable linkage of data)
- an overview of facility equipment and supplies (not an inventory, as in the SA instruments)
- a month-by-month calendar, for each of the three study years (1996, 1997 and 1998) of the demographic profile of family planning clients of the SDP (gender, upper and lower ages, number of never-pregnant clients) and of the total number of clients served, by month and year
- a month-by-month calendar, for each of the three study years of the number of new and continuing family planning clients, and of the mix of family planning methods provided
- a month-by-month calendar, for each of the three study years (1996, 1997 and 1998) of the demographic profile of clients seen at the SDP for STD services (gender, upper and lower ages) and of the total number of clients served in each month and year
- a month-by-month calendar for each of the three study years of the variety of STD-related diagnoses that were screened, treated and/or referred, and of preventive STD services that were rendered to clients.

- a month-by-month calendar, for each of the three study years (1996, 1997 and 1998) of the demographic profile of PAC clients of the SDP (upper and lower ages, marital status, number of first-time pregnant clients) and of the total number of clients served by month and year, and the variety of PAC and RH-linked services (STD, FP) or referrals that were provided.
- a daily calendar, on which information concerning days and hours of service and types of services offered each day could be recorded, to generate a profile of the SDP.

- **provider/manager interview guide**

This semi-structured interview guide was developed for the purpose of obtaining information about the context of integration of reproductive health services into family planning. The content of this instrument was derived from the analytical framework for this evaluation (variables that would help to evaluate progress in promoting access to and quality of care), and also included variables that would focus directly on PRIME's contributions in Ghana. The instrument contains the following elements:

- identification variables for both the SDP and the respondent(s)
- an exhaustive list of reproductive health related services, (FP, STD, PAC, antenatal care, normal delivery, lifesaving skills, postnatal care, breastfeeding and infertility) and a calendar on which month and year of initial (preservice) and refresher (in-service) provider training could be recorded.
- a supplementary list, reflecting non-RH adult and child health services, for which respondents may have been educated as providers
- a probing question designed to elicit the respondent's views about additional training that might be useful in order to improve proficiency in service delivery
- a representation of the two lists of RH and adult/child health services, seeking information about *which* of the services was offered at the SDP, and querying the month and year in which the services were first introduced to the setting
- queries about the providers knowledge about and use of *the National Reproductive Health Service Policy and Standards* document
- a series of probing questions designed to elicit the provider or manager's views about changes in client services that may have occurred at the SDP over the study time period. The questions focused on the (potential) relationship between receipt of provider training and/or receipt of the *Policy and Standards* document and the way in which clients and the community in which the SDP is located are served (access and quality).
- questions focused on the organizational arrangements and changes that may have occurred at the SDP over the study time period
- an open-ended question designed to elicit the provider/manager's perception about the way in which clients, supervisors and the community have responded to the way in which the SDP is organized (whether or not changes had occurred).
- a series of probing questions designed to elicit the provider/manager's perceptions about a changing client and service mix at the SDP, and the provider/manager's personal feelings (likes or dislikes) about these issues
- questions about the availability and quality of supervision and support, as perceived by the provider or manager

- a series of questions addressing the effectiveness of activities undertaken to introduce the *Policy and Standards* document and to prepare providers/managers to implement the use of these guidelines within the SDP.

- **client interview guide**

This semi-structured interview guide was developed for the purpose of obtaining feedback from both first-time and returning clients concerning access to and quality of care, and to ascertain that services are client-focused, in accord with the analytical framework for this evaluation. The instrument contains the following elements:

- identification variables for both the SDP and the respondent (including whether respondent was a first-time or returning client to the facility, and whether the respondent was a first-time or continuing user of family planning).
- an exhaustive list of RH and adult/child health services (the equivalent of the lists presented in the provider/manager tool) from which the respondent could select the primary reason(s) for which the respondent had sought care at the facility on the day of the interview
- a re-presentation of these lists, from which the respondent could select the full variety of services that had been received on the day of the interview.
- semi-structured and open-ended questions addressing the returning client's perceptions of changes that may have occurred at the facility over the study time period
- semi-structured and open ended questions addressing the client's satisfaction with the quality and quantity of services that had been received on the day of the visit, and perception of how they might be improved.

- **question by question guide**

A user's manual was developed to guide the use of the three study instruments. The "question by question guide" (QxQ) provided explanatory information about the purpose of variables, where this might not be self-evident. It provided in-depth instruction about how the instruments were to be administered, or how information was to be recorded, in order to promote standardization of the use of each measurement tool. Operational definitions were provided for several variables (For example, users are instructed that when the electricity and light at a SDP were reviewed, a mark of "yes" meant that the items were present and in working order.). The three study instruments and the Question by Question guide are presented as Appendix D (D1 – D4).

b. training of research assistants

A 4-day workshop was held in June, 1999 in Accra at which 15 research assistants (RAs) were trained in the use of the instruments and the conduct of interviews. The agenda and training materials for this workshop were developed by the study co-investigator (MJ). The materials were designed using the situation analysis manual as a reference. The training materials were then adapted for use by the in-country training team in Ghana.

c. instrument field testing

The RAs (three teams of four members each, and their supervisors) then made field visits for two days to nearby health facilities in three communities that had not been selected for inclusion in the study sample (Dodowa, Amasama and Winiba in Suhum district) and at two government clinics in Accra (West Akim district). Each team tested each instrument in (minimum) one of each of the types of facilities (hospital, health center or clinic, maternity home) included in the study sample. The feedback from field testing was received by study investigators and modifications to the tools were made as indicated. The listing of those involved in these activities is provided in Appendix E.

4. Study procedures and timeframe

The training workshop also provided directions concerning the logistics of data collection. Interviewers worked in teams of two, one collecting statistical data while the other conducted interviews with providers or managers and with clients of the setting. Completed work was reviewed by study supervisors at the end of each day. RAs traveled to designated sites by vehicle (provided by the Eastern Regional Director of Health Services) or by public transportation. All data were collected between June 29 and July 9, 1999.

5. Data entry and processing

A code book was developed during the period of instrument development, in order to give direction for data entry. Data coding of the identification variables was performed on all instruments under the direction of the computer specialist at the MOH HRU. The computer specialist also entered all statistical data in *Epi-Info 6*. The numeric data obtained from provider/manager and client interview were entered into an Excel database by study investigators.

The narrative data obtained during provider/manager and client interviews was word-processed by MOH HRU personnel. These files were transmitted to the study investigators for analysis and interpretation.

6. Data analysis

The statistical data were exported from *Epi-Info 6* as a SAS data set. Data were analyzed by the study co-investigators, using commercially available software packages including SAS, SPSS and Excel. Differences in proportions were analyzed using Chi-square or Fisher's exact test. Mean differences were conducted using a 2-sided or an independent sample t-test, The nonparametric Friedman's test was employed in trend analysis. The nonparametric Mann Whitney U test was used to view the distribution of data in those instances when standard deviations were very large.

A grounded theory methodologic approach was used to interpret meanings imbedded in the narrative (qualitative interview) data. The narratives were first read for content, then, during second and subsequent readings, read for comprehension and synthesis. During the several readings a series of codes (level 1 coding) was developed to represent the major categories and subcategories that emerged from the data. The data were searched both for the occurrence of themes and common relationships across all study subjects, and also for the appearance of variations. The semi-structured nature of the interview guides facilitated a quasi-statistical, quantitative interpretation of the narrative data. The second level of analysis (level II coding) involved a review of the interpreted data for its consistency with the evaluation framework that had guided the study.

RESULTS

1. Statistical data

A total of 43 facilities were visited, in accord with the sampling frame. The facilities varied greatly in size, some covering entire districts (and parts of neighboring districts), and others serving only the local community. There was no way to standardize the estimates of population aggregates or geographic boundaries served, which made it not possible to conduct any meaningful analyses of service impact, as a function of the size of the facility. Figure D (Appendix F) presents the verbatim responses received concerning facility size, for information purposes.

The daily/weekly schedule of services offered in each facility is summarized in Figure C (Appendix C)**.** Seventeen of 23 case facilities (74%) were providing integrated services. Of these, 35% (8/23) were offering FP/STD/PAC services, 26% FP/PAC services and 13% (3/23) were offering STD services. Family planning services alone were provided in 22% (5/23) of the facilities. Most of the facilities (78%, 8/23) were open for services mornings, afternoons and evenings every day of the week. STD services were provided in 13% of the facilities although the providers were not trained in STD service provision, and 8% were providing PAC services, although the individual who responded to the interview had not herself been trained. One quarter of the facilities (26%, 6/23) had a provider trained in STDs but were not offering STD services to clients, whereas 17% (4/23) of the facilities were not offering PAC services, although providers had been trained in PAC service delivery.

In the control group of facilities, most facilities (74%, 14/19) were providing family planning services and these services were offered in conjunction with maternal care services (antenatal, delivery and postpartum services). Only 5% (1/19) of facilities were offering FP/STD services and 5% FP/STD/PAC services. Ten percent (2/19) of the facilities had a provider trained in FP, but were not offering FP Services. Although providers indicated that they had been trained in STD service delivery, 26% (5/19) of the facilities were not offering the service and 21% (4/19) of facilities were not offering PAC services although training had been undertaken. Almost half (42%, 8/19) of the facilities were available for services morning, afternoon and evenings every day of the week.

Table 1 presents the comparison of personnel within case and control facilities. There were no statistically significant differences between study groups in any category of personnel, in all instances in which this analysis could be conducted.

There were no obstetrician/gynecologists and no surgeons posted to the control facilities. While the absolute numbers of allied health workers and support personnel (such as orderlies and maintenance workers) were greater in case facilities, there was no statistically significant difference in the proportions of these personnel within the case and control facilities.

TABLE 1: Facility Personnel

Personnel	Case		Control		chi-square
	N	mean	N	mean	
staff physicians	5	1.14	6	0.75	.518 (NS)
obstetrician/gynecologist	4	0.18	0	0	NA
surgeon	6	0.27	0	0	NA
registered nurse	288	*	154	11.8	*
midwife	125	5.2	90	4.7	.284 (NS)
medical assistant	13	.62	8	.54	.414 (NS)
community health nurses	45	1.87	21	1.1	.531 (NS)
community health workers	277	11.5	82	5.5	.273 (NS)
laboratory technician	108	1.13	4	0.3	.650 (NS)
other personnel	377	15.83	222	12.3	.661 (NS)

* There was substantial missing data in the computer data file; the figures for case group are derived from recounts, using original data forms.

The facilities were reviewed on the basis of 15 categories that might be reasonably related to the quality of services that could be offered within them. These data are depicted in Table 2.

TABLE 2: Facility equipment and supplies

Variable	(24 facilities) N of YES	(19 facilities) N of YES	Chi Square (Fishers Exact Test)
running water	19	12	.314 (NS)
electricity or light in working order	19	14	.728 (NS)
toilets in working order	18	11	.329 (NS)
counseling or examination area (different from area for processing equipment)	21	16	1.0 (NS)
area for processing equipment and supplies (separate from client service area)	19	11	.185 (NS)
waiting area for clients (separate from the area in which services are provided)	24	18	.442 (NS)
existence of a place for storage of supplies, commodities and drugs	21	14	.432 (NS)
equipment/supplies for conducting examinations, procedures and lab tests	18	8	.058 *
equipment for infection control	20	12	.17 (NS)
IEC materials available in waiting room	21	17	1.0 (NS)
IEC materials available in provider's office	21	17	1.0 (NS)
(at least three blank copies of) client records, referral forms	21	10	.021 *
(at least three blank copies of) monthly FP report forms	22	12	.033 *
(at least three blank copies of) inventory control forms	9	10	.273 (NS)
existence of a plan so that emergency transport can be conducted, if necessary	10	10	.547 (NS)

The case facilities were significantly more likely to have equipment and supplies for conducting examinations, procedures and lab tests, and also more likely to have certain reporting and recording forms available for use. A number of both case and control facilities lacked running water, electricity or working toilets. Client information-oriented brochures and pamphlets were available in the majority of both case and control facilities. Only 10 of 24 case facilities (42%) and 10 of 19 control facilities (53%) had a plan in place to accommodate emergency transport, in the event of client need.

a. Family planning statistics

Family planning service statistics were collected for the years 1996, 1997 and 1998. Summary data are presented in Appendix F (Table F1). Few clients age 19 or younger were served by either case or control facilities, in any of the three study years. The youngest age of any client served for family planning was 14 (case) and 16 (control). The mean age of the youngest clients served by case and control facilities in each study year was: 1996 (17.75/18.6); 1997: (16.58/17.25) and 1998 (17.58/18.3). These mean differences were not statistically significant. However, it should also be noted that this information was available from only 18 of the 24 case and 12 of the 19 control facilities.

On the other hand, the upper age of clients served for family planning was reported to be as old as age 60. Upper ages in each of the three study years ranged from 45 to 60 (cases) and from 45 to 52 (controls).

Few males were served by either case or control facilities, in any of the three study years; however, when services were provided, it was more likely to occur in a case facility. Similarly, there were few clients served who had not yet been pregnant (gravida 0), but, when these services were provided, they were more likely to occur in a control facility. These data were also consistent across all three study years.

The yearly total number of clients seen per site and the annual mean number of total clients served in these facilities for family planning services are depicted in Figures 1 and 2. (Both figures include the total of all clients seen, which may include more than one visit per client in any single year.) Case facilities demonstrated an increase in total numbers of clients in 1997 and 1998. It is reasonable to speculate that after training in additional RH services had been received (1996 and 1997) and new RH services were added to the FP facilities, new clients were attracted to the facilities, thus positively impacting the total number of clients served. The total number of clients seen by control facilities remained nearly static.

FIGURE 1: FP -Total number of clients seen

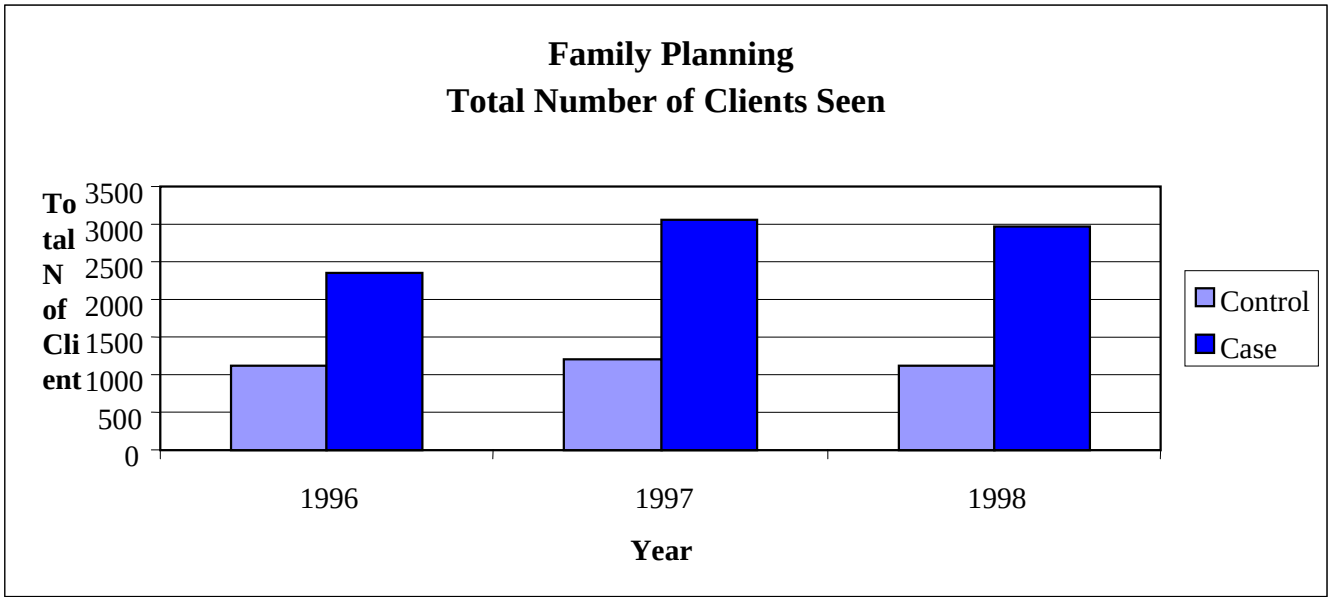


FIGURE 2: FP -Average number of clients seen

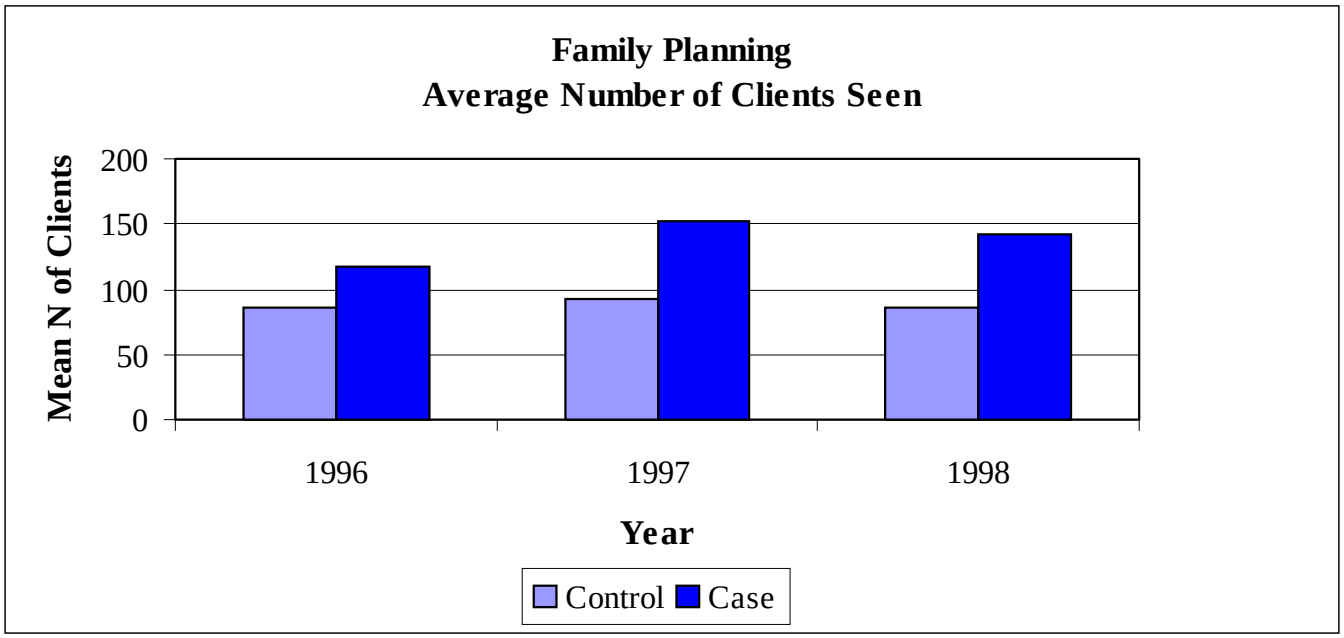


Table 3 depicts the annual mean number of new and continuing family planning clients seen by case and control facilities in each of the three study years. An increase in new clients for case facilities was demonstrated in 1997 and 1998, and in all three study years in control facilities. The difference in average number of new clients between case and control facilities was not statistically significantly different in any of the three study years.

Case facilities demonstrated a consistently increasing mean number of continuing clients. The mean number of continuing clients served by control facilities dropped in the second study year and, although an increase was demonstrated in the third study year, these facilities did not regain their initial (1996) census. The trend for increasing numbers of continuing clients within case facilities is statistically significant.

The total number of clients (which, as the sum of new plus continuing clients is actually representative of the total number of visits) was not statistically significantly different from year to year. There is internal inconsistency in the data when total number of clients are calculated from different data sources. However, the statistical findings are consistent.

