

FAMILY PLANNING AT THE SOCIAL SECURITY INSTITUTE IN PARAGUAY: BUILDING CAPACITY AND IMPROVING QUALITY OF CARE

October 2014

This evaluation report was produced for review by the United States Agency for International Development. It was prepared by Alejandra Mijares, Kathryn Banke, Chloé Revuz, and Ilana Ron Levey for the Strengthening Health Outcomes through the Private Sector (SHOPS) project.



Recommended Citation:

Mijares Alejandra, Kathryn Banke, Chloé Revuz and Ilana Ron Levey. August 2014. *Family Planning at the Social Security Institute in Paraguay: Building Capacity and Improving Quality of Care.* Bethesda, MD: Strengthening Health Outcomes through the Private Sector Project, Abt Associates Inc.

Download copies of SHOPS publications at: www.shopsproject.org

Cooperative Agreement: GPO-A-00-09-00007-00

Submitted to: Marguerite Farrell, AOR Bureau of Global Health Global Health/Population and Reproductive Health/Service Delivery Improvement United States Agency for International Development



Abt Associates Inc. 4550 Montgomery Avenue, Suite 800 North Bethesda, MD 20814 Tel: 301.347.5000 Fax: 301.913.9061 www.abtassociates.com

In collaboration with: Banyan Global • Jhpiego • Marie Stopes International Monitor Group • O'Hanlon Health Consulting

FAMILY PLANNING AT THE SOCIAL SECURITY INSTITUTE IN PARAGUAY: BUILDING CAPACITY AND IMPROVING QUALITY OF CARE

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States government.

TABLE OF CONTENTS

Ac	ronyms	vii
Ac	knowledgments	viii
1.	Introduction	1
2.	Methodology	4
	2.1 Objective and Research Questions	4
	2.2 Study Design	4
	2.3 Data Collection	5
	2.4 Data Analysis	5
	2.5 Limitations	6
3.	Findings	7
	3.1 Setting	7
	3.2 Sample	8
	3.2.1 IPS facilities and Providers	8
	3.2.2 IPS Beneficiaries	10
	3.3 Capacity of IPS to deliver FP services	11
	3.3.1 Delivery of FP services at each type of facility	11
	3.3.2 Changes in capacity to provide II ID services – July 2011- December 2012	15
	3.3.4 IPS Providers' perspectives of IUD training	18
	3.3.5 Barriers and facilitators to diffusing IUD training to other IPS providers	20
	3.3.6 Barriers and facilitators to implementation of IUD services	21
	3.4 Beneficiary experiences with FP methods and services at IPS	25
	3.4.1 Beneficiary experiences using short-term FP methods	25
	3.4.2 Beneficiary experiences using IUDs	25
	3.4.3 Beneficially sources of information	25
	3.4.4 Beneficiaries' perceptions of the UID	20
	3.5 Perceived quality improvements in IPS FP and II ID services	20
	3.5.1 Perceived quality improvements among providers	27
	3.5.2 Perceptions of quality among beneficiaries	29
4.	Discussion and Recommendations	31
	4.1 SHOPS provider training and equipment donation exposed private providers to mo	۰r۵
	current FP skills and practices	31
	4.2 IPS has begun to recapture FP beneficiaries	31
	4.3 Addressing structural and systemic barriers experienced by IPS providers is	
	necessary for continued improvement of FP services	32
	4.4 Train providers performing prenatal care	32
	4.5 Incorporate IUD insertion as part of the formal training of providers	33
	4.6 Increase deneticiary UC supply	<u>ა