TABLE 3: New and Continuing Family Planning Clients

	CASE (N = 24)			**CONTROL (N = 19)**			**Mann-Whitney U Test (Case vs Control)**
	N	**Mean**	**S.D.**	**N**	**Mean**	**S.D.**	**sig**
NEW CLIENTS							
1996	17	83.47	24.0	14	60.07	51.0	.321
1997	20	82.75	40.0	16	67.37	41.0	.931
1998	20	93.75	48.5	17	77.76	27.0	.862
Test for significant change over time (Friedman's Test) .355				Test for significant change over time (Friedmans' test) .358			
CONTINUING CLIENTS							
1996	17	112.76	75.0	13	159.5	151.0	.120
1997	20	144.5	106.5	15	146.46	177.0	.250
1998	20	164.45	109.0	16	151.43	107.5	.735
Test for significant change over time (Friedman's Test) .020				Test for significant change over time (Friedman's Test) .412			

The profile of family planning methods commonly used by case and control facilities across the three study years is also presented in Appendix F (Table F1). For women, injectable contraceptives were consistently the most frequently distributed method. Oral contraceptives (both combined pills and progesterone- only [mini-]pills) were the second most frequently selected method.

Condoms and spermicides were more likely to be distributed by control facilities. Their use/distribution markedly increased in the third study year, and outranked every other method selected/distributed in 1998.

The availability and use of intrauterine devices was consistent between case and control facilities across all study years, although its mean use never exceeded approximately 4% of clients. Methods used very infrequently were the progestational implant (Norplant™) and female tubal ligation. Methods of contraception that were never cited by either case or control facilities, in any of the three study years included vasectomy, the diaphragm, natural family planning the lactational amenorrhea method and the use of emergency contraception.

b. STD statistics

Statistics addressing services provided for STD/HIV and AIDS are presented in Appendix F (Table F2). Again, there were very few clients under the age of 19, served in either case or control facilities. The ages of the youngest client served ranged from 14 (one client in each of two study years, control facilities) to (generally) the mid-40's). There were a few outliers: males, ages 60 and 73). Unfortunately, there is substantial missing data for both case and control facilities for the 1998 study year; due both to the lack of clients served at the facilities and also to the absence of records for review. The mean age of youngest clients served by case and control facilities was: 1996 (23.2/22.6), 1997 (18.25/30.5), and 1998 (18.1 – no comparison). The differences that seem apparent are not reliable, because there are too few cases in either group, in any study year, to generate stable statistics. The oldest clients served were reported to be in their 70's and 80's (case clinics).

The mean number of clients served for STD concerns was very low, although an increasing trend was demonstrated for control clinics.

FIGURE 3: STD -Total number of clients seen

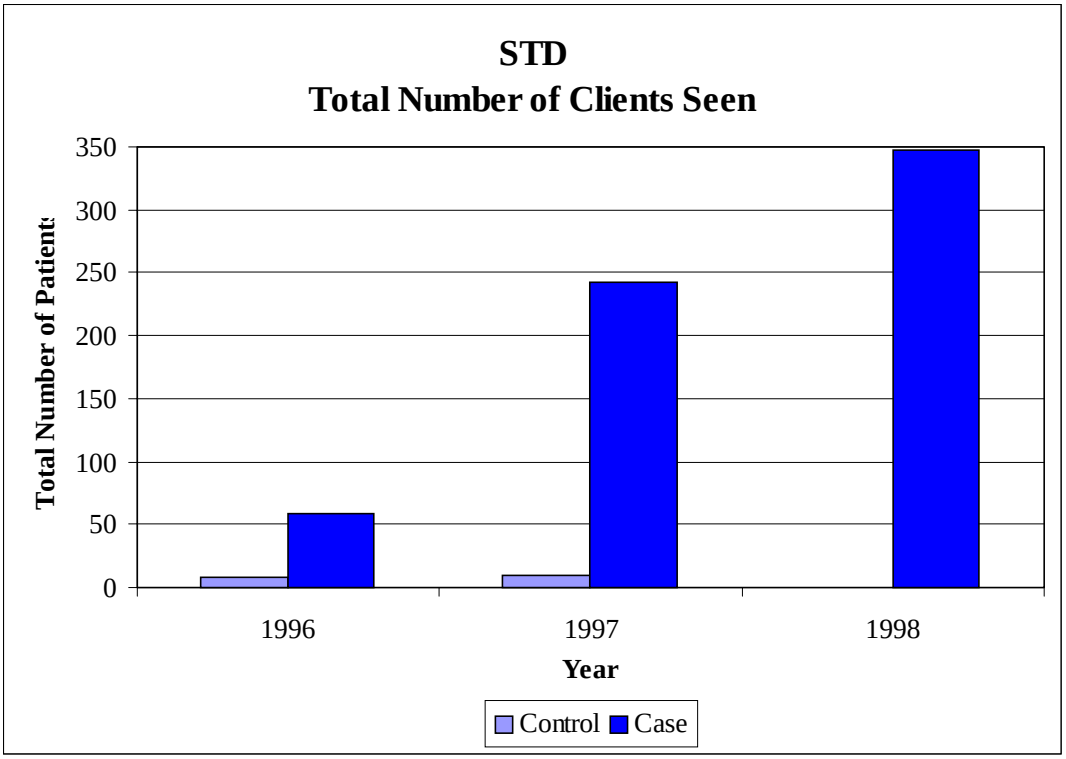
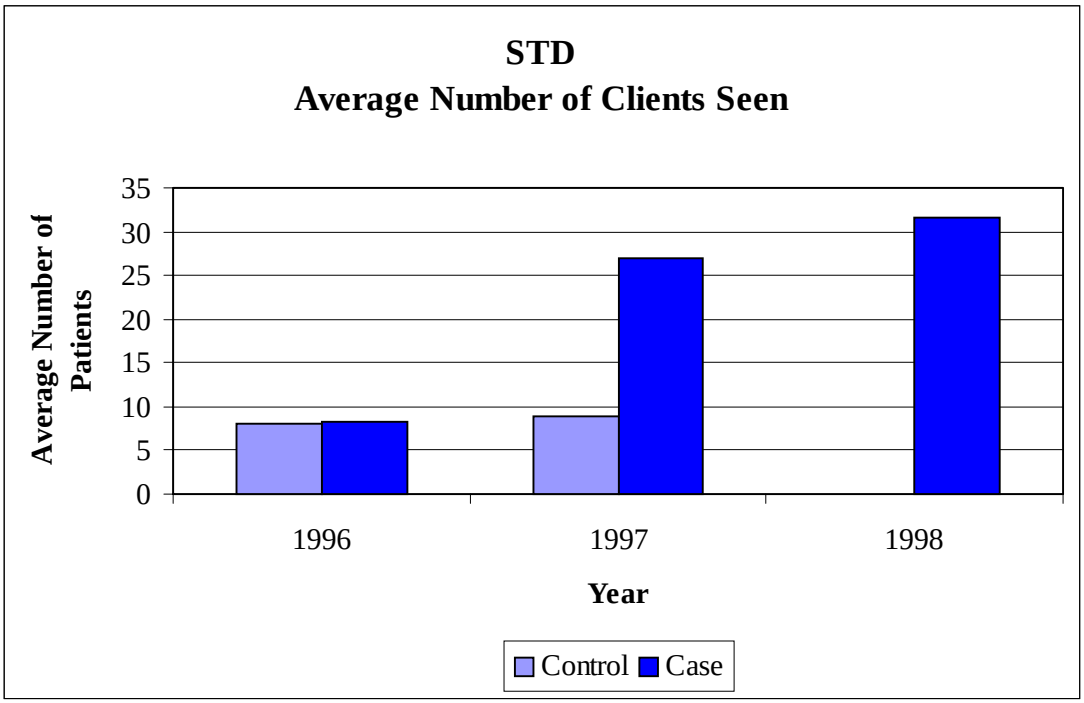


FIGURE 4: STD -Average number of clients seen



Information was sought about the variety of STD diagnoses that were seen by providers. Limited data are available. Research Assistants reported that the records that were available in the settings did not provide this level of detail. It can be noted, however, that the diagnosis of pelvic inflammatory disease (PID) was consistently noted. (Mean data are not informative, since only one to two control facilities are included in the data, and one of these facilities is a government hospital.)

A finding of particular note is that cases of HIV/AIDS were presenting to both case and control facilities as early as 1996. The absolute number of cases increased as the three study years progressed.

An important integrated RH service intervention for the prevention of STDs is the provision of dual methods of family planning – a long-acting method for contraception and a barrier method for preventing transmission of STDS. Fourteen case respondents and 5 control respondents indicated that they had received initial and/or refresher training in the provision of this service. The statistical data were not recorded in a manner that allows an assessment of the number of clients to whom this service might have been provided.

Data reviewing the number of cases referred elsewhere for management are not reliable, given the small number of respondents, or complete absence of available data, in the control group. No observable trends could be demonstrated for case facilities.

c. PAC statistics

There were no PAC services reported for any of the 19 control facilities. The data for case facilities is presented as Table F3 (Appendix F). The youngest client served was 14 years of age; several clients were age 16. Mean ages for youngest clients in each of the study years were 18.2 (1996), 16,3 (1997) and24.1 (1998). The oldest clients served were generally in their 30's and 40's . Only three unmarried clients were reported across all three study years. The number of gravida 1 clients (first pregnancy aborted) ranged from 0 – 7 (1996) or 8 (1997 and 1998).

Only referral services were offered in early 1996. However, following the receipt of training that occurred in 1996 and subsequent years, the number of clients who received manual vacuum aspiration and/or emergency treatment of abortion on site, increased and was sustained. Similarly, the number of PAC clients offered or referred to postabortion FP services increased substantially, as did the number of clients who returned for follow-up services.

FIGURE 5: PAC -Total number of clients seen

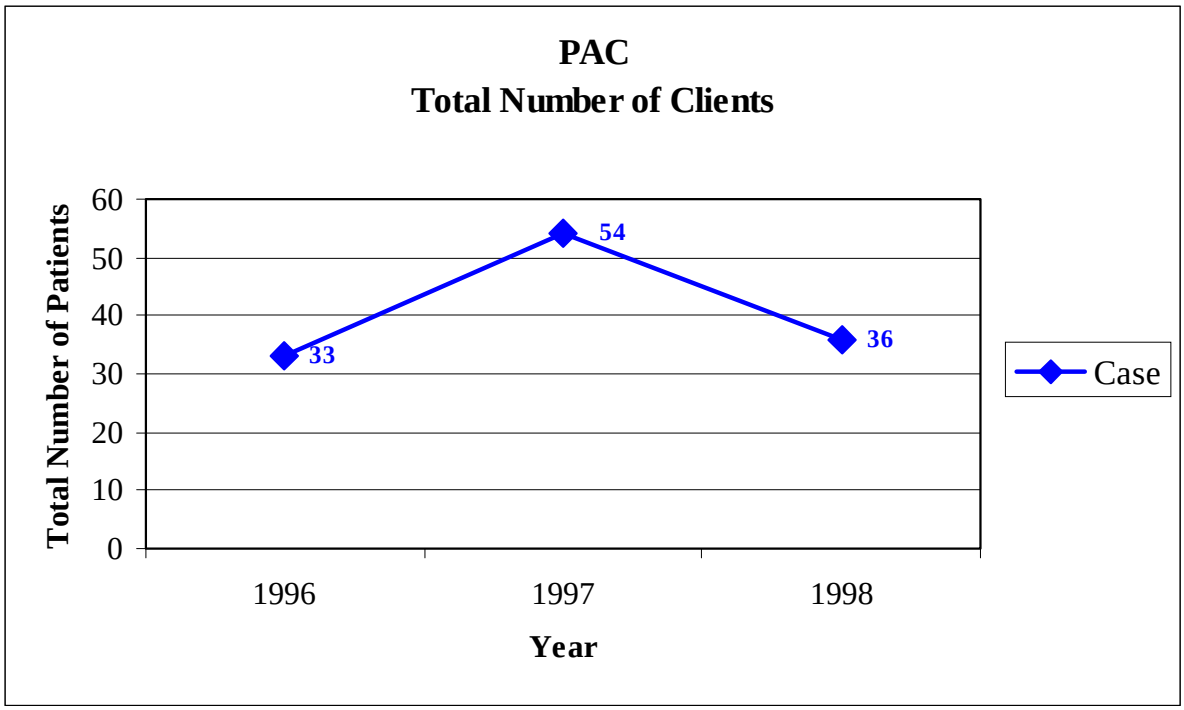
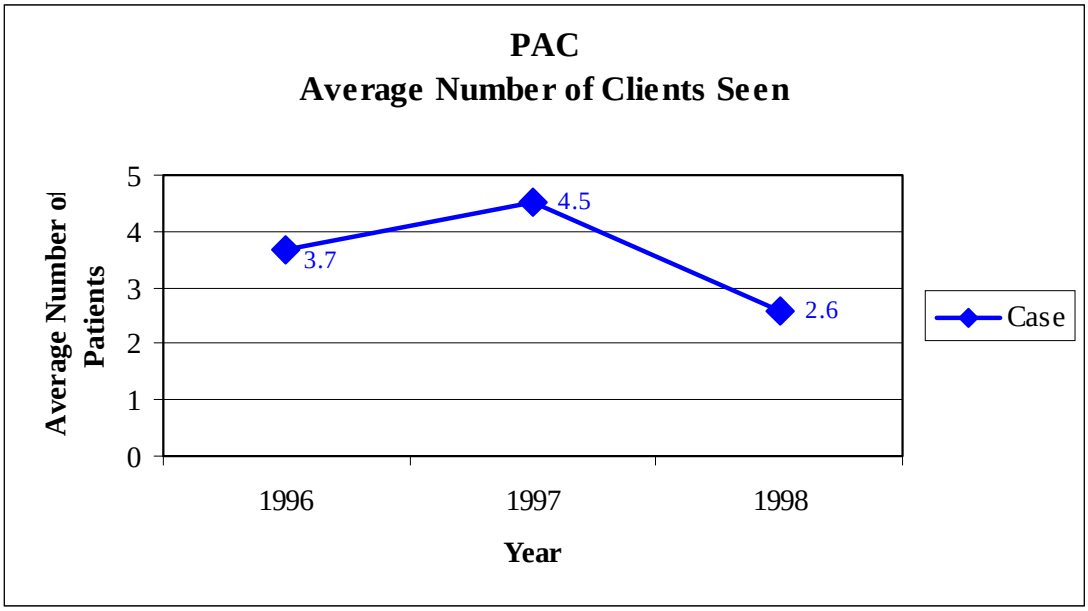


FIGURE 6: PAC -Average number of clients seen



2. Provider/Manager Interviews

A total of 48 complete interviews (among 49 respondents) were conducted among facility managers, who may also have been providers of service in the facility. The number of interviews obtained in case and control facilities was well balanced: Hospitals (4 case/6 control), health centers (2/0), health clinics/health posts (10/7) and maternity homes (10/9).

Although they were eligible to be interviewed, there were no physicians in the sample. This was quite likely due in part to the fact that few physicians were posted to the facilities in this sample (see Table 1), and probably less likely to be identified as a provider/manager by study staff. Those interviewed in the case group included 9 midwives who were service providers (2 hospital, 6 health center/clinic/post, 1 maternity home), 3 midwives who were provider/managers (1/1/1) and 8 who were provider/owners of their own maternity homes (20 midwives in total) (Note: one additional midwife who provided statistical data did not participate in the interview, as she was not the provider/manager of the maternity home.). Case group respondents also included 1 nurse who provided services in the hospital and 5 nurses who provided services in health centers/clinics or post (6 nurses in total).

Those interviewed in the control group included 11 midwives who were service providers (6 hospital, 4 health center/clinic/post, 1 maternity home), 3 midwives who were provider managers in health centers/clinics or posts, and 8 who were provider/managers in their own maternity home facilities. Twenty-two (22) midwives were interviewed in total.

a. Training for provision of FP, RH and adult/child health services:

Respondents had received training in a broad variety of reproductive health services. Table G-1 (Appendix G) presents the types of training received by members of the two study groups, and the years in which initial and refresher (if applicable) training was received.

There are some apparent differences between the case and control groups in the types and timing of training. The majority of respondents in both case and control groups had obtained initial training in family planning in the first half of the 1990s, and a substantial number of respondents in both groups had obtained family planning training in the 1970's or 1980s. Case respondents were more likely than control respondents to obtain initial family planning training in 1996; approximately equal proportions of respondents in each group obtained initial or refresher training in family planning in 1997 or 1998. Control respondents were far more likely to obtain their initial family planning training in 1999, a post-study year. In accord with the sampling strategy, the majority of those who had obtained initial or refresher training in either STD or PAC services are represented in the case group.

However, overall group comparisons did not demonstrate any statistically significant differences between the groups on the proportions who had received any family planning training (N = 23 case and 21 control; Fisher's exact test = .362, N.S.), or any training in STD services (N = 15 case and 8 control; chi-square = .252, N.S.). More than twice as many cases (16) as controls (7) had received any PAC training, however this difference was also not

statistically significantly different (chi –square = .3665, p = .085). Finally, when those who had received *any* training in any one of the three areas of interest (N= 25 case and 22 control) were compared, no statistically significant differences could be demonstrated between the groups (Fisher's exact test = .495, N.S.)

The following additional findings are worthy of note:

- few respondents in either group have been trained in the insertion of Norplant™ (an expensive method, requiring special equipment and strict infection control)
- few respondents in either group acknowledged training in pregnancy testing methods
- only two respondents in each group indicated that they had obtained training in the laboratory diagnosis of STDs. (The study questionnaire did not ask if respondents had been trained in the use of the microscope; a variation of the wording of the questionnaire may have yielded different responses to this question.)
- few respondents in either group indicated that their training in STD/HIV prevention and control also included training in AIDS pre-post counseling and referral and almost no respondents indicated that they had the skill to conduct HIV/AIDS testing (2 case and 2 control respondents)

Table G-1 also depicts the training that respondents may have had in reproductive health services other than the three that are the focus of this study. These data do demonstrate some internal inconsistency, (e.g. the numbers of those trained in breastfeeding as a method of contraception do not match the numbers reported for training in LAM as a method of family planning). They are, nevertheless, useful as a depiction of the breath and depth of RH preparation for providers in the sample.

There was a very close correlation between the years in which FP, STD or PAC training had been received, and the introduction of those services into the practice setting. This information is depicted in Figure 7, for GRMA midwives only. This information is specifically not reviewed for government hospitals, or government health centers, clinics or posts because it is less likely that institutional change would be directly related to individual circumstances. However, in the instance of the provider/managers of maternity home, it would be logically hypothesized that receipt of training would lead to introduction of new services.

FIGURE 7: Association between receipt of training and the introduction of services into the practice setting (GRMA Midwives)

Service	Year Initial or Refresher Training Was Received					Year Service was Introduced				
	Prior to 1996	1996	1997	1998	1999	Prior to 1996	1996	1997	1998	1999
CASES										
Family Planning	I			R						
STD				I	R					
PAC			I							
Family Planning	I									
STD										
PAC				I						
Family Planning	I									
STD					I					
PAC										
Family Planning										
STD										
PAC										
Family Planning	I & R									
STD					I					
PAC		I								
Family Planning	I	R								
STD										
PAC		I	R							
Family Planning			I		R					
STD					I					
PAC		I	R							
Family Planning	I			R						
STD										
PAC										
Family Planning	I & R									
STD										
PAC	I			R						
Family Planning				I						
STD										
PAC										
CONTROLS										

Service	Year Initial or Refresher Training Was Received					Year Service was Introduced				
	Prior to 1996	1996	1997	1998	1999	Prior to 1996	1996	1997	1998	1999
Family Planning				I						
STD			I							
PAC										
Family Planning					I					
Family Planning	I									
STD					I					
Family Planning			I							
STD			I							
Family Planning	I									
Family Planning	I									
Family Planning	I									
Family Planning	I									

Additional training was received by some respondents in areas other than reproductive health. Table 4 depicts these data. Respondents in the case clinics were more likely to have received additional training, in each of the six areas. Case respondents were more than twice as likely to be skilled in child immunization and child growth monitoring.

TABLE 4: Training in adult and child health services

Health Service	Case		Control	
	N	%	N	%
child immunization	24	88.9	9	40.9
child growth monitoring	20	74.1	8	36.4
oral rehydration	24	88.9	14	63.6
nutrition counseling (adult & child)	20	74.1	11	50
treatment of minor illness - adult	17	63	12	54.5
treatment of minor illness - child	17	63	12	54.5

Respondents were asked to indicate the additional training that they would need in order to "improve proficiency in service delivery." These data are presented in Table 5. The most frequently requested area of training for members of both groups was STD/HIV/AIDS (either initial or refresher courses, with particular emphasis on syndromic STD diagnosis.) Twelve members of the case group and 2 members of the control group requested additional training in Life Saving Skills/Safe Motherhood. Almost twice as many members of the control group, none of whom had previously received training in PAC requested this training, and specifically indicated the need for training in use of the manual vacuum aspirator. The

requests for training covered both RH and general adult and child health issues, and was quite diverse.

Table 5: Additional training requested

Additional Training Requested**	Case	Control
antenatal care	0	1
breastfeeding	0	1
BTL counseling	1	3
child growth monitoring	2	0
circumcision	1	0
emergency contraception	0	1
family planning (initial or refresher course)	2	4
IUD insertion	5	6
LAM	1	1
laboratory skills	0	1
Life Saving Skills/safe motherhood	12	2
managerial course	1	0
marriage counseling	1	0
maternity skills/delivery skills	0	1
Norplant insertion	9	8
nutrition counseling	3	1
oral rehydration	1	0
PAC/MVA	8	14
postnatal care	0	1
pregnancy testing	1	1
STD - initial or refresher course in syndromic assessment and counseling	12	12
treatment of minor illnesses – adult	1	0
treatment of minor illnesses – child	1	0
VSC counseling	1	3

NOTE: the entries in this table are direct quotations from the interviews, i.e., they are reproduced exactly as expressed by the respondent.

b. National Reproductive Health Policy and Standards

Several questions were focused on the *National Reproductive Health Service Policy and Standards* document; specifically, had providers/managers received this document, and were they trained in how to use it at the service site effectively. More than twice the number

of respondents in the case group (55.6%) than controls (22.7%) had received a copy. Case respondents received their copies during the years 1996 through 1999, while control respondents were only recently (1998 and 1999) receiving the document. Of those who had received a copy the majority of case (14 of 15) and control (3 of 5) respondents had received it at a training session. (Table H-1, Appendix H)

c. Impact and effects of changes in facility organization and clinical services

Providers/managers were asked to comment on ways that the integrated set of services now offered in their facilities may have changed for clients, for providers and for the community. Focused questions were asked in the attempt to determine what, if any, relationship existed between the receipt of training and/or the introduction of the new *National Reproductive Health Service Policy and Standard*s and the decision to offer new services. Table I-1 (Appendix I) depicts these data. Substantially more case than control facilities had increased the number of clinical sessions, and had also increased the offering times (morning, afternoon and evening). These changes began as early as 1993 for case clinics, but not until 1996 for control facilities. Additional provider and assistant staff (medical assistants, community outreach workers) were added by case clinics, as early as 1996, and only very recently by control facilities.

New equipment was added by 63% of case, but only 36% of control facilities. Both groups equally reported the addition of supplies and commodities, but twice as many case as control facilities reported obtaining additional drugs. Respondents indicated that these changes had increased their opportunity to provide additional family planning counseling and services (81.5% of cases; 63.6% of controls.), or to add referral services (approximately two-thirds of the respondents in both groups.)

The types of provider and provider's assistant staff that had been added to SDP included two senior community health nurses (case/hospital; case/health center), a nurse (case/maternity home) six midwives (case and control/hospital; case/maternity home; 3 control/maternity home), 3 midwives assistants (2 cases and 1 control/maternity homes), an unknown number of community based distribution workers (case/maternity home; control/government hospitals and health posts), a ward assistant (case/maternity home), an orderly (case/hospital) and a facility cleaner (case/maternity home). Voluntary workers (case/health center), opinion leaders and assembly men (case/hospital) were also cited.

A further series of questions focused on perceptions of providers/managers about the way in which their facility may have changed its organizational or operational structure. These data are also presented in Table I-1 (Appendix I). Respondents in both groups reported that attempts had been made to integrate records and reporting systems and that changes had been made to the system for ordering drugs, supplies, FP commodities. Changes were also made to the plan for client flow. In addition, job descriptions and staff roles and responsibilities were undergoing change to promote integrated service provision. For each area of interest, there were at least 10% more affirmative responses received from the case group when compared to controls, and for each area of interest, these changes had begun to be implemented in earlier years.

The most predominant theme to emerge from the narrative responses provided by provider/managers was the perception that empowering providers by enhancing skills in FP and other RH services resulted in empowerment of clients (to make personal decisions regarding contraception; to aim for reproductive health). This, in turn, had a positive benefit for the larger community. These data are evidence of *client-centered* services. Some typical responses are offered as examples:

clients:

"The number of referrals in the reproductive health services has reduced. We manage most of the cases here." (case/health center)

"Clients have gained more knowledge about reproductive health and they make informed choice." (case)

"Complications of pregnancy, delivery and puerperium has reduced due to my health talks and counseling. We no longer see many bleeding cases as before." (case/health post)

"Clients now know about what to do to prevent pregnancy." (case/health clinic)

"They invite friends to our clinic. Defaulters are now being regular. They now come with their husbands to the clinic." (control/health post)

"Clients now do not feel shy to report to the clinic and sometimes come with their spouse." (control/health post)

"The clients take the health education that we give them and even they also educate their relatives and friends." (case/health post)

providers:

"I am now more competent in my work." (case/maternity home)

"First I was just a midwife but I have new skills to do the work effectively; hardly do I refer." (case/maternity home)

"I no more find my work difficult. What I do is to follow protocols." (case/health center)

"It has built my confidence as a provider. I also approach cases with positive skills and do what my clients need." (case/maternity home)

community:

"Community now recruits clients to the clinic, i.e., encouraging others to come to the facility."(case/health post)

"The community now accept family planning, as we now use satisfied clients to testify about the methods." (case/hospital)

"The community is happy because they have confidence in the services provided." (case/health center)

"The chiefs, elders and community members are happy because cases are no more referred like the past years." (case/maternity home)

The addition of new staff and equipment enabled the SDPs to offer additional services. These data are depicted in Table 6. The most striking changes are noted for

respondents from the case group, who were enabled to offer a broad new array of new adult and child services that reflect integrated reproductive and adult health services.

TABLE 6: Services enabled or enhanced by addition of new equipment

Service	Case			Control		
	Hospital	Health Center Clinic/Post	Maternity Home	Hospital	Health Center Clinic Post	Maternity Home
antenatal care		2				
child growth monitoring		1	2			
delivery services	1	2	1	2 (vacuum extraction)	1	
family planning	2		1			1
immunization			2			
insertion of IUD			2	2	3	
PAC/MVA	1	2	3			
postnatal care		1				
treatment of STDs		1				

** multiple responses are possible

Respondents were then asked to comment on the community's acceptance of the way in which the FP/RH services are presently offered. The following comments illustrate the overwhelmingly positive perceptions.

"Interaction with the client, community and supervisor is cordial and they show their approval of the work I am doing." (case/health post)
"Clients now accept family planning/reproductive health because privacy is now established, they have confidence in the providers and are also able to give their view." (case/clinic)
"The clients themselves bring others to me." (case/maternity home)
"Clients come to me with all the reproduction needs and even with social problems so I know they have accepted my work.." (case/health center)
"Because the integrated reproductive health services are now offered unlike formally, only family planning services were offered, i.e., FP, STD and PAC are offered here." (case/maternity home)
"Yes, because now there is a great reduction in both maternal and infant deaths, to which people testify." (control.hospital)

Nevertheless, there remains room for continued improvement.

"Not all the community members have accepted it because they still don't come for family planning, but services supervisor has accepted it." (case/clinic)
"Family planning/reproductive health services offered at the facility are inadequate." (case/maternity home)

A next series of questions was directed to those who were service providers in the various facilities. These questions were intended to elicit the providers' perceptions of the way client characteristics may have changed over time. These data are depicted in Table 7.

TABLE 7: Perceptions of the practice

Issue **	Case (N = 27)		Control (N = 22)	
	N	%	N	%
Do you have too many/too few clients?				
just enough	4	16.0	5	22.7
too many	8	32.0	5	22.7
too few	13	52.0	12	54.5
Is your client load increasing or decreasing?				
no noticeable change	3	11.5	2	10.0
increasing	17	65.4	14	70.0
decreasing	6	23.1	4	20.0
Have the type of clients changed in any way?				
they are younger	12	46.2	14	63.6
they are older	9	34.6	12	60.0
there are more men	3	11.5	3	13.6
there are more unmarried clients	6	23.1	11	50.0
Are families are having fewer/more children?				
fewer	16	64	9	40.9
more	8	32.0	10	45.5

**** Denominator changes for each response**

The majority of respondents in both groups thought that their client load was too low, although they also believed that the client load was increasing. More control than case group respondents perceived that clients were both younger and older in age, and twice as many control group respondents indicated that they perceived that more unmarried clients were requesting services. Respondents from the case group were far more likely to perceive that clients were having fewer, rather than more children.

Providers were asked to indicate the types of services that they would like to add to their current practices, if training were available. Respondents from both case and control SDPs were similar in their endorsement of Norplant, PAC (including MVA) and LSS as priorities for training.

Providers were also asked if there were any services that they were currently providing that they would like not to continue to offer. There were only two responses to this query; both were midwives. One respondent indicated that she was considering no

longer offering PAC, subsequent to an adverse client outcome. The second respondent indicated that she was "too old" and needed an assistant if she were to continue to offer antenatal and delivery services.

Providers were asked how they knew that they were providing the types of FP/RH services that were wanted and needed by clients (*client focused services)* and also how they used the information from clinic records and reports to strengthen and improve family planning client services. The most common response received from both case and control respondents was that they were receiving endorsement from their clients, who offered positive feedback. Clients returned for additional and/or follow-up services and brought new clients to the facility.

Use of records to track attendance allowed providers a second means of affirming the acceptability of the services they were providing. A second major use of these records, expressed equally by case and control respondents, was to identify those who did not return for services, so that outreach (e.g. home visiting) could be extended. The following comments are illustrative.

> "The clients themselves request for the services and also make their own choice after counseling." (midwife/case/health center)
> "The clients themselves say it. They appreciate what we do for them." (midwife/case/health center)
> "Because of positive feedback from clients about services given them. They are grateful. Clients bring their friends for services." (midwife/case/maternity home)
> "Clients are always thankful to us and show their gratitude by bringing other people to us." (midwife/control/hospital)
> "Clinic records enable us to detect the increase or decrease in clinic attendance and plan strategies to correct any decrease in attendance." (midwife/case/hospital)
> [I use the records] "to do my follow up and home visit after knowing those who defaulted from the reports." (midwife/case/maternity home)
> "When figures start coming low, I intensify the health education at church, in the community and other surrounding villages." (midwife/case/maternity home)
> "Decreasing figures, makes us to intensify our health education and home visiting to trace defaulters." (midwife/control/health center)
> "At a point in time I compared the reports and I saw that the family planning acceptors were reducing so I started giving health education talks and even going to the villages to talk to them. That has now increased the acceptor rate." (midwife/control/health center)

d. Facilitators and barriers to change

Providers/managers were asked to comment on whether clients had expressed feelings (either positive or negative) about receiving additional RH services, and whether any barriers had been encountered from clients, other providers, their supervisors/managers or the community when the attempt was made to offer additional services. Only positive

comments were received; for example: "they feel happy because they are not expecting such services in the facility yet they have got them." (midwife/control/health center).

Very few respondents indicated that there were barriers. Six case and four control respondents said that they had encountered resistance from clients, with only one explanatory comment that "clients… refuse referral" (midwife/case/maternity home) [which could actually be perceived as an endorsement of/request for additional services rather than a barrier to their integration]. Three case and one control respondent perceived barriers from other providers (no explanatory comments were offered). Two case and one control respondent cited community barriers; for example: "sometimes some of the community members ask mothers to do things their old ways which are harmful to their babies." (midwife/case/health center)

Case group respondents indicated their perception that introduction of antenatal care (1), delivery (1), postnatal care (2), STD counseling/treatment (3), safe motherhood/ LSS (2), IEC (6), and PAC (12) were the RH services that had promoted the most FP acceptors/continuing users. (Note: two respondents who cited PAC had not received training in this skill.). The child health services of immunization (EPI) and growth monitoring each received one citation.

Eight control group respondents endorsed PAC and 4 endorsed STDs as important adjuncts to FP. Of particular note is the fact that three of these respondents had been very recently trained (late 1998 and early 1999) to provide PAC services and two control group respondents, while endorsing both STDs and PAC, specifically indicated their lack of training in either service.

e. Supervision and support

Supervisory visits were made to both case and control facilities on a regular basis. Table 8 presents these data. Quarterly visits were most common and monthly visits next most common in both groups. The majority of those who responded to this question (18/21, 86% case; 17/18, 94% controls) indicated that their supervisor was also trained in the RH services that were the focus of this study (FP, STDs and/or PAC). Approximately one quarter of those interviewed in each group did not know this information. The overwhelming majority in both groups indicated that their supervisor helped to solve service delivery problems, and provided support to providers to assist them to improve their competencies.

TABLE 8: Supervisory visits

Frequency	Case (N = 24)*		Control (N = 21) *	
	N	%	N	%
daily	1	4	0	-
weekly	4	16	1	4
monthly	6	25	5	24
quarterly	12	50	10	48
twice yearly	0	-	2	9
annually	1	4	1	4
other ("occasionally"; "once in a while")			2	9

* Two instances of missing data in each study group

f. Determination of priorities for expansion of RH services

Respondents were asked if they know how it was determined that PAC and/or STD/HIV services would be added to the facilities' FP services, and whether they agree that this specific set of services was in accord with the RH priorities in the community which they served. The 25 respondents in the case group (1 instance of missing data) agreed in the majority (16/25; 64%) that these had been identified (methodology unspecified) as the priorities; only 7 of the 21 respondents (33%) in the control group (2 instances of missing data) agreed with this statement.

Ten (40%) of cases and 5 (24%) controls stated that it was a government mandate to provide these services. Eleven (44%) of cases and 10 (48%) of controls believed that technical, financial and human resource assistance donated by funding agencies influenced the selection of these particular services as priorities.

Nevertheless, all but 6 of the total number of respondents (1 cases and 5 controls) agreed that PAC and or STD/HIV were RH priorities for their communities. (One cited malaria, the others did not cite any other services.) The following comments highlight some issues and concerns:

> "The authorities [from the MOH] know that if these services are introduced into the facilities, the clients and the community will benefit from them." (midwife/case/maternity home)
> "If other RH [services] are added to family planning it would reduce the rate of criminal abortions in the area." (nurse/case/health post)

"They noticed through researches that people were dying through these things so they decided to add it." (midwife/control/hospital)
"They noticed a rise in infant and maternal mortality rate." (midwife/control/health post)
"…because there is no medical officer at the health centre level, they decided to add all these services so that if someone comes in with these problems we can offer an assistance." (midwife/control/health center)
"It was also noticed that these services would help you feel self-confident." (midwife/control/maternity home)

The following individuals were named as the agent(s) responsible for ensuring that the integrated services are provided in accord with *The National Reproductive Health Services Policy and Standards.*

at the regional level: MOH, Regional Director of Health Services (18); Regional medical officer (1); Regional Executive of GRMA (3), Midwifery Training School (1), public health nurse (1), health education unit (1)

at the district level: District Director of Health Services (19), District Executives of GRMA (2), District medical officer/Senior medical officer (6), District public health nurse (2)

at the community level: Service providers /midwife (9) and staff (2) in the community, medical assistant (11), sub-district health director/management team (5), GRMA/or private midwife supervisor (5), District community/public health nurse (3), opinion leaders (1)

A final series of questions were focused on the planning and preparation for new services that had been introduced at the facility. These data are depicted in Table 9. There are notable differences between case and control facilities in these areas of interest. Case facilities were twice as likely to use the committee structure to seek consultation about new services, and to introduce supervisory and record keeping systems to promote the success of their new endeavors. The case facilities were also more likely to procure the additional equipment or commodities that were necessary for the introduction of the new services. Case facilities were substantially more likely to have the advantage of the recently developed and disseminated national *Policy and Standards* document. However, both case and control facilities were equally likely to be certain that staff had been appropriately trained to provide any new reproductive health service in the facility.

TABLE 9: Planning and preparation for new services

Area of Interest	Cases		Controls	
	N	%	N	%
formation of committees (national, regional, district, subdistrict, community level) task force, meetings, written communications	14	51.9	5	27.8
(receipt or implementation of) Revised *National Reproductive Health Service Policy and Standards*	9	36.0	1	5.9
orientation workshops for policy makers, managers, educators, service providers, clients and community	16	61.5	9	50.0
staff training	18	75.0	14	77.8
training of supervisors, managers and coordinators in integrated service settings	12	52.2	5	27.8
facility upgrade, procurement of equipment, supplies, contraceptive commodities/drugs and IEC materials	15	60.0	7	38.9
additional staffing	2	7.4	2	11.8
integrated systems for record keeping, reporting and procurement of drugs and commodities	14	53.8	6	35.3
supervision and evaluation of services	18	69.2	7	41.2

3. Client interviews

A total of 37 client interviews were conducted. Eight (8) interviews were conducted with first-time clients to the facility and 29 were conducted with clients who had previously received services at the SDP. Case facilities provided 23 interviews (5 new and 18 continuing clients); control facilities provided 14 interviews (3 new and 11 continuing clients)/The respondents were all female; ages ranged from 22 to 46. Two respondents were in a partnered relationship; all others were married. The number of their children ranged from 0 to 9.

TABLE 10: Client interviews

	Case		Control	
	First time	Returning	First Time	Returning
Hospital	2	3	1	2
Health Center		1		
Health Clinic/Post	2	8	2	3
Maternity Home	1	6		6
TOTAL:	5	18	3	11

Only the case/control and first time/return client subsets were reviewed in all analyses of these data. The number of respondents by facility was so small that confidentiality of respondents could not be assured, should analysis be conducted for that subset.

The primary reason that clients sought services at the facility, and the services that they actually received are depicted in Appendix J (Table J-1). The majority of clients in both the case and control groups actually received more services than they had originally requested;, Sixteen of the 22 clients of the case group (72%) received at least one and as many as three additional services. Eleven of 15 clients in the control group (73%) received one or two additional services. The additional service most frequently provided for clients of both groups was family planning information/education and counseling (provided to 12 of the 22 case and 14 of the 15 control group clients.) Four clients of the case group, but no clients in the control group, received STD/HIV/AIDS counseling, risk assessment and screening. Three case group clients received treatment for minor illness (adult) as an additional service, and two children who accompanied a parent to the family planning clinic received immunizations, growth monitoring and nutritional counseling.

Clients were aware that they had received additional services, and of those who perceived that they had, in fact, received more services than they had expected to receive, respondents were satisfied that this had happened. Clients indicated that they did not know that the services were available and were glad to get them at one visit/location (15 endorsements) or that they didn't know that they needed these additional services, but were glad to receive them (13 endorsements) (multiple responses possible). Other comments included "no time is wasted" and "…they have time for us and teach us a lot of things."

First time clients were asked whether they believed that the services that they had received at this first visit could be improved. All 5 of the case and 2 of the 3 control respondents answered in the affirmative, and, further, the majority of the 7 respondents in both groups selected each of the ten service parameters that were presented for comment (a few items received a "don't know" response.)

Returning clients were more positive and more variable in their responses. Eleven respondents in the case group (11/18; 61%) and 10 respondents in the control group (10/11; 90%) stated their perception that services had improved over time. When a response was given, the improvements that were most noticeable to respondents included:

- staff were perceived as friendly and respectful (100% case, 90% control)
- information and services were provided in a manner that was easy to understand (100%/90%)
- it seemed easier to obtain the FP method of choice (72%/50%)
- staff were perceived as competent (72%/70%)
- there was concern for privacy and confidentiality (63%/100%)
- the facility was clean (70%/70%)
- there was a wider FP method mix available, and more RH services were available on site (63%/50%) (*This comment, in particular, may speak to the effect of integrated services.)*
- clinic hours were convenient (72%/90%)

- the clinic was located in a convenient facility (72%/100%)
- the services were affordable (63%/100%)

A total of 22 responses were received from clients in response to the request for "suggestions…for improving the FP/RH services". Responses were received from 16 case (2 first time; 14 returning clients) and 6 control (1 first time, 5 returning) clients. Two themes emerged from these responses: *the request for additional staff and for additional services*. Clients in the case sample who had previously used public service facilities suggested longer hours of operation, the availability of 24-hour (on-site) personnel to attend deliveries, and a new maternity facility. Clients in the control sample who had previously used public facilities also suggested improvements to the facility (electricity/light, availability of a public vehicle and more privacy). The two first time users of public facilities in the case group suggested that commodities be provided free of charge and that the facility should open earlier. The single first time respondent from the control group asked that a wider contraceptive method mix be made available. Two respondents (case group, returning clients) suggested that more IEC be disseminated through the villages.

DISCUSSION AND RECOMMENDATIONS

The objective of this study was to document the effect of integrating reproductive health services into family planning services. This study focused on two specific RH services: STD prevention and control and PAC, because PRIME has been conducting intensive training on these particular services over the past several years. The Eastern Region of Ghana was selected as a case study site, because the schedule of training activities for these specific services within Eastern Region allowed a case comparison study design. For the purposes of this study, an integrated reproductive health service site (case facility) is a site in which a) providers regularly assess the range of a client's needs when a client presents for any RH service and, b) where providers regularly offer or provide family planning and at least one of the two selected treatment or prevention services at the same visit.

A first research question asked whether training FP providers to add either (or both) of these specific RH services to their profile of services would have an affect on the number of FP new acceptors or continuing users. A second, and related, question asked whether there was an associated change in the demographic characteristics of the clients served. The analysis of all data was limited by the variance in availability of record keeping between both within and between case and control facilities, and also by the relatively few STD and PAC clients seen in the control study settings. For example, for study year 1998 only a single control facility reported any data for STD services, and no control facilities indicated that PAC services were provided in that year. The study groups were well balanced with respect to character (hospitals, health centers/ clinics/posts and maternity homes). Nevertheless, there were no statistically significant differences between case and control facilities in the mean number of clients served for both family planning and STD services in each of the study years. There was a statistically significant difference between numbers of continuing family planning clients for the case group, when the three study years were compared to each other (an increasing trend).

There were too few clients younger than age 19 served in either case or control facilities to generate stable (reliable) comparative statistics. There were similar limitations on the analysis of oldest clients served; however, clients in their 50's and 60's were documented. Very few male clients were reported overall. However, when services were provided, it was more likely to have occurred in a case facility. When any of the very few gravida 0 (never pregnant) clients were provided family planning services, this was more likely to occur in a control facility.

The family planning method mix (a third research question) was remarkably consistent across all three study years, and quite similar for case and control facilities. For women, injectable contraceptives were consistently the most frequently distributed method, and oral contraceptives (both combined and "mini") ranked second. Norplant ™ and the intrauterine device – methods that require specific equipment, special training and strict infection control – were used very infrequently. Both male and female voluntary surgical sterilization were cited infrequently. An increase in education and awareness programs,

counseling and referral could be recommended. Emergency contraception was also used very infrequently. Consumer and provider awareness of this method might be enhanced.

The distribution of condoms and spermicides increased remarkably in 1998, more dramatically for control rather than case facilities. However, these observations must be tempered with the understanding of the small number of facilities contributing data to these analyses, since the statistical averages are markedly influenced by the larger government hospital services.

Use of the lactational amenorrhea method of family planning was not reported by any case or control clinic. This finding is of particular importance since it may also speak to the advocacy (or lack thereof) of breastfeeding for infant nutrition. There were no data available concerning the use of dual family planning methods (which could have included, for example, condoms and LAM, or the use of an injectable contraceptive and condoms, as a preventive measure against STD). This was due both to the way in which statistics were gathered (i.e., data were gathered concerning total numbers of clients served, by method, rather than the total of all methods provided to any single client) and to the way in which records were kept in the facilities. This more focused (and resource intensive) level of data gathering is recommended in future and broader-scale studies.

Very limited data were available to provide a profile of the variety of STD diagnoses that were managed or referred in study settings. It is recommended that record forms be revised so that this level of detailed information can be available in the future

It was of particular note, however, that cases of HIV/AIDS were presenting to both case and control facilities as early as 1996. The absolute number of cases increased as the three study years progressed. This finding is of some significance given that no more than 5 providers in either case or control facilities reported that they had received training in HIV/AIDS testing or pre/post counseling and referral. Twelve respondents in the case and 12 respondents in the control group specifically requested training in STD syndromic assessment and counseling. One (control) provider's response is most compelling. "A client was once furious with me because she had HIV/AIDS and I told her relatives. Just because I have not had any formal training in STD/HIV/AIDS programme and did not know what to do."

PAC services were provided only in case facilities. Referral services were offered in early 1996. Substantial numbers of respondent providers received training in that and subsequent years. New services were implemented in the case facilities, and service statistics increased dramatically. These data clearly indicate the positive impact that training did have on the availability of services for clients.

Narrative data from case respondents was clearly supportive of the positive impact that these services had on their community, reducing the need for referrals and increasing the numbers of clients who accepted family planning services following PAC services. Eight provider/managers in the control group endorsed PAC and 4 endorsed STDs as important

adjuncts to family planning. Of particular note is the fact that three of these respondents had been recently trained (late 1998 and early 1999) to provide both of these services

On equal note is the fact that two control group respondents, while endorsing both STDs and PAC as important adjuncts to family planning, specifically indicated their lack of training in either service and 14 control group respondents specifically requested PAC training. These comments clearly indicate an awareness of the benefits of this training. It may be the case that GRMA midwives share their stories about the positive effect that training has on their client load in particular and their practices in general (such as their relationship with their community), which may have an influence on other (untrained) GRMA midwives who hear these discussions. A recommendation for additional training sessions, targeted throughout Eastern Region (and by extension, throughout the country of Ghana) would be clearly indicated.

The increases in patient load that have been presented were correlated with reported changes in clinic organization and function (a fifth research question). These changes included an increase in the total number of clinic sessions, the provision of more morning, afternoon and evening sessions and an increase in provider and assistant staff. Record systems were revised, provider job descriptions were rewritten and client flow systems were refashioned. Respondents indicated that these changes had increased their opportunity to provide additional family planning counseling and services or to add referral services.

The most predominant theme to emerge from the narrative responses provided by providers/managers was the perception that empowering providers (enhancing their skills in FP and other RH services) resulted in the empowerment of clients to make decisions regarding their own reproductive health. Providers/managers believed that this client-centered approach to care had positive impact not only on individuals, but also on the community that they served.

The dissemination of the *National Reproductive Health Service Policy and Standards* had a clearly positive impact on assisting providers and managers to promote these positive changes. Among those who expressed an opinion, the large majority agreed that STD and PAC services were important reproductive health priorities for their communities. They were able to cite the sources of supervision and support to which they could refer for assistance in implementing new services, in response to these RH priorities and in accord with the new guidelines. The currently on-going efforts to disseminate this document and to train providers to maximize the value of the information and guidance it can offer should be strongly endorsed, and the continuation of assertive efforts in this regard is clearly recommended.

A final research question concerned the satisfaction of providers/managers and clients with the provision of integrated RH services. The number of requests from providers for training in FP/STD/PAC, other RH, and adult/child services clearly indicates that providers are both interested and willing to develop knowledge and skills in provision of integrated services. The limited findings from this study are very encouraging with respect to the potential that training in adult and child health services (such as the treatment of minor adult

illnesses, child immunization, child growth monitoring and nutritional counseling) could have, by extension, on family planning services. Such training, which enables the broader health care needs of families – adults and children – to be offered in a family planning service setting, clearly increases the "exposure" of families to reproductive health services. Linking FP services with other RH and adult/child services will also promote opportunities to bring into the service delivery system underserved groups such as adolescents/youth, men, unmarried and older women.

Exit interviews of clients indicated that respondents from both the case and control groups had, in fact, received more services that they had expected to receive when they were seen in the facility that day. The additional service most frequently provided to clients of both groups was family planning information/education and counseling. FP IEC was provided to all clients who had come to the facility requesting some method of family planning. These same clients left the facility having been fully informed of the available options, and then also provided a method of their choice. Some clients of the case group also received STD/HIV/AIDS counseling, risk assessment and screening. Clients were aware that they were receiving additional services and were satisfied that this had happened. They perceived the staff as friendly and respectful, and that there was a concern for their privacy and confidentiality. Clients indicated that family planning services were not only more readily available (i.e., the clinics were located in conveniently accessible settings and services were offered at convenient times of the day), but that a wider mix of methods was also at hand. Nevertheless, there was a consistent call for additional staff and additional services.

The overall findings of this study strongly support the conclusion that training family planning providers to render a richer mix of reproductive (and adult/child) health services has a clear impact on enhancing family planning services. When this training is associated with a strong system of supervision and support (such as correlated training in the use of the *National Reproductive Health Service Policy and Standards*) providers are encouraged not only to introduce these new services into their practice settings but also to sustain the delivery of these services over time. Clients – not only women and their families, but also the community as client - clearly appreciate the availability of these services, but also clearly benefit from the enhancement of their personal and reproductive health.

REFERENCES

Bruce J. Fundamental elements of the quality of care: A simple framework. *Studies in Family Planning*, 1990:21(2), 61-91.

Health Sector 5 year programme of work.. Republic of Ghana, Ministry of Health, August,1996.

Miller, R. Personal communication, 1999

Miller K, Miller R, Askew I, Horn M, Ndhlovu L. Clinic-based family planning and reproductive health services in Africa: Findings from situation analysis studies. Population Council, 1998.

Miller R, Fisher A, Miller K, Ndhlovu L, Maggwa B, Askew I, Sanogo D, Tapsoba P. The situation analysis approach to assessing family planning and reproductive health services. A Handbook. Population Council, 1997.

National Reproductive Health Service Policy and Standards. Republic of Ghana. Ministry of Health., November, 1997.

PRIME. Quality and CPI Session (Unpublished document). January, 1999.
Republic of Ghana, 1999. WWW citation: ghana.com/republic/index.html

APPENDICES

APPENDIX A
FIGURE A: Map of Ghana's Eastern Region

APPENDIX B.
FIGURE B: Sample as Studied

Scenario	District	Hospital	Health Center(s)	Health Clinics /Posts	GRMA Maternity Homes	TOTAL
CASES						
STD and PAC	BIRIM SOUTH	Oda Hospital	Achiase Health Center	Akoroso Health Post	Esther Addo Korba **Mawuli Maternity Home**	
				Aperade Clinic	Justina Boateng **Paulina's Memorial Maternity**	
					Georgina Osei **Immanuel Maternity Centre**	
					Constance Asante **Holy Horniel Maternity Home**	
PAC	KWAHU SOUTH	Kwahu Hospital	Pepease Health Center	Obo Health Post	Elsie Abankwa **Nyaakoma Maternity Home**	
			Nkyenenkyene Health Center	Nkwatia Health Post	Juliana Kissi **Sunkwa Maternity Home**	
					Sethina Aboagye **Oframase Maternity Home**	
					Gladys Ofori **Angela Maternity Home**	
					Regina Addo **Radiant Maternity Home**	
					Comfort Amoafo **Connie's Maternity Home**	
STD	NEW JUABEN	Central Hospital		Oyoko Health Post	Eunice Quarshie **Eureka Maternity Home**	
				Jumapo Health Post	Kathlyn Ababio **Pat's Maternity Home**	
Subtotals		3	3	6	12	24

CONTROLS						
Districts not targeted for training interventions	ASUOGYAMAN			Akwamufie Health Post	Rhoda Wuaku **Hedwig Maternity Home**	
				Boso Health Post	Mercy Teye **Mercy Maternity Home**	
				Adjena Health Post	Cecilia Mickson **El-Shaddai Maternity Home**	
	SHUHU/KRABOA	Shuhum Hospital		Asuboi Health Post	Edna Roberts **Abotare Maternity Home**	
	AKWAPIM SOUTH	Nsawam Hospital		Pakro Health Post		
	WEST AKIM	Asamankese Hospital		Osenase Health Post	Martha Akorsah **St. Anthony's Mat Home**	
				Adeiso Health Post	Edith Klu **Edith's Maternity Home**	
	AKWAPIM NORTH **GRMA Midwives ONLY**				Elizabeth Archer **Semanhyia Mat Home**	
					Monica Asiedu **All Saints Mat Home**	
					Leticia Asare-Kumi **Nyarkoa Memorial MH**	
Subtotal		3	0	7	9	19
GRAND TOTAL	4 Case 4 Control	6 (3/3)	3 (3/0)	13 (6/7)	21 (12/9)	43 (24/19)

FIGURE C: Schedule of services, provider (respondent(s)) training in RH and facility size
CASES

- **District New Juaben**

Facility	Services	Service Hours	Trained	Catchment Population
Koforidua Central Hospital	FP/STD/PAC	AM/PM (M-F) Outreach (weekends)	FP/STD/PAC	District and surrounding villages
Jumapo Health Post	FP/STD/PAC STD/PAC	AM/PM (M-F) AM/PM/Eve (weekends)	FP/STD/PAC	7,810
Oyoko Health Post	FP	AM/PM (M-F)	FP	7,630
Pat's Maternity Home	FP/STD/PAC Emergency services	AM/PM/Eves (M-F) (weekends)	FP/PAC	3,279
Eureka Maternity Home	FP	All times	FP	6 communities

District Birim South

Facility	Services	Service Hours	Trained	Catchment Population
Oda District Hospital	FP/STD/PAC	AM/PM (every day)	FP/STD/PAC	Entire district
Akoroso Health Post	FP/STD/PAC	AM/PM/Eve (every day)	FP/STD	34,472
Achiase Health Center	FP/PAC	AM/PM/Eve (every day)	FP/STD/PAC	68,401
Aperade Health Clinic	FP/STD	AM/PM/Eve (every day)	FP/STD	13,210
Paulina's Memorial Maternity Home	ANC/delivery	AM/PM (every day) Evenings (every day)	No training	The community
Mawuli Maternity Home	FP	AM/PM/Eve (every day)	FP/PAC	The community
Emmanuel Maternity Center	FP/STD/PAC	AM/PM/Eve (every day)	FP/STD/PAC	14,884
Holy Horniel Maternity Home	FP/STD	AM/PM/EVE (every day)	FP/PAC	20,908

District Kwahu South

Facility	Services	Service Hours	Trained	Catchment Population
Kwahu Hospital	FP/PAC; PAC	AM/PM (M-F)	FP/STD/PAC	293-492
Nkyenenkyene Health Center	Incorrect data		No training	17 communities
Pepease Health Center	FP	AM/PM/Eve (every day)	FP/STD/PAC	37,910
Nkwatia Health Post	FP/PAC (emergencies)	AM/PM (M-F) AM/PM/Eve (every day)	FP/STD/PAC	9,420
Obo Health Post	FP/STD STD	AM/PM (M-F) Evenings (M-F)	PAC	49,435

ANC (antenatal care)
PNC (postnatal care)

District Kwahu South (cont)

Facility	Services	Service Hours	Trained	Catchment Population
Angel's Maternity Home	FP/STD/PAC	AM/PM/Eve (every day)	FP/STD/PAC	Entire community and surrounding villages
Sunkwa Maternity Home	FP/PAC	AM/PM/Eve (every day)	FP/STD/PAC	???
Oframase Clinic Maternity Home	FP/PAC	AM/PM/Eve (every day)	FP/PAC	10 communities
Nyaakoma Maternity Home	FP/STD/PAC	AM/PM/Eve (every day)	PAC/STD	Entire community and surrounding villages
Radiant Maternity Home	FP	AM/PM/Eve (M-Sat)	FP/PAC	3 large communities
Connie's Maternity Home	FP/PAC	AM/PM/Eve (every day)	FP/STD/PAC	4,774

CONTROLS

District Akwapim North

Facility	Services	Service Hours	Trained	Catchment Population
All Saints Maternity Home	FPANC/PNC/delivery	All times	FP/ STD	8,739
Nyarkoa Memorial Maternity Home	ANC/PNC/delivery minor ailments	All times	FP	494
Semanhyia Memorial Maternity	FP/ANC/PNC/delivery, minor ailments	All times	FP/STD	20 villages

District Asuogyaman

Facility	Services	Service Hours	Trained	Catchment Population
Akwamufie Health Post	All services	24 hrs. (M-F) emergencies (weekends)	FP	20,709
Boso Health Post	FP/maternity services	AM/PM/Eve (M-F)	FP	3,660
Adjena Health Post	FP/maternity services	All times	FP	5, 925
El-Shaddai Maternity Home	Delivery and minor ailments	All times	FP	Community and surrounding villages
Hadwig Maternity Home	FP	All times	FP	3,979
Mercy Maternity Home	FP	All times	FP	4,500

District Shuhu/Kraboa Coaltar

Facility	Services	Service Hours	Trained	Catchment Population
Shuhum Goverment Hospital	FP/STD	AM/PM (M-F)	FP	District and surrounding towns and villages
Asuboi Health Post	FP/STD/PAC	All times	no data	19,177
Abotare Maternity Home	FP	AM/PM/Eve (M-Sat.)	FP	district

District West Akim

Facility	Services	Service Hours	Trained	Catchment Population
Asemankese Hospital	ANC deliver PNC	AM/PM/Eve (every day) AM/PM/Eve (Wed)	FP/STD/PAC	200 villages
Osenase Health Post (no evenings or weekends)	FP FP/PNC FP/ANC FP/ANC/PNC	AM/PM (Fri) PM (Mon) AM (Mon) AM/PM (Wed) PM (Tues) AM/PM (Thurs) AM (Tues)	FP	27,943
Adeiso Health Post (no evenings or weekends)	FP FP/ANC	AM/PM (M-F) AM/PM (T W Th)	FP/PAC	60,317
Edith's Maternity Home	FP/ANC/PNC/delivery	All times	FP/STD	59,222
St. Anthony's Maternity	FP/ANC/PNC/delivey	All times	FP	98,916

District Akwapim South

Facility	Services	Service Hours	Trained	Catchment Population
Nsawam Government Hospital	FP/IEC	All times	FP/STD/PAC	4 districts
Pakro Health Post (no weekends or evenings)	FP FP outreach	AM/PM (M-F) AM (Tues, Wed. Thurs)	FP FP/STD/PAC	19,000

APPENDIX D: Study Instruments and Question by Question Guide

Statistical Data Tool
Provider/Manager Interview Guide
Client Interview Guide
Question by Question Guide

Statistical Data

I. GENERAL INFORMATION

1. Health Facility visited (name) _____ _____
2. District (name) _____
3. Village/town (name) _____ _____
4. Date of Visit: _____
5. Name of interviewer: _____ _____
6. Type of health facility (circle and tick)

   A. Government

      hospital

      health center

      health clinic/post

   B. Private

      GRMA maternity homes

7. Level of service delivery system

   Community level (health post, maternity home/post)

   Sub-district level (health center, maternity home)

   District level (district hospital)

8. Size of catchment population (or size of geographic area served) ____ _____

PROVIDER/MANAGER INTERVIEW GUIDE

1. Health Facility visited (name) _____ _____
2. District (name) _____
3. Village/town (name) _____ _____
4. Date of Visit: _____
5. Name of interviewer: _____ _____
6. Interview number: _____
7. Level of responsibility of the individual interviewed

   provider

   provider – also has responsibilities as clinic manager

   owner/provider (private maternity home)

8. Qualifications of the individual interviewed

   physician midwife

   obstetrician/gynecologist nurse

I. What types of Reproductive Health services have you been trained to provide?

A. Family Planning	**Yes or No**	**When was training received?**	
		Initial	**Refresher (In-service)**
1) IEC/health talks	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2) condom	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3) foaming tablet/spermicide	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4) combined pill	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
5) mini pill	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
6) IUD	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
7) injectable	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

A. Family Planning	Yes or No	When was training received?	
		Initial	Refresher (In-service)
8) norplant implant	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
9) VSC counseling/ referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
10) tubal ligation (all methods combined)	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
11) vasectomy	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
12) natural family planning counseling/referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
13) LAM	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
14) diaphragm	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
15) emergency contraception	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
16) pregnancy testing	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

B. STDs/HIV/AIDS	Yes or No	When was training received?	
		Initial	Refresher (In-service)
1. STD/HIV/AIDS counseling/education (health talks on primary prevention, risk reduction)	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. STD risk assessment/screening	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3. syndromic diagnosis	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4. laboratory diagnosis	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
5. treatment	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
6. referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
7. HIV/AIDs pre and post test counseling and referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
8. HIV/AIDS testing	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
9. dual FP method use	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
10 contact notification	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

B. STDs/HIV/AIDS	Yes or No	When was training received?	
11. client follow-up	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

C. Post-abortion care	Yes or No	When was training received?	
		Initial	Refresher (In-service)
1. IEC/health talks	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. abortion counseling	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3. treatment of incomplete abortion	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4. MVA	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
5. referral of abortion complications	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
6. postabortion FP counseling/method provision	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
7. client-followup	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

D. Antenatal Care	Yes or No		When was training received?
		Initial	Refresher (Inservice)
1. prenatal assessment and client management	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. IEC/counseling on FP methods (including LAM)	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3. STD/HIV/AIDS risk assessment/client management and contact tracing	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4. screening for syphilis	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
5. management and referral for emergency services	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

E. Maternity care/normal delivery services	Yes or No	When was training received?	
		Initial	**Refresher (In-service)**
1. normal delivery and immediate postpartum care	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. FP method counseling	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3. FP method provision	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4. STD/HIV counseling/screening/ treatment/referral/contact tracing	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
5. Emergency Obstetric Care services/referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

F. Lifesaving Skills (LSS)	Yes or No	When was training received?	
		Initial	**Refresher (In-service)**
1. LSS course	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

G. Postnatal care	Yes or No	When was training received?	
		Initial	Refresher (In-service_
1. postpartum examination and client management	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. FP method counseling	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
3. FP method provision	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
4. STDs/HIV counseling/screening/ treatment/referral/contact tracing	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

H. Breastfeeding	Yes or No	When was training received?	
		Initial	Refresher (In-service)
1. IEC-infant nutrition	Yes No	Month: _____ Year: _____	Month: _____ Year: _____
2. IEC: breastfeeding as a method of FP (LAM)	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

I. Infertility	Yes or No	When was training received?	
		Initial	Refresher (In-service)
1. consultation/referral	Yes No	Month: _____ Year: _____	Month: _____ Year: _____

II. What types of health services, in addition to reproductive health services, have you been trained to provide?)

	Yes	No
1. Child immunization		
2. Child growth monitoring		
3. Oral rehydration		
4. Nutrition counseling (adult and child)		
5. Treatment of minor illnesses - adult		
6. Treatment of minor illnesses - child		

III. What additional training do you need to help you to improve proficiency in service delivery?

Family Planning:

STD/HIV/AIDS:

PAC:

OTHER:

IV. Range of Services Offered in the Facility

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
A. Family planning	Yes No	
1. IEC/health talks	Yes No	Month: _____ Year: _____
2. condom	Yes No	Month: _____ Year: _____
3. foaming tablet/spermicide	Yes No	Month: _____ Year: _____
4. combined pill	Yes No	Month: _____ Year: _____
5. mini pill	Yes No	Month: _____ Year: _____
6. IUD	Yes No	Month: _____ Year: _____
7. injectable	Yes No	Month: _____ Year: _____
8. norplant implant	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
9. vasectomy counseling/ referral	Yes No	Month: _____ Year: _____
10. vasectomy	Yes No	Month: _____ Year: _____
11.tubal ligation counseling/referral	Yes No	Month: _____ Year: _____
12. tubal ligation	Yes No	Month: _____ Year: _____
13. natural family planning counseling/referral	Yes No	Month: _____ Year: _____
14. LAM	Yes No	Month: _____ Year: _____
15 diaphragm	Yes No	Month: _____ Year: _____
16. emergency contraception	Yes No	Month: _____ Year: _____
17. pregnancy testing	Yes No	Month: _____ Year: _____
18. client follow-up	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
B. STDs/HIV/AIDS	Yes No	
1. STD/HIV/AIDS counseling/education (health talks on primary prevention, risk reduction)	Yes No	Month: _____ Year: _____
2. STDs risk assessment/screening	Yes No	Month: _____ Year: _____
3. syndromic diagnosis	Yes No	Month: _____ Year: _____
4. laboratory diagnosis	Yes No	Month: _____ Year: _____
5. treatment	Yes No	Month: _____ Year: _____
6. referral	Yes No	Month: _____ Year: _____
7. HIV/AIDS pre and post test counseling and referral	Yes No	Month: _____ Year: _____
8. HIV/AIDS testing	Yes No	Month: _____ Year: _____
9. dual FP method use	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
10. contact notification	Yes No	Month: _____ Year: _____
11. client follow-up	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
C. Post-abortion care	Yes No	
1. IEC	Yes No	Month: _____ Year: _____
2. abortion counseling	Yes No	Month: _____ Year: _____
3. treatment of incomplete abortion	Yes No	Month: _____ Year: _____
4. MVA	Yes No	Month: _____ Year: _____
5. referral of abortion complications	Yes No	Month: _____ Year: _____
6. postabortion FP counseling/method provision	Yes No	Month: _____ Year: _____
7. client follow-up	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
D. Antenatal Care	Yes No	
1. prenatal assessment	Yes No	
2. IEC/counseling on FP methods	Yes No	Month: _____ Year: _____
3. STD/HIV/AIDS risk assessment	Yes No	Month: _____ Year: _____
4. screening for syphilis	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
E. Maternity Care/Normal Delivery services	Yes No	
1. normal delivery and immediate postpartum care	Yes No	Month: _____ Year: _____
2. FP method counseling	Yes No	Month: _____ Year: _____
3. FP method provision	Yes No	Month: _____ Year: _____
4. STD/HIV counseling/ screening/treatment/referral/ contact tracing	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
5. Emergency Obstetric Care services/referral	Yes No	Month: _____ Year: _____
F. Postnatal care	Yes No	Month: _____ Year: _____
1. postpartum examination	Yes No	Month: _____ Year: _____
2. FP method counseling	Yes No	Month: _____ Year: _____
3. FP method provision	Yes No	Month: _____ Year: _____
4. STDs/HIV counseling/ screening/treatment/referral	Yes No	Month: _____ Year: _____
G. Breastfeeding (IEC)	Yes No	Month: _____ Year: _____
1. IEC-infant nutrition	Yes No	Month: _____ Year: _____
2. IEC-breastfeeding as an FP method (LAM)	Yes No	Month: _____ Year: _____
H. Child immunization	Yes No	Month: _____ Year: _____

Range of Services Offered	Yes or No	Date (month/year) when each service was introduced into the service setting (if yes)
I. Child growth monitoring	Yes No	Month: _____ Year: _____
J. Infertility consultation/referral	Yes No	Month: _____ Year: _____
K. Oral rehydration therapy	Yes No	Month: _____ Year: _____
L. Nutrition Counseling (adult and child)	Yes No	Month: _____ Year: _____
M. Treatment of minor illnesses (child)	Yes No	Month: _____ Year: _____
N. Treatment of minor illnesses (adult)	Yes No	Month: _____ Year: _____

V. National Reproductive Health Service Policy and Standards

A. Do you have a copy of this policy?	Yes No
B. When did you receive your copy?	Date: _____
C. How did you receive your copy?	
1. At a training session	
2. From a supervisor who visits several centers	
3. From a health center manager	
4. Other (please specify)	
D. Have you been trained in how to use the guidelines at the service delivery site?	Yes No

VI. Changes in Client Services

A. Thinking back to the beginning of the year 1996, have there been any changes made in the way in which client services are provided in this facility?	Yes	No
➔**IF YES, WHEN?**		
1. after training	Month: _____	Year: _____
2. after receipt of guidelines/protocols	Month: _____	Year: _____
3. after introduction of new services (PAC, STD/HIV/AIDS)	Month: _____	Year: _____
4. other: (specify)	Month: _____	Year: _____

VII. How have the services that are now provided changed?

for clients:
for providers:
for the community:

VIII. Changes in clinic organization

A. Thinking back as far as the beginning of the year 1996, have any of the following changes been made in the way in which this facility is organized?	Yes	No	Year: _____
1. number of clinic sessions have been increased	Yes	No	Year: _____
2. clinic sessions have been lengthened			
a. morning	Yes	No	Year: _____
b. afternoon	Yes	No	Year: _____
c. evening	Yes	No	Year: _____

3. add provider staff a. Type: _____ b. Number: _____	Yes No Year: _____
4. add assistant staff a. Type: _____ b. Number: _____	Yes No Year: _____
5. add community outreach workers a. Type: _____ b. Number: _____	Yes No Year: _____
6. add new equipment (what service did it enable or enhance?)	Yes No Year: _____
7. add new ☐ supplies ☐ drugs ☐ commodities (what service did it enable or enhance?)	Yes No Year: _____
8. add increased opportunites to offer FP counseling and services	Yes No Year: _____
9. add referrals/linkages to other services	Yes No Year: _____

10. add transport	Yes No Year: _____
11. changes in :	
a. records and reporting systems	Yes No Year: _____
b. ordering and storage of commodities/drugs	Yes No Year: _____
c. staff roles, responsibilites, job descriptions	Yes No Year: _____
d. client flow	Yes No Year: _____
d. OTHER? (please specify)	Yes No Year: _____
B. Have your clients, supervisors and the community accepted the way in which the FP/RH services are now organized? **Can you tell me why you have come to this conclusion?**	Yes No

IX. Tell me about your practice here at the (clinic/health center)

A. Do you have too many/too few clients?	too many too few
B. Has your client load been increasing/decreasing?	increasing decreasing
C. Have the type of clients that come to your service changed in any way?	
1. Are they younger?	Yes No ☐ Do not know
2. Are they older?	Yes No ☐ Do not know
3. Are there more men as clients?	Yes No ☐ Do not know
4. Are there more unmarried clients?	Yes No ☐ Do not know
D. Are the women/families having (fewer) (more) children?	Fewer More Do not know
E. Are there any services that you do not currently offer that you would like to offer, if you could receive training?	Yes No
➔**IF YES, PLEASE EXPLAIN**	
F. Are there any services that you currently offer that you would like not to offer anymore?	Yes No
➔**IF YES, PLEASE EXPLAIN**	

G. How do you know that you are providing the FP/RH services that your clients want and need?		
H. Do you use the information from the clinic records and reports to strengthen and improve family planning client services?.	Yes	No
➔**IF YES, HOW EXACTLY**		
I. How do your clients feel about receiving FP information and services in other RH situations? (STD, PAC services)?		
J. Have you encountered any obstacles in trying to provide integrated FP services (FP in addition to PAC or STD/HIV/AIDS)?		
1. clients	Yes	No
2. providers	Yes	No
3. community	Yes	No
4. supervisors/managers	Yes	No

5. limits on resources	Yes No
➔**IF YES TO ANY OF THE ABOVE (1-5), PLEASE EXPLAIN**	
K. Which RH intervention (PAC, STDs) has promoted the most FP acceptors/continuing users?	
L. How often does your supervisor and/or service manager visit the facility?	Daily Weekly Monthly Quarterly Annually
M. Has your supervisor/clinic manager been trained in FP, PAC and STDs/HIV?	Yes No
N. Does your supervisor help you to solve service delivery problems, provide support and guide you in improving your competency when needed?	Yes No

X .Do you know how it was determined that PAC and/or STD/HIV services would be added to the FP services at your facility as an integrated set of services?

A. PAC and STD/HIV/AIDS were identified as important RH priorities	Yes No Do not know
B. Government mandate (policy) to provide these services	Yes No Do not know
C. Donors provided assistance (technical, financial, human) to establish services	Yes No Do not know
D. Other (please explain)	

XI. Do you agree that the services cited in #10 are the RH priorities for your community or do you see them differently?

XII. Who is responsible for ensuring that the integrated services are provided in accord with the National Reproductive Health Services Policy and Standards?

Regional Level
District Level
Community Level

XIII. Was there sufficient planning and preparation for the new services that have been introduced into this setting?

(What steps were taken to make your facility ready?)

A. formation of committees (national, regional, district, subdistrict, community level), task force, meetings, written communications	Yes	No
B. revised National Reproductive Health Service Policy and Standards	Yes	No
C. orientation workshops for policy makers, managers, educators, service providers, clients and community	Yes	No
D. staff training	Yes	No
E. training of supervisors, managers and coordinators in integrated service delivery	Yes	No

F. facility upgrade, procurement of equipment, supplies, contraceptive commodities/drugs and IEC materials	Yes	No
G. additional staffing	Yes	No
H. integrated systems for recordkeeping, reporting and procurement of drugs and commodities	Yes	No
I. supervision and evaluation of services	Yes	No

Thank you for your assistance with this survey.

Client Exit Interview

1. Health Facility visited (name) _____ _____
2. District (name) _____
3. Village/town (name) _____ _____
4. Date of Visit: _____
5. Name of interviewer: _____ _____
6. Interview number: _____
7. The individual interviewed:

   7.a. Sex ☐ female ☐ male

   7.b. Age._____

   7.c. Marital status ☐ single ☐ married ☐ partnered ☐ widowed ☐ divorced

   7.d. Number of living children _____

   (IF INFORMATION IS VOLUNTARILY PROVIDED: Number of children born alive but not now living_____)

I. What was the main purpose of your visit today? ((Select all that apply)

A. Family Planning (by method)
   1. health talks/counseling
   2. condom
   3. foaming tablets/spermicide
   4. combined pill
   5. mini pill
   6. IUD
   7. injectable
   8. Norplant implant
   9. VSC counseling/ referral
   10. vasectomy
   11. tubal ligation
   12. natural family planning counseling/referral
   13. LAM
   14. Diaphragm
   15. emergency contraception
   16 pregnancy testing

B. Post-abortion care
   1. abortion counseling
   2. treatment of incomplete abortion
   3. MVA
   4. referral of abortion complications
   5. follow-up of post abortion care

C. STDs/HIV/AIDS
   1. STD/HIV/AIDS counseling/risk assessment/screening
   2. diagnosis and treatment for STD
   3. referral for STD/HIV/AIDS
   4. HIV/AIDS pre and post test counseling , referral
   5. HIV/AIDS testing
   6. follow-up

D. Pregnancy Testing

E. Antenatal care

F. Delivery services

G. Postnatal care

H. Child immunization

I. Child growth monitoring

J. Infertility consultation

K. Oral rehydration therapy

L. Nutritional counseling

M. Treatment of minor illnesses (child)

N. Treatment of minor illnesses (adult)

II. What services did you (and/or the person whom you accompanied to the facility today) actually receive today?

(Select all that apply)

A. Family Planning (by method)
   1. IEC/health talks/counseling
   2. condom
   3. foaming tablets/spermicide
   4. combined pill
   5. mini pill
   6. IUD
   7. injectable
   8. Norplant implant
   9. VSC counseling/ referral
   10. vasectomy
   11. tubal ligation
   12. natural family planning counseling/referral
   13. LAM
   14. Diaphragm
   15. emergency contraception
   16. pregnancy testing

B. Post-abortion care
   1. abortion counseling
   2. treatment of incomplete abortion
   3. MVA
   5. referral of abortion complications
   6. follow-up of post abortion care

C. STD/HIV/AIDS
   1. STD/HIV/AIDS counseling/risk assessment/screening
   2. diagnosis and treatment for STD
   3. referral for STD/HIV/AIDS
   4. HIV/AIDS pre and post test counseling , referral
   5. HIV/AIDS testing
   6. follow-up

D. Pregnancy Testing

E. Antenatal care

F. Delivery services

G. Postnatal care

H. Child immunization

I. Child growth monitoring

J. Infertility consultation

K. Oral rehydration therapy

L. Nutritional counseling

M. Treatment of minor illnesses (child)

N. Treatment of minor illnesses (adult)

III. Is this your first visit to this clinic facility? OR Have you received services in this facility before?

IV Are you a new family planning acceptor? OR Are you a continuing family planning user?

V. (Reflection and Evaluation)

WORDING FOR *FIRST TIME CLIENTS TO THE FACILTY (FTCF) is presented in italic font*

WORDING FOR RETURNING CLIENTS TO THE FACILITY (RCTF) is presented in BOLD font:

RTCF*:…*Please think about what you expected would happen during this visit:

RCTF: Thinking back over all the time you have been coming to this health facility for services:

A. FTCF: Did you receive more family planning/reproductive health services than you expected to receive at this visit? A. **RCTF: Do you now receive more family planning/reproductive health services than you used to receive at each visit?**	Yes No
IF YES…(both *FTCF* and RCTF*)* B. Are you more satisfied or more dissatisfied about receiving these additional services?	More Satisfied More Dissatisfied

WHY? (circle one of the following)

1. Didn't know they were available—glad to get them at one visit/location
2. Didn't know I needed them—glad to get them
3. Took to much time---came for a specific purpose
4. Didn't want to discuss other services---private matters
5. Other (explain)

C. *FTCF: Do you think that the services can be improved?* Yes No

RCTF : Do you think the services have been improved over time?

➔**IF YES**,

FTCF:…How do you think they can be improved?

RCTF: How do you think they have been improved?

1. friendly and respectful, caring staff	Yes	No
2. information and services provided in a manner that is easy to understand	Yes	No
3. easier to obtain FP method of choice	Yes	No
4. staff are competent and ensure privacy, confidentiality and cleanliness of facility	Yes	No
5. more choice of FP methods and availability of other RH services at one location/site	Yes	No
6. convenient clinic hours and location	Yes	No

7. services affordable	Yes No
D. What (*other)* suggestions do you have for improving the FP/RH services in this facility?	

Thank you for your assistance in answering these questions. This will help us to improve the services.

QUESTION BY QUESTION GUIDE TO THE INSTRUMENTS

Statistical Data: Question by Question Guide

I. General Information

1. Health Facility visited:

2. District

3. Village/town

Fill in the exact name of the health facility and its location. This information should match exactly with the assignment received from your team leader.

4. Date of Visit:

It is expected that the information can be gathered in one visit to the facility. If it is necessary that a second visit be made, fill in this date also.

5. Name of interviewer:

Fill in the name of the interviewer who completed this instrument, on the date provided in question #4. If a second visit is made, fill in the name of the second interviewer, even if it is the same individual.

6. Type of health facility

Check one code in either section A or B. Information about which facilities will be included in the sample has been provided to the team leader and should be confirmed with the team leader at the time of the work assignment. The information is important to be certain that the full range of facilities has been reviewed during this study.

7. Level of service delivery system

Check one code. This information should be confirmed with the team leader at the time of the work assignment. This information helps to confirm the information gathered in question #6.

8. Size of catchment area.

This information will be used by the Research Team when comparing facilities on issues that relate to quantity of services. The provider or manager from whom you obtain this information may not have an easy or ready answer to this question, as this is often a difficult thing to know. Write down whatever answer is given, such as “the entire district” or “ X number of kilometers.”

9. Staffing

Please confirm the total number of individuals in each of the given categories who are permanently assigned to work in the facility. Do not limit your count only to the number of providers who are present on the day of the visit. You may need to ask the clinic manager for assignment in confirming these numbers. If there are no providers who fit any single category, fill in the number "0". For example, a private maternity home may have only a single provider ("midwife"), and no other personnel.

II. Physical Facilities, Equipment and Supplies

This question will provide information about the readiness of the facility to provide family planning and reproductive health services to clients. You should obtain this information by asking for a tour of the facility, during which you will observe the presence of each of the items. You are not asked to take an inventory of these items (that is, for example, you do not have to count the number of chairs). You are only asked to observe whether or not these items are present. If some items are not easily observable, ask the clinic manager/provider whether the items are available. Mark "yes" or "no" in the space provided, indicating whether these items are present or absent.

1) "adequate utilities" mean that the items are present and in working order. All three items must be present and in working order for a "yes" response.

2) "adequate space for the provider" means that sufficient space is available in which to do the work. The space for processing equipment and supplies should be separate from the space used for providing services to clients. The counseling and examination area may be the same area. Therefore, at least two separate areas must be present for a "yes" response.

3) "adequate space for the client" means that clients waiting for services are in an area separate from the area in which they receive these services

4) "adequate space" for storage of supplies, commodities and drugs means that there is a place for these items to be kept. This space should be some form of cupboard or file.

5) information about "equipment and supplies" is obtained by visual observation that these items are present within their storage space (as in #4), or by confirmation by the provider that these items are in storage. Some items, such as cleaning supplies or a sterilizing unit should be apparent to visual inspection.

6) "IEC materials" should be available for the client and staff, for example, in the waiting areas and in the provider's office. These materials will usually be in the form of brochures, pamphlets, posters, flip charts or models.

7) client records and reporting forms" refer to the forms that are used by providers or managers to document their work. Summaries of data derived from these forms, or log books in which client data are recorded are the records that will be used during the data abstraction. A "yes" response means that blank

copies of three of four of these types of form are available for use. CIRCLE the type of form that is NOT available, if applicable.

8) "emergency transport" means that a plan is in place, so that this action can be taken if necessary. This plan can be confirmed by the clinic manager or provider.

III Review of Records

The client demographic data and service statistic information in Section III will not be available in every facility that is visited. You will obtain information concerning only those services that are offered in the facility or by the provider. You will obtain statistics only for the years in which the particular family planning or reproductive health service was actually offered in that facility.

These data will be abstracted from the record books maintained in the facility and/or by the provider. Each particular service may be recorded in a separate log book (for example, family planning statistics may be kept separately from PAC services in a larger clinic, but might be kept in a single log book by a private midwife provider.) Ask the clinic manager or midwife to provide you with all of the record sources in which you might be able to find the information that is needed. For example, there may be daily log books, monthly summaries, and quarterly report forms.

Fill in the information requested for each month of each year, from January 1996 to December, 1998. If the service was not provided in that setting, in that month, in that year, place an "X" in the calendar space. Each calendar should be filled in completely, either with an "X" or with a number, so that it can be confirmed that there was the attempt to gather the data.

Three types of services will be abstracted separately: family planning, sexually transmitted diseases, and post-abortion care services. It is possible that a single client may receive all three of these types of services on a single visit. If this is the case, these services may be recorded in a single record book (as may be the case in a private maternity facility) or in several different log books (as may be the case in a clinic), one for each different type of service provided to the client. In either case, please document each of these services in the designated section of the data collection instrument

D. Weekly Schedule of Reproductive Health Services

In some facilities selected services may be offered on selected days of the week. In other facilities any and all services may be offered to each client every day (morning, afternoon, evening) of the week. Please fill in each cell of the calendar by writing in all of the services that are provided (for example, "FP", or "PAC" or "STD". If the facility is not open for services on any day (morning, afternoon, evening), please place an "X" in the cell.

Provider/Manager Interview Guide

The information in this instrument will be obtained by personal interview. Carefully document the general information about the facility, making certain that the information that is recorded exactly matches the information on the "statistical data" and "client exit interview forms" that are also being completed by members of the research team. This information is necessary in order that the various data collection instruments can be combined together in a single set, for each facility that is visited. The directions for completion of the duplicated items is repeated here, for your convenience.

1. Health Facility visited:

2. District

3. Village/town

Fill in the exact name of the health facility and its location. This information should match exactly with the assignment received from your team leader.

4. Date of Visit:

It is expected that the information can be gathered in one visit to the facility. If it is necessary that a second visit be made, fill in this date also.

5. Name of interviewer:

Fill in the name of the interviewer who completed this instrument, on the date provided in question #4. If a second visit is made, fill in the name of the second interviewer, even if it is the same individual.

The following <u>additional</u> identifying information must be completed for the Provider/Manager instrument.

6. Interview Number

In some cases a second, or third, interview may be conducted (see item # 8). The interviews must be clearly numbered as #2 or #3, as appropriate.

7. Level of responsibility of the individual interviewed

. In some cases (such as a private maternity home) a single individual may be the only provider in the facility. If that is the case, this individual should be able to provide all of the information that is required to fill out the "Provider/Manager" interview form completely. This person will be coded as "owner/provider"

In the hospitals or clinics the provider's role may be limited to client services. Select the code "provider". In other cases, the provider may also have the responsibility for managing the services offered in the facility in addition to providing client services. Select the code "provider/manager".

8 Qualifications of the individual interviewed.

The individual who should be selected for interview should under all circumstances be a provider of services in the facility. Select the code that represents the highest level of qualification that has been earned by the provider.

IN ADDITION – if there is more than one provider present in the facility, please request to interview the provider who has been located in that facility for the longest period of time (preferably as far back as the beginning of 1996).

IF TIME PERMITS: You may select a second (or third) provider. If this is the case, then a new form must be used for this second (or third) interview. All identification data must be completed. The interview number must be filled in, clearly identifying this as interview #2, or #3, as appropriate.

I. What types of reproductive health services have you been trained to provide?

The interview guide covers a full range of reproductive health services. Any single provider may or may not have received either initial or refresher training in each of these services.

- First ASK the question: "Have you ever been trained to provide the following reproductive health services?"
- Then READ the complete list of services, item by item: **A through I**.
- Mark "yes" or "no" indicating whether any training has been received.
- If the answer is "yes", fill in the month and year for this initial training.
- If the individual has received initial training, then ask the question, "Have you received additional (refresher) training to provide this service?"
- If the answer is "yes", fill in the month and year for this additional (refresher or inservice) training. If the answer is "no", mark an X , or write "no" in the box for refresher training.

II. What types of health services, in addition to reproductive health services, have you been trained to provide?

Read the list of six additional types of health services, and simply mark "yes" or "no" for whether or not the provider training has ever been received.

III What additional training do you need to help you to improve proficiency in service delivery?

First ASK the question as stated and allow the provider to answer. Record the providers' answer under the categories provided (family planning, STD/HIV/AIDS, PAC). If the provider speaks about categories other than these three, use the area outside of the box to record this information.

The three categories can also be used to stimulate conversation. (This is called a probe or prompt.) The interviewer might say "Anything in the area of family planning?", and a similar probe for the other two categories. Finally, the interviewer might say "Anything else?" for additional categories that would be recorded outside of the box.

IV. Range of services offered in the facility

First ASK the question: "Are the following reproductive health services offered in this facility?"

- Then READ the complete list of services, item by item: **A through N**.
- Mark "yes" or "no" indicating whether the service is provided in the setting.
- If the answer is "yes", fill in the month and year when the service was first introduced into the service setting.
- If the answer is "no", mark an X , or write "no" in the month/year box.

V. National Reproductive Health Service Policy and Standards

Items A, B and D should be asked directly. The elements under item C are provided as probes to be used by the interviewer. Additional information should be written in the space provided.

VI through IX.

The questions in these four sections have been developed in the form of probes, that can be used by the interviewer to stimulate and to guide conversation about the specific topics of interest.

VI. Changes in client services

VII. How have the services that are now provided changed?

VIII. Changes in clinic organization

IX. Tell me about your practice here at the (clinic/health center)

Check boxes have been provided, and should be used if they are sufficient to summarize the conversation. Use of the checkboxes will reduce the amount of handwriting required. Nevertheless, interviewers should feel free to add additional information that helps to clarify the responses received. Where multiple examples are offered, circle (or check) the ones that are answered as "yes". Mark "no" only if NONE of the examples apply.

X through XII.

These questions are also developed as probing questions. The entries within the boxes are provided to stimulate and guide the interview. Once again, where multiple examples are offered, circle the ones that are answered as "yes". Mark "no" only if NONE of the examples apply.

X. Do you know how it was determined that PAC and/orSTD/HIV services would be added to the FP services at your facility as an integrated set of services?

XI. Do you agree that these are the RH priorities for your community or do you see them differently?

XII. Who is responsible for ensuring that the integrated services are provided in accord with the National Reproductive Health Service Policy and Standards?

XIII Was there sufficient planning and preparation for the new services that have been introduced into this setting?

Client Exit Interview

The interviewer should attempt to speak with clients who have received services at the facility on the day that the study team is present. . A minimum of two interviews should be obtained, one from a new (first time) client and one from a client who has previously received services in the facility (returning client). Be certain first to obtain the permission of the clinic provider and/or manager to approach clients as they leave the facility. Then be certain to request permission of the clients to speak with them, and assure them that their participation is both fully voluntary and fully confidential. Explain to the client that the information will be used to improve services.

For each interview completed for each client, again, take great care to be certain that the "general information" is exactly the same as on all other forms completed in that facility (Items 1 through 5). These directions are repeated here for your convenience.

General Information

1. Health Facility visited:

2. District

3. Village/town

Fill in the exact name of the health facility and its location. This information should match exactly with the assignment received from your team leader.

4. Date of Visit:

It is expected that the information can be gathered in one visit to the facility. If it is necessary that a second visit be made, fill in this date also.

5. Name of interviewer:

Fill in the name of the interviewer who completed this instrument, on the date provided in question #4. If a second visit is made, fill in the name of the second interviewer, even if it is the same individual.

6. Interview Number

Mark each interview sequentially (#1, "#2" and so forth.).

IN ADDITION: The following information should be obtained from each client interviewed. Ask the question as stated. Accept whatever answer is given. Do not probe for clarification, as this may seem to the client that you are not trusting the response that has been given.

7.a. Sex This is apparent to observation.

7.b. Age ASK "How old are you?"

7.c. Marital status ASK "What is your marital status?"

7.d. Number of children ASK "How many living children do you have?"

NOTE: The client may have had other children who are not now living. If this information is voluntarily provided, make this note on the information sheet. Do not, however, ask for this information.

I. What was the main purpose of your visit today?

- FIRST allow the client to provide one or more answer(s) (for example "family planning").
- THEN, if the answer provided by the client is within category A, B or C, read the list of items within the appropriate category, and circle all the items that apply.
- If the answer provided by the client is category D through N, circle that category.

II. What services did you (and/or the person whom you accompanied to the facility today) actually receive today?

- FIRST allow the client to provide an answer (one or several answers).
- THEN, if the answer(s) provided by the client is (are) within category A, B, or C, read the list of items within the appropriate category (the sublist) and circle all the items that apply.
- If the answer(s) provided by the client is (are) in category D through N, circle the appropriate category or categories.
- Then read through the list, citing any categories not already mentioned by the client, and circle any additional services that were received. If the client answers "yes" to category A, B or C, then also read the category sublist.

III. Is this your first visit to this clinic facility ? OR
Have you received services in this facility before?

Ask the question as presented, and mark one category only.

IV Are you a new family planning acceptor?…OR
Are you a continuing family planning user?

Ask the question as presented, and mark ONE category only. Note that the client may be a first time client of the particular facility (first visit), but has previously obtained family planning services at another facility. This client is, nevertheless, considered a new family planning acceptor at the facility in which she received services on the day of the visit.

Clients who return to the same facility for a second (or further) visit, for additional family planning services, are considered continuing family planning users.

V. Reflection/Evaluation

Question V has been developed in two forms, so that the interview guide could be used for both first time clients to the facility (FTCF) and for returning clients to the facility (RCTF). The questions are

to be posed differently. The client's status as a first time or continuing client to the facility depends on the answer given in question # III.

- Item VA should be posed as written, and the answer provided in the check box.
- Item VB should be posed ONLY if the answer to item VA was "yes". Then seek to obtain additional information using the interview guide probes that are provided.
- Item VC should be posed as appropriate for first time or returning clients, and the answer provided in the check box.
- If the answer to VC is "yes" , seek to obtain additional information using the interview guide probes that are provided.

  Check boxes have been provided as an aid to summarizing the information.
- Item D is an additional and final interview probe to be used if needed.

APPENDIX E: Study Personnel (Ghana)

Study Facilitator (PRIME)	Dr. Alexandre Muhawenimana Regional Program Officer, INTRAH/PRIME
Study Coordinator	Dr. Gilbert Buckle District Director of Health Services, Eastern Region
Study Manager	Ms. Mercy Abbey Ghana MOH/HRU
Data Manager	Ms. Jane Cobbina Ghana MOH/HUR

Study Research Assistants/Interviewers:
Abbey, Joseph
Adika, Patricia
Ama-Yeboay, Sherry
Ashon, Daniel Ato
Bruce-Tagoe, Josephine
Clottey, Crystal
Dzodzodzi, Vivian
Fianco, Isaac
Laryea, Augustine (Tina)
Offei, Florence
Sarkodie, Bismark
Seidu, Irene

Research Assistants participating in the training workshop
Tornui, Janet
Amponsah, Janet
Osei, Delali

APPENDIX F.
TABLE F-1: Family Planning: Demographic statistics

CASES (16 – 20 facilities reporting)	**—1996—**											
Family Planning: Demographic statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	0.2	0.4	0.4	0.2	.0	0.1	0.6	0.6	0.6	0.2	0.2	0.2
b. **actual** age of youngest client seen that month	14	*16	18	19	20	18	18	19	17	17	18	19
c **actual** age of the oldest client seen during month	52	50	49	54	49	50	55	45	60	50	57	55
d. **mean (maximum)** number of MALES seen in clinic	.18 (3)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	0.2 (4)	.0 (0)	.0 (0)	.0.1 (2)
e. **mean** number of NEVER PREGNANT (gravida 0) clients seen	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)
f. **mean** number of clients seen during month	22.8	21.3	14.6	11.6	7.2	4.9	6.5	7.4	9.4	9.3	7.9	7.1

* missing data

Table F-1 (cont)

CONTROLS (7-13 facilities reporting)	**—1996—**											
Family Planning: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	0.2	0.2	0.2	0.1	.0	.0	.0.4	0.1	0.4	.0	0.3	0.1
b. **actual** age of youngest client seen during month	19	18	16	17	21	20	18	19	18	20	19	19
c **actual** age of the oldest client seen during month	46	48	49	40	45	47	46	45	40	40	45	44
d. **mean (maximum)** number of MALES seen in clinic	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)
e. **mean (maximum)** number of NEVER PREGNANT (gravida 0) clients seen	0.4	0.2	0.4	0.1	0.3	.0	0.1	0.1	0.1	.0	.0	.0
f. **mean** number of clients seen during month	15.8	12.7	11.7	6.3	7.3	5.1	4.4	5.9	5.0	6.5	5.3	5.4

*** missing data**

Table f-1 (cont)

CASES (15– 20 facilities reporting)	**—1997—**											
Family Planning: Demographic Statstics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	0.3	0.3	*	0.4	0.4	0.5	0.2	0.4	0.3	0.4	0.2	.0
b. **actual** age of youngest client seen that month	*18	18	17	16	15	18	16	17	15	18	15	16
c **acutal** age of the oldest client seen that month	51	48	56	55	49	46	50	47	46	48	50	48
d. **mean (maximum)** number of MALES seen in clinic	0.1 (1)	.0. (0)	0.2 (2)	.07 (3)	0.2 (2)	0.2 (2)	* (1)	0.1 (2)	* (1)	* (1)	.0 (0)	.0.1 (2)
e. **mean (maximum)** number of NEVER PREGNANT (gravida 0) clients seen	.0 (0)	.0 (0)	0.1 (1)	0.1 (3)	0.2 (2)	0.2 (2)	0.2 (2)	0.1 (2)	0.1 (1)	0.2 (3)	.0 (0)	.0 (0)
f. **mean** number of clients seen during month	27.5	14.7	12.2	11.4	8.9	8.6	10.7	9.0	10.3	9.4	10.1	7.4

* missing data

Table F-1 (cont)

CONTROLS (7 – 13 facilities reporting)	**—1997—**											
Family Planning: Demographic statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	0.2	0/4	.0	.0	0.1	0.2	0.1	0.1	0.1	.0	.01	.0
b. **actual** age of youngest client seen that month	*19	16	20	20	19	19	19	18	19	20	18	17
c **actual** age of the oldest client seen that month	47	50	51	47	50	45	40	50	42	43	40	46
d. **mean (maximum)** number of MALES seen in clinic	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (.0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)
e. **mean (maximum)** number of NEVER PREGNANT (gravida 0) clients seen	.0 (0)	0.2 (2)	.0 (0)	0.2 (2)	.0 (0)	.0 (0)	0.1 (1)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	0.2 (1)
f. **mean** number of clients seen during month	15.2	25.7	16.5	9.1	6.9	6.0	5.3	5.2	4.8	5.0	6.0	5.3

*** missing data**

Table F-1 (cont)

CASE (15 -– 20 facilities reporting)	**—1998—**											
Family Planning: Demographic statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	.0.4	0.5	0.4	0.3	0.1	0.1	0.1	0.2	.0	0.2	.04	0.3
b. **actual** age of youngest client seen that month	*16	18	18	17	17	17	19	21	18	17	16	17
c **actual** age of the oldest client seen that month	5.	55	53	52	48	46	55	60	54	50	51	44
d. **mean (maximum)** number of MALES seen in clinic	0.3 (3)	.0 (0)	0.1 (2)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	0.1 (2)	* (1)	.0 (0)	.0 (0)
e. **mean (maximum)** number of NEVER PREGNANT (gravida 0) clients seen	* (1)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	* (1)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)
f. **mean** number of clients seen during month	27.2	23.7	22.2	11.9	7.6	12.2	10.2	7.0	9.8	6.8	9.8	8.2

*** missing data**

Table F-1 (cont)

CONTROLS (8 – 13 facilities reporting)	**—1998—**											
Family Planning: Demographic statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male and female)	0.1	.0	0.5	0.1	.0.4	0.4	0.5	0.3	.0	0.1	.0	0.3
b. **actual** age of youngest client seen that month	19	20	26	19	17	18	17	18	20	19	20	17
c **actual** age of the oldest client seen that month	52	51	48	45	50	47	42	45	42	44	42	45
d. **mean (maximum)** number of MALES seen in clinic	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	3.5 (28)	3.5 (28)
e. **mean (maximum)** number of NEVER PREGNANT (gravida 0) clients seen	0.3 (2)	.0 (0)	.6 (6)	.0 (0)	.1 (1)	0.3 (2)	0.2 (1)	0.1 (1)	0.1 (1)	.0 (0)	.0 (0)	.0 (0)
f. **mean** number of clients seen during month	14.9	12.2	11.7	8.7	8.3	5.5	6.1	4.5	4.8	6.0	6.8	4.8

*** missing data**

Table F-1 (cont)

CASES (5– 17 facilities reporting)	**—1996—**											
Family Planning Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (maximum)** number of new FP clients	12.4 (97)	8.5 (40)	4.2 (15)	6.8 (48)	9.5 (87)	8.7 (79)	8.0 (81)	6.8 (46)	7.6 (77)	8.4 (48)	4.4 (47)	5.5 (52)
b. **mean (maximum)** number of continuing clients	13.8 (80)	13.7 (51)	9.3 (37)	13.1 (65)	14.4 (118)	14.7 (90)	10.7 (76)	8.6 (55)	5.2 (24)	7.3 (39)	4.0 (18)	8.6 (78)
c. **mean** number of clients provided:												
1) combined pill	8.3	6.8	7.2	4.2	5.0	3.4	4.0	3.3	4.6	3.8	2.4	3.7
2). mini pill	1.4	0.4	0.2	0.7	0.5	10.	1.1	0.7	2.5	0.8	0.7	0.7
3) IUD	2.1	2.6	2.4	2.6	4.1	2.3	1.8	2.0	2.1	2.3	1.6	2.5
4) injectable	17.3	16.7	12.4	11.3	13.0	8.9	8.9	8.5	10.4	1.2	4.4	8.4
5) norplant implant	.1	.0	.0	0.2	0.8	0.4	.0	0.6	0.4	0.5	0.6	.0
6) tubal ligation counseling/referral	.0.9	.0.2	.0	1.1	1.4	2.1	1.5	.0	1.5	2.3	1.9	.0
7) tubal ligation (all methods combined)	.88	1.8	.0	1.11	1.4	2.1	1.5	.0	1.5	2.3	1.9	.0
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11) condom	4.6	4.5	2.7	1.7	6.3	5.4	3.1	3.4	1.3	1.1	4.7	.36
12) diaphragm	.0.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	4.5	2.5	0.8	3.3	4.3	4.6	2.5	3.1	3.0	4.5	5.1	2.8
14) emergency contraception	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table F-1 (cont)

CONTROLS (1 –14 facilities reporting)	**—1996—**											
Family Planning Service Statstics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (maximum)** number of new FP clients	5.8 (23)	4.9 (18)	6.0 (15)	8.1 (42)	6.1 (23)	4.3 (9)	3.8 (13)	3.9 (14)	7.2 (22)	7.2 (24)	6.3 (23)	6.5 (16)
b. **mean (maximum)** number of continuing clients	18.3 (57)	14.3 (50)	12.8 (29)	22.8 (66)	19.1 (60)	12.3 (31)	15.3 (48)	16.4 (39)	10.8 (38)	15.4 (65)	11.6 (45)	14.4 (40)
c. **mean** number of clients provided:												
1) combined pill	11.8	13.2	10.1	8.6	6.0	8.4	9.0	6.9	7.6	8.4	7.9	7.1
2). mini pill	2.3	.75	4.6	3.5	3.0	2.8	1.8	4.0	3.5	4.3	4.0	5.8
3) IUD	2.3	2.3	3.0	1.7	1.3	3.3	1.0	1.0	1.0	1.7	2.7	0.5
4) injectable	13.3	10.1	11.0	17.1	10.0	12.7	17.3	14.2	11.7	15.0	12.7	11.2
5) norplant implant	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6) tubal ligation counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) tubal ligation (all methods combined)	.5	.2	1.5	1.0	2.0	.0	.0	1.3	2.7	1.7	2.3	1.0
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	..0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11) condom	12.1	10.7	26.0	24.8	17.0	40.1	23.1	17.0	14.2	11.9	46.0	33..0
12) diaphragm	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	4.7	5.2	4.8	6.0	19.8	16.2	16.3	11.8	10.6	12.0	14.0	10.6
14) emergency contraception	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table F-1 (cont)

CASES (6 – 20 facilities reporting)	**—1997—**											
Fanily Planning: Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (maximum)** number of new FP clients	6.5 (62)	7.4 (52)	6.4 (61)	7.8 (62)	8.5 (68)	8.5 (65)	9.6 (73)	7.4 (66)	6.5 (47)	6.0 (43)	7.6 (48)	8.2 (52)
b. **mean (maximum)** number of continuing clients	15.9 (80)	14.2 (70)	13.6 (80)	12.2 (70)	13.2 (82)	12.6 (91)	11.4 (66)	14.1 (75)	13.8 (87)	13.6 (96)	10.6 (63)	11.4 (85)
c. **mean** number of clients provided:												
1) combined pill	6.2	5.9	5.4	4.1	3.8	3.9	3.5	3.5	4.0	5.1	3.9	3.8
2). mini pill	0.4	0.8	0.8	0.8	1.2	1.0	0.5	1.3	0.8	0.5	0.7	0.8
3) IUD	4.7	1.3	1.4	1.2	1.9	2.3	2.3	1.8	1.9	1.8	1.4	1.1
4) injectable	17.8	17.5	14.1	11.1	10.6	10.1	8.1	9.6	10.4	9.2	9.1	9.3
5) norplant implant	0.5	1.4	0.8	0.7	0.7	1.2	1.0	0.5	*	0.5	1.0	0.6
6) tubal ligation counseling/referral	0.3	0.3	0.3	.0	.0	0.1	0.4	0.4	0.4	0.7	0.6	.0
7) tubal ligation (all methods combined)	1.3	2.9	1.7	3.4	3.1	3.0	2.7	2.0	1.9	2.6	1.9	1.2
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11) condom	2.0	2.7	4.3	3.1	4.1	7.5	4.4	4.8	3.9	3.9	2.9	2.6
12) diaphragm	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	1.7	2.3	2.2	3.1	2.0	2.9	2.7	2.9	2.8	2.6	2.8	1.9
14) emergency contraception	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table F-1 (cont)

CONTROLS (1-15 facilities reporting)	**—1997—**											
Family Planning: Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (mximum)** number of new FP clients	7.9 (22)	6.3 (17)	6.3 (22)	8.0 (44)	6.8 (23)	6.8 (26)	7.8 (30)	7.0 (42)	5.3 (16)	4.3 (19)	5.4 (34)	6.4 (35)
b. **mean (maximum)** number of continuing clients	18.7 (56)	18.7 (55)	20.6 (55)	12.1 (33)	12.3 (25)	17.0 (88)	14.1 (32)	9.6 (31)	10.6 (32)	10.9 (30)	12.6 (44)	12.8 (43)
c. **mean** number of clients provided:												
1) combined pill	6.6	5.6	14.8	11.8	10.5	10.6	8.7	6.8	6.2	6.2	5.2	8.0
2). mini pill	3.2	2.5	3.8	3.0	3.4	4.4	1.7	2.8	4.0	1.2	1.5	2.0
3) IUD	3.3	2.7	1.0	0.3	2.0	2.8	2.8	1.7	3.3	2.3	3.5	1.7
4) injectable	13.8	12.9	14.8	12.3	16.9	17.1	12.5	10.4	10.7	9.4	12.8	11.3
5) norplant implant	.0	.0	.0	1.5	.0	0.5	.0	1.0	2.0	1.5	.0	.0
6) tubal ligation counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) tubal ligation (all methods combined)	1.3	2.0	2.3	1.7	1.7	1.0	1.7	1.3	1.0	0.3	1.0	0.3
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11) condom	9.0	23.8	24.2	17.2	12.9	6.5	9.9	2.9	37.8	29.7	26.7	17.9
12) diaphragm	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	7.5	5.0	29.7	29.4	26.6	31.5	33.6	33.8	30.6	26.2	26.2	26.2
14) emergency contraception	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table F-1 (cont)

CASES (7 – 21 facilities reporting)	**—1998—**											
Family Planning: Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (maximum)** number of new FP clients	6.4 (46)	8.8 (63)	8.7 (26)	8.2 (48)	9.3 (52)	9.1 (61)	8.9 (78)	9.6 (85)	11.2 (81)	8.8 (53)	11.6 (84)	10.1 (65)
b. **mean (maximum)** number of continuing clients	18.2 (97)	15.2 (52)	13.7 (76)	13.3 (75)	16.1 (108)	19.7 (107)	18.3 (88)	16.2 (76)	13.1 (79)	14.6 (126)	16.1 (143)	17.4 (122)
c. **mean** number of clients provided:												
1) combined pill	6.8	6.1	3.4	4.8	4.1	4.9	4.8	2.3	6.2	4.5	4.8	3.7
2). mini pill	0.8	0.7	0.8	0.8	5.7	4.1	0.5	1.6	0.8	0.6	0.5	1..5
3) IUD	2.4	1.8	2.5	2.3	2.1	1.9	1.9	2.2	1.6	1.0	2.8	1.9
4) injectable	17.4	16.9	16.8	10.5	10.7	11.1	10.0	10.4	9.6	12.3	8.6	13.3
5) norplant implant	0.8	0.9	1.3	1.2	0.3	0.5	1.3	1.2	0.9	0.3	1.8	1.4
6) tubal ligation counseling/referral	0.4	0.7	0.6	3.0	0.7	0.8	0.6	1.1	.0	.0	1.8	.0
7) tubal ligation (all methods combined)	1.0	1.9	2.7	1.3	2.0	2.1	2.3	2.0	3.2	1.1	1.3	1.8
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	0.1	.0	.0
11) condom	*	*	3.1	2.1	2.1	15.8	14.7	4.8	17.9	4.0	6.2	4.8
12) diaphragm	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	1.4	3.3	1.2	1.4	1.5	2.6	5.3	3.8	1.3	1.3	3.3	3.5
14) emergency contraception	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table F-1 (cont)

CONTROLS (1-16 facilities reporting)	**—1998—**											
Family Planning: Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean (maximum)** number of new FP clients	10.1 (34)	6.5 (24)	6.7 (37)	4.9 (18)	5.6 (22)	5.9 (20)	6.4 (24)	7.8 (36)	4.3 (10)	9.4 (39)	13.1 (74)	17.0 (105)
b. **mean (maximum)** number of continuing clients	14.0 (66)	13.1 (52)	11.2 (35)	11.2 (30)	10.1 (35)	9.0 (24)	23.6 (204)	12.5 (29)	11.7 (39)	11.0 (54)	22.9 (149)	23.6 (172)
c. **mean** number of clients provided:												
1) combined pill	7.2	5.8	9.0	6.6	6.0	5.2	5.6	6.2	4.5	3.6	4.7	7.8
2). mini pill	1.5	2.0	1.9	1.6	2.3	1.7	6.8	6.8	0.3	1.8	1.3	4.5
3) IUD	3.4	1.8	3.8	2.3	1.5	2.6	1.3	1.0	1.8	2.4	1.8	1.8
4) injectable	13.7	13.7	10.8	10.9	10.8	9.6	8.9	8.3	9.0	10.1	11.2	10.5
5) norplant implant	1.5	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6) tubal ligation counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) tubal ligation (all methods combined)	3.7	1.0	1.7	1.0	0.7	1.3	0.5	2.3	1.5	3.0	2.7	2.7
8) vasectomy counseling/referral	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) vasectomy	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) natural family planning	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11) condom	*	*	4.7	63.0	69.1	60.6	63.5	27.0	19.4	19.3	31.7	35.6
12) diaphragm	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13) spermicides	19.0	27.2	23.5	19.0	16.6	13.8	30.3	21.0	13.8	18.3	23.8	17.5
14) emergency contraception	.0	.0	.0	.0	.0	.0	0.5	.0	.0	.0	.0	.0
15) LAM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

TABLE F-2: STD Service Statistics

CASES (6- 7 facilities reporting)	—1996—											
STD: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	1.7	1.7	.0	.0	1.7	.0	.0	.0	.0	.0	1.4	1.4
b. **minimum** age of youngest client seen that month	*18	17	*	21	18	29	28	34	26	*	19	22
c. **maximum** age of the oldest client seen that month	40	28	*	65	18	30	39	36	42	*	35	38
d. **mean** number of clients seen during month	0.7	1.2	.0	0.5	0.2	0.3	1.3	0.8	1.5	.0	1.0	.0

CONTROLS (1 facility reporting)	—1996—											
STD Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
b. **minimum** age of youngest client seen that month	14	*	*	44	*	*	*	*	44	24	20	*
c. **maximum** age of the oldest client seen that month	45	*	*	44	*	*	*	*	44	44	40	*
d. **mean** number of clients seen during month	2.0	.0	.0	1.0	.0	.0	.0	.0	1.0	2.0	2.0	1.7

*** missing data**

Table F-2 (cont)

CASES (9 facilities reporting)	—1997—											
STD: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	0.1	0.1	.0	0.3	0.3	0.1	.0	0.1	0.1	.0	.0	0.1
b. **minimum** age of youngest client seen that month	*17	18	25	17	17	14	20	18	19	22	18	14
c. **maximum** age of the oldest client seen that month	56	84	73	45	46	49	47	71	67	65	41	40
d. **mean** number of clients seen during month	1.9	2.9	2.1	2.7	2.1	3.0	2.0	2.2	2.7	1.1	2.8	1.6

CONTROLS (1 facility reporting)	—1997—											
STD: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
b. **minimum** age of youngest client seen that month	14	44	44	20	*	*	*	*	*	*	*	*
c. **maximum** age of the oldest client seen that month	60	44	44	40	*	*	*	*	*	*	*	*
d. **mean** number of clients seen during month	5.0	1.0	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0

*** missing data**

Table F-2 (cont)

CASES (10 – 11 facilities reporting)	—1998—											
STD: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	0.1	.0	0.1	.02	.0	.02	.01	.03	*	.02	*	.02
b. **minimum** age of youngest client seen that month	*15	21	16	16	21	18	19	17	19	20	15	20
c. **maximum** age of the oldest client seen that month	60	70	42	45	60	61	61	42	48	43	41	60
d. **mean** number of clients seen during month	1.3	3.0	3.2	2.5	1.9	3.1	3.2	5.2	2.6	2.6	2.8	2.4

CONTROLS (1 facility reporting)	—1998—											
STD: Demographic Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger (male/female)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
b. **minimum** age of youngest client seen that month	*	*	*	*	*	*	*	*	*	*	*	*
c. **maximum** age of the oldest client seen that month	*	*	*	*	*	*	*	*	*	*	*	*
d. **mean** number of clients seen during month	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

*** missing data**

Table F-2 (cont)

CASES (5 – 7 facilities reporting)	**—1996—**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	0.7	1.2	0.0	0.3	.02	0.3	1.3	4.0	5.0	.0	1.0	1.8
b. **mean** number of cases of:												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	*	*	0.4	0.4	0.2	*	*	*	*	*	0.2	0.2
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	*	*	*	*	*	*	*	*	*	*	0.3	0.8
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	0.8	0.4	*	0.2	*	0.2	*	*	0.2	*	*	*
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	*	*	*	*	*	*	*	*	*	*	*	*
5) scrotal swelling: (chlamydia, gonorrhea)	*	*	*	*	*	*	*	*	*	*	*	*
6) bubos: (lymphogranuloma venereum)	*	*	*	*	*	*	*	*	*	*	*	*
7) genital warts: (HPV, condylomata acuminata)	*	*	*	*	*	*	*	*	*	*	*	*
8) **mean (maximum)** HIV/AIDS	.0 (0)	0.6 (3)	.0 (0)	.0 (0)	.0 (0)	0.2 (1)	1.6 (8)	1.0 (5)	1.6 (8)	.0 (0)	0.5 (3)	0.6 (4)
c. **mean (maximum)** number of cases referred elsewhere for management												

*** missing data**

Table F-2 (cont)

CONTROLS (0 – 2 facilities reporting)	**—1996—**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	4.0	13.0	6.0	3.0	0.0	2.0	3.0	0.8	1.5	4.5	5.0	4.5
b. **mean** number of cases of:												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	*	*	*	*	*	*	*	*	1.0	2.0	2.0	.0
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	*	*	*	*	*	*	*	*	*	*	*	*
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	*	*	*	*	*	*	*	*	*	5.0	3.0	5.0
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	*	*	*	*	*	*	*	*	*	*	*	*
5) scrotal swelling: (chlamydia, gonorrhea)	*	*	*	*	*	*	*	*	*	*	*	*
6) bubos: (lymphogranuloma venereum)	*	*	*	*	*	*	*	*	*	*	*	*
7) genital warts: (HPV, condylomata acuminata)	*	*	*	*	*	*	*	*	*	*	*	*
8) **mean (maximum)** HIV/AIDS	4.0 (4)	13.0 (13)	6.0 (6)	3.0 (3)	.0 (0)	2.0 (2)	3.0 (3)	4.0 (4)	0.5 (1)	1.0 (2)	.0 (0)	4.0 (4)
c. **mean (maximum)** number of cases referred elsewhere for management	*	*	*	*	*	*	*	*	*	*	*	*

*** missing data**

Table F-2 (cont)

CASES (7 – 11 facilities reporting)	**—1997—**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	1.7	2.9	2.2	2.7	2.1	3.0	2.0	2.2	2.6	1.2	2.8	1.6
b. **mean (maximum)** number of cases of:												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	.04	0.4	0.1	0.1	.03	0.4	.0	0.1	0.4	0.1	.0	0.4
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	1.0	2.3	1.5	1.3	1.5	2.2	1.6	1.6	1.5	0.9	1.8	0.1
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	0.4	0.5	.0	0.3	0.1	0.1	.0	.0	0.1	0.1	0.3	0.1
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	.0	.0	.0.1	.0	.0	0.1	.0	.0	.0	.0	.0	.0
5) scrotal swelling: (chlamydia, gonorrhea)	.0	.0	.0	0.1	.0	.0	.0	.0	.0	.0	.0	.0
6 bubos: (lymphogranuloma venereum)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) genital warts: (HPV, condylomata acuminata)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8) **mean (maximum)** HIV/AIDS	0.4 (3)	0.1 (1)	0.6 (5)	1.4 (11)	0.4 (3)	0.4 (3)	0.6 (5)	0.6 (5)	0.5 (4)	0..3 (2)	1.1 (9)	1.1 (9)
c. **mean (maximum)** number of cases referred elsewhere for management	.0 (0)	0.4 (3)	0.1 (1)	0.1 (1)	0.4 (3)	1.0 (7)	.0 (0)	0.6 (4)	1.0 (7)	0.4 (3)	0.3 (2)	0.0 (0)

Table F-2 (cont)

CONTROLS (1 – 2 facilities reporting)	**—1997**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	9.0	2.0	6.0	8.0	8.5	6.5	9.5	6.0	8.0	6.0	4.0	6.5
b. **mean** number of cases of												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	5.0	1.0	1.0	1.0	2.0	2.0	1.0	.0	1.0	.0	.0	.0
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	*	*	*	*	*	*	*	*	*	*	*	*
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	2.0	2.0	3.0	5.0	6.0	2.0	2.0	3.0	2.0	4.0	4.0	6.0
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5) scrotal swelling: (chlamydia, gonorrhea)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6) bubos: (lymphogranuloma venereum)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) genital warts: (HPV, condylomata acuminata)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8) **mean (maximum)** HIV/AIDS	5.5 (11)	0.5 (1)	3.0 (6)	2.0 (4)	1.0 (2)	0.5 (1)	4.0 (8)	4.0 (8)	4.0 (8)	1.0 (2)	.0 (0)	3.0 (6)
c. **mean (maximum)** number of cases referred elsewhere for management	.0 (0)	.0 (0)	2.0 (2)	6.0 (6)	7.0 (7)	8.0 (8)	8.0 (8)	1.0 (1)	5.0 (5)	6.0 (6)	.0 (0)	1.0 (1)

*** missing data**

Table F-2 (cont)

CASES (8 – 10 facilities reporting)	**—1998—**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	1.4	3.0	3.2	2.5	1.0	2.2	3.6	3.4	2.9	2.6	2.8	2.7
b. **mean** number of cases of:												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	0.3	0.2	0.1	0.3	0.2	0.1	0.5	0.1	0.1	0.1	0.1	0.4
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	0.3	1.2	1.8	1.6	0.4	1.1	1.8	2.4	2.3	1.6	1.9	1.4
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	0.1	.0	0.2	0.3	0.1	0.1	0.3	.0	0.2	0.3	0.3	0.4
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5) scrotal swelling: (chlamydia, gonorrhea)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6 bubos: (lymphogranuloma venereum)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) genital warts: (HPV, condylomata acuminata)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8) **mean (maximum)** HIV/AIDS	1.0 (8)	1.8 (16)	1.2 (11)	0.5 (5)	0.3 (3)	1.1 (10)	1.5 (12)	1.2 (11)	1.0 (8)	1.0 (9)	1.0 (9)	0.8 (7)
c. **mean (maximum)** number of cases referred elsewhere for management	.0 (0)	.0 (0)	0.1 (1)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)

*** missing data**

Table F-2 (cont)

CONTROLS (1 – 2 facilities reporting)	**—1998**											
STD Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of cases seen during month	134.5	109.5	137.5	115.0	107.5	127.0	107.0	123.0	94.5	73.0	88.5	109.0
b. **mean** number of cases of:												
1) urethral discharge: (urethritis,chlamydia,gonorrhea)	1.0	1.0	4.0	8.0	6.0	3.0	2.0	5.0	5.0	1.0	0.0	3.0
2). vaginal discharge: (candida, bacterial vaginosis, trichomonas vaginalis, mucopurulent cervicitis [chlamydia, gonorrhea])	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3) PID: (lower abdominal pain with abnormal vaginal discharge, chlamydia, gonorrhea)	8.0	5.0	8.0	15.0	5.0	7.0	5.0	4.0	4.0	1.0	22.0	4.0
4) genital ulcer: (syphilis, HSV, chancroid, granuloma inguinale)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5) scrotal swelling: (chlamydia, gonorrhea)	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6) bubos: (lymphogranuloma venereum)	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
7) genital warts: (HPV, condylomata acuminata)	.0	.0	.0	.0	.0	.0	.0	0.	.0	.0	.0	.0
8) **mean (maximum)** HIV/AIDS	2.0 (4)	2.5 (5)	2.5 (5)	2.0 (4)	3.5 (7)	3.5 (7)	5.0 (10)	4.0 (8)	5.0 (10)	3.0 (6)	4.5 (9)	2.5 (5)
c. **mean (maximum)** number of cases referred elsewhere for management	6.0 (6)	6.0 (6)	10.0 (10)	5.0 (5)	6.0 (6)	5.0 (5)	8.0 (8)	5.0 (5)	1.0 (1)	1.0 (1)	5.0 (5)	2.0 (2)

TABLE F-3: PAC Demographic and Service Statistics

CASES ** (1-5 facilities reporting)	—1996—											
PAC: Demographic and Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger	.0	.0	.0	.5	2.5	0.3	2.7	.0	1.8	0.8	.0	0.4
b. **minimum** age of youngest client seen that month	*	*	*	*18	16	16	17	25	16	17	21	18
c. **maximum** age of the oldest client seen that month	*	*	*	35	35	37	42	38	39	40	43	35
d. **mean** number of clients seen that month	.0	.0	.0	3.5	4.5	3.3	9.0	4.0	6.0	4.0	2.3	2.5
e. **mean (maximum)** number of clients offered emergency treatment of abortion and/or referral	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)	.0 (0)
f. number of MVA's	0	0	0	0	0	1	0	9	5	16	7	7
g. **number** of PAC clients offered or referred to postabortion FP services	0	0	0	6	8	0	22	8	12	14	5	7
h. **number** of clients who returned for follow-up	0	0	0	0	0	0	0	0	1	1	0	2
i. **number** of PAC clients counseled/ screened/treated for STD/HIV	0	0	0	0	0	0	0	0	0	0	0	0
j. **number** of UNMARRIED clients seen that month	0	0	0	0	0	0	0	0	0	0	0	0
k. **numbe**r of GRAVIDA 1 clients seen that month (first pregnancy aborted)	0	0	0	2	4	2	7	3	8	4	0	2

*** missing data**

**** There were NO PAC clients reported for any of 19 control facilities**

Table F-3 (cont)

CASES ** (4 – 9 facilities reporting)	**—1997—**											
PAC: Demographic and Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger	0.7	0.5	0.4	0.2	0.3	0.3	0.1	0.5	0.1	.0	0.7	0.5
b. **minimum** age of youngest client seen that month	*16	16	16	16	14	17	18	16	19	17	15	16
c. **maximum** age of the oldest client seen that month	43	40	45	42	40	44	40	42	42	40	33	40
d. **mean** number of clients seen that month	5.0	3.0	6.9	2.8	2.5	7.1	6.9	19.3	2.7	2.3	3.5	1.8
e. **number** of clients offered emergency treatment of abortion and/or referral	0.6 (4)	0.2 (1)	.0 (0)	.0 (0)	0.3 (1)	.0 (0)	0.1 (1)	.0 (0)	0.4 (1)	0.5 (2)	0.6 (2)	0.1 (1)
f. **number** of MVA's	27	15	17	19	15	19	23	16	16	10	18	11
g. **number** of PAC clients offered or referred to postabortion FP services	23	16	17	16	7	3	4	8	13	5	13	4
h. **number** of clients who returned for follow-up	2	3	2	1	2	3	1	0	1	3	2	2
i. **numbe**r of PAC clients counseled/ screened/treated for STD/HIV	0	0	0	0	0	0	0	0	0	0	0	0
j. **number** of UNMARRIED clients seen that month	0	0	0	0	0	0	1	0	0	0	0	0
k. **number** of GRAVIDA 1 clients seen that month (first pregnancy aborted)	5	3	5	6	4	8	5	5	0	1	4	4

*** missing data**

**** There were NO PAC clients reported for any of 19 control facilities**

Table F-3 (cont)

CASES ** (7 fcilities reporting)	**—1998—**											
PAC: Demographic and Service Statistics	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
a. **mean** number of clients 19 years of age and younger	.0	0.2	0.3	0.3	0.4	0.3	0.1	0.6	0.3	0.6	.0	0.2
b. **minimum** age of youngest client seen that month	*28	*	37	*	*	35	28	18	19	16	22	14
c. **maximum** age of the oldest client seen that month	48	40	40	42	43	40	38	42	37	37	37	39
d. **mean** number of clients seen that month	2.0	1.9	1.8	3.0	2.9	2.6	1.8	2.9	3.4	1.7	1.0	1.0
e. **mean (maximum)** number of clients offered emergency treatment of abortion and/or referral	0.3 (1)	0.3 (1)	.0 (0)	0.2 (1)	0.5 (1)	0.3 (1)	.0 (0)	.0 (0)	0.3 (1)	0.5 (2)	0.2 (1)	0.4 (2)
f. **number** of MVA's	13	11	11	19	17	15	11	9	6	2	4	2
g. **number** of PAC clients offered or referred to postabortion FP services	2	2	1	3	2	1	2	6	2	4	1	2
h. **numbe**r of clients who returned for follow-up	2	2	1	2	1	1	2	1	1	2	1	2
i. **number** of PAC clients counseled/ screened/treated for STD/HIV	0	0	0	0	0	0	0	0	0	0	0	0
j. **number** of UNMARRIED clients seen that month	1	0	0	0	0	1	0	0	0	0	0	0
k. **number** of GRAVIDA 1 clients seen that month (first pregnancy aborted)	3	2	1	8	5	2	2	3	3	2	0	1

*** missing data**

** **There were NO PAC clients reported for any of 19 control facilities**

APPENDIX G:

TABLE G-1: Initial (I) or Refresher (R) Training Received in Reproductive Health Services

CASES	N of Responses	Prior to 1990	1990 – 1995	1996		1997		1998		1999
Total N: Midwife (N=20); Nurse (N=6)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
Family Planning										
IEC	22	6	13	3	2	2	1	2	6	2
condom	22	7	13	2	2	2	2	3	5	1
foam/spermicide	22	8	13	2	2	2	1	3	5	1
combined pill	22	8	13	2	2	2	1	3	5	1
mini pill	22	8	13	2	2	2	1	3	5	1
IUD	17	5	9	1	2	1	1	1	2	4
injectable	23	8	13	2	2	2	1	4	5	1
Norplant implant	4	1	3	1						1
VSC counsel/refer	15	3	6	3	1	1	1	3	3	2
tubal ligation	4		2	2	1		1			
vasectomy	2		1	1						
natural family planning	18	5	10	2	1	1	2	3	3	1
LAM	21	3	8	3	1	2	2	5	2	3
diaphragm	15	3	11	2	1		1		4	
emergency contraception	16	2	8	2		2	2	2	2	4
pregnancy testing	10	1	5	1		1		3	1	1
STD/HIV/AIDS										
STDHIV/AIDs counseling/education (health talks on primary prevention, risk reduction)	15		1	6			1	3	3	7
STD risk assessment/screening	15		1	5		1	1	3	3	7
syndromic diagnosis	15		1	5		1	1	3	3	7
laboratory diagnosis	2			1			1	2		1
treatment	14		2	5	5		1	3	2	7

CASES	N of Responses	Prior to 1990	1990 – 1995	1996		1997		1998		1999
Total N: Midwife (N=20); Nurse (N=6)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
referral	15		1	5		1	1	3	3	10
HIV/AIDS pre/post counseling and referral	4		2	2			1			2
HIV/AIDS testing	1		1						1	
dual FP method use	14		1	5		1	1	2	3	7
contact notification	14		2	5		1	1	3	2	6
client follow-up	14		1	5			1	3	2	7
PAC										
IEC	16		1	6		4	3	5	3	1
abortion counseling	15		1	6		3	3	5	3	1
treatment of incomplete abortion	15		1	6		3	3	5	3	1
manual vacuum aspiration	14		1	6		3	3	4	3	1
referral of abortion complications	15		1	6		3		5		
post abortion FP counseling/method provision	15		1	6		3	3	5	3	1
client follow-up	15		1	6		3	3	5	3	1
Antenatal care										
prenatal assessment and counseling	19	7	7	2		2	2	3	1	1
IEC: counseling for family planning	21	2	8	3		4	2	6	1	1
STD/HIV/AIDS risk assessment and contact tracing	13		3	3		2	2	5		3
screening for syphilis	6	1	2			1		3		2
management or referral for emergency services	19	4	3	4		2	2	4	1	1
Maternity care/normal delivery services										

CASES	N of Responses	Prior to 1990	1990 – 1995	1996		1997		1998		1999
Total N: Midwife (N=20); Nurse (N=6)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
normal delivery and immediate postpartum care	20	7	7	2		2	1	4	1	1
FP method counseling	21	4	10	3		2	2	4	3	1
FP method provision	19	4	9	3		3	2	2	3	1
STD/HIV counseling/screening/treatment /referral/contact tracing	12		2	3		2	1	3	1	5
Emergency Obstetric Care	14	1	6	2		4		2		
Life Saving Skills										
LSS course	10	1	6	2		4	1	2	1	1
Postnatal care										
postpartum examination and client management	20	6	7	2		3	2	3	1	
FP method counseling	21	3	10	3	2	4	3	3		
FP method provision	19	3	9	3		4	1	2	2	1
STD/HIV counseling/screening/treatment /referral/contact tracing	12		2	3		1	1	3	1	4
Breastfeeding										
IEC – infant nutrition	13		3	3		3		4		1
IEC – breastfeeding as an FP method (LAM)	9		6	3		4	1	7	1	3
Infertility										
consultation/referral	5	1	2	1				3		5

Table G-1 (cont)

CONTROLS	N	Prior to 1990	1990 - 1995	1996		1997		1998		1999
Midwife (N=23); Nurse (N=0)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
Family Planning										
IEC	21	2	7	2	1	4	1	4	3	5
condom	21	3	8	1		4	1	2	3	6
foam/spermicide	20	3	7	1		4	1	2	3	9
combined pill	21	3	8	1		4	1	2	3	6
mini pill	21	3	8	1		4	1	2	3	6
IUD	14	6	6	3		6		3	1	9
injectable	21	3	8	1		4	1	2	3	6
Norplant implant	8	1	1	1		2		1	1	3
VSC counsel/refer	15	2	3	2		1	1	3		7
tubal ligation	10	2	2	1			1	2		4
vasectomy	8	2	1	1			1	2		2
natural family planning	15	4	5	1		1	1	2		4
LAM	16	2	3	2		3	1	3	1	5
diaphragm	6	2	1			1		1	1	1
emergency contraception	9	1	1	1		1		1	1	4
pregnancy testing	6		3	1		1		3	1	
STD/HIV/AIDS										
STDHIV/AIDs counseling/education (health talks on primary prevention, risk reduction)	8			1		2	1	3	3	4
STD risk assessment/screening	6			1		2	1	1	3	4
syndromic diagnosis	8		1	3		6	1	6	3	9
laboratory diagnosis	1						1	1		2

CONTROLS	N	Prior to 1990	1990 - 1995	1996		1997		1998		1999
Midwife (N=23); Nurse (N=0)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
treatment	8			1		2	1	2	2	4
referral	8			1	1	2	2	3	3	4
HIV/AIDS pre/post counseling and referral	5		1	1		1	1	1		1
HIV/AIDS testing	2							1		1
dual FP method use	5			1		1	1	2	3	3
contact notification	6		1	6		1	1	5	2	8
client follow-up	6		1	6		1	1	5	2	8
PAC										
IEC	7					1	3	4	3	3
abortion counseling	7					1	3	4	3	3
treatment of incomplete abortion	5					1	3	2	3	3
manual vacuum aspiration	2					1	3	1	3	1
referral of abortion complications	7					1		4		2
post abortion FP counseling/method provision	7					1	3	4	3	3
client follow-up	6					1	3	3	3	3
Antenatal care										
prenatal assessment and counseling	17	12	10	3		5	1	6		1
IEC: counseling for family planning	17	1	4	2		5		4		3
STD/HIV/AIDS risk assessment and contact tracing	9		2			2	2	3		5
screening for syphilis	3		2					1		3
management or referral for emergency services	16	5	3	1		3	2	3	1	3

CONTROLS	N	Prior to 1990	1990 - 1995	1996		1997		1998		1999
Midwife (N=23); Nurse (N=0)		**I or R**	**I or R**	**I**	**R**	**I**	**R**	**I**	**R**	**I or R**
Maternity care/normal delivery services										
normal delivery and immediate postpartum care	17	7	5			4	1	2		1
FP method counseling	17	2	5	1		6		2		3
FP method provision	17		9	1		4		2		4
STD/HIV counseling/screening/treatment /referral/contact tracing	10		2			3	1	4	1	4
Emergency Obstetric Care	14	5	4			4	1	2	1	2
Life Saving Skills										
LSS course	7	4	4			4		2		1
Postnatal care										
postpartum examination and client management	16	5	4			4		2	1	2
FP method counseling	16	1	5	1		5		3	1	3
FP method provision	16	1	4	1		5	1	2	2	3
STD/HIV counseling/screening/treatment /referral/contact tracing	9					4		4	1	2
Breastfeeding										
IEC – infant nutrition	7		1	2		2		1		1
IEC – breastfeeding as an FP method (LAM)	22			2		3	1	1	1	4
Infertility										
consultation/referral	8			1		2				2

APPENDIX H:

TABLE H-1 : *National Reproductive Health Policy and Standards*

Issue	Case (N =27)		Control (N = 22)		Year					
	N of YES	%	N of YES	%	90-92	93-95	96	97	98	99
Has respondent received a copy of the policy?	15	55.6	5	22.7						
If yes, year in which the copy was received:										
case										
control										
How the copy was received	14		3							
at a training session			1							
from a supervisor who visits several centers	0		0							
from a health manager	0		0							
other	1		1							
Has respondent been trained in use of the guidelines?	14		5							

APPENDIX I:

TABLE I-1: Changes in facility organization

Issue	Case (N =27)		Control (N = 22)		Year					
	N of YES	%	N of YES	%	90-92	93-95	96	97	98	99
Thinking back to 1996, have any of the following changes been made in the way in which the facility is organized?										
1. the number of clinic sessions have been increased	17	63	4	19						
case						2	5	3	4	
control							1	1	3	
2. clinic sessions have been lengthened										
morning	15		6							
case						3	6	3	3	3
control							1	4		
afternoon	13		5							
case						2	6	3		1
control							1	3		
evening	7		4							
case						2	3	1	1	
control								1	2	
3. provider staff were added	6	23	3	13.6						
case (1 Ob/GYN; 2 midwives, 3 nurses)										
control (2 midwives)										
4. assistant staff were added	5	19.2	3	13.6						
case (6 medical assistants)										
control (2 medical assistants)										
5. Community outreach workers were added	5	19.2	3	13.6						

Issue	Case (N =27)		Control (N = 22)		Year					
	N of YES	%	N of YES	%	90-92	93-95	96	97	98	99
case (9)										
control (5)										
6. new equipment was added	17	63	8	36.3						
case							5	6	3	3
control							1	2	1	1
7a. additional supplies were obtained	2	8.7	3	13.6						
7b additional drugs were obtained	7	29.2	3	13.6						
7c additional commodities were obtained	6	25	4	18.2						
case										
control										
8. opportunities were increased for FP counseling and services	22	81.5	14	63.6						
case										
control										
9. referrals to other services were added	16	59.3	12	54.5						
case										
control										
10. transportation was added	6	22.2	6	27.3						
case										
control										
11. changes were made to the following:										
records and reporting systems	18	69.2	13	59.1						
case										
control										
ordering/storage of commodities and drugs	13	50.0	7	31.8						

Issue	Case (N =27)		Control (N = 22)		Year					
	N of YES	%	N of YES	%	90-92	93-95	96	97	98	99
case										
control										
staff roles, responsibilities and job descriptions	15	57.7	10	45.5						
case										
control										
client flow	16	61.5	10	45.5						
case										
control										
Where these changes accepted by clients, supervisors and the community?	2‘	87.5	15	75.5						

APPENDIX J:

Table J-1: Client Interviews: Services Requested/Services Received

Service(s) for which client presented to the setting	Service(s) which client received on day of visit	Does client perceive that additional services were received?		If yes: Is client satisfied about receiving additional services?		First time or continuing client of the SDP	
		Yes	No	Yes	No	New	Return
CASES:							
family planning (undesignated)	FP: injectable		X		na*		X
family planning (undesignated)	FP: IEC health talk/counseling FP: injectable	X		X			md**
family planning (undesignated)	FP: IEC health talk/counseling FP: injectable		X		na		md
treatment of minor illness (child)	treatment of minor illness (child)		X		na		X
postnatal care treatment of minor illness (adult)	FP: IEC health talk/counseling postnatal care treatment of minor illness (adult)	X		X			X
antenatal care	antenatal care		X		na		X
antenatal care	antenatal care		X		na		X
family planning (combined pill)	FP: combined pill		X		na		X
family planning (undesignated) antenatal care	FP: IEC health talk/counseling antenatal care treatment of minor illness (adult)	X		X		X	
family planning (IUD)	FP: IEC health talk/counseling FP: IUD	X		X			X
treatment of minor illness (adult)	treatment of minor illness (adult)	X		X			X
antenatal care	STD/HIV/AIDS counseling/risk assessment/screening antenatal care	X		X			X

Service(s) for which client presented to the setting	Service(s) which client received on day of visit	Does client perceive that additional services were received?		If yes: Is client satisfied about receiving additional services?		First time or continuing client of the SDP	
		Yes	No	Yes	No	New	Return
antenatal care	FP: IEC health talk/counseling pregnancy testing antenatal care (counseling) treatment of minor illness (adult)	X		X		X	
antenatal care treatment of minor illness (adult)	STD/HIV/AIDS counseling/risk assessment/screening antenatal care treatment of minor illness (adult)	X		X			X
postnatal care	postnatal care child immunization child growth monitoring nutritional counseling	X		X			X
family planning (undesignated)	FP: IEC health talk/counseling FP: injectable STD/HIV/AIDS counseling/risk assessment/screening	X		X		X	
family planning (undesignated)	FP: IEC health talk/counseling FP: injectable	X		X		X	
antenatal care	antenatal care IEC: health talk/counseling	X		X			X
family planning (IUD)	FP: IEC health talk/counseling FP: IUD child immunization child growth monitoring nutritional counseling	X		X			X

Service(s) for which client presented to the setting	Service(s) which client received on day of visit	Does client perceive that additional services were received?		If yes: Is client satisfied about receiving additional services?		First time or continuing client of the SDP	
		Yes	No	Yes	No	New	Return
family planning (IUD)	FP: IEC health talk/counseling FP: IUD STD/HIV/AIDS counseling/risk assessment/screening	X		X		X	
family planning (IUD)	FP: IEC/health talk/counseling treatment of minor illness (adult)	X		X			X
family planning (health talks/counseling)	FP: IEC/health talk/counseling FP: combined pill		X		md		X
CONTROLS							
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable treatment of minor illness (adult)		dk***		na		
family planning (health talk/counseling) family planning (IUD)	FP: IEC/health talk/counseling FP: injectable	X		X			
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable		X		na		
family planning (health talk/counseling) family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X		X	
family planning (undesignated)	FP: Norplant implant	X		X			md
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X

Service(s) for which client presented to the setting	Service(s) which client received on day of visit	Does client perceive that additional services were received?		If yes: Is client satisfied about receiving additional services?		First time or continuing client of the SDP	
		Yes	No	Yes	No	New	Return
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (combined pill) treatment of minor illness (adult)	FP: IEC/health talk/counseling FP: foaming tablets/spermicide	X		X			X
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (health talk/counseling) family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (injectable)	FP: IEC/health talk/counseling FP: injectable	X		X			X
family planning (undesignated)	FP: IEC/health talk/counseling FP: injectable	X		X		X	

*na: not applicable
**md: missing data
***dk: don't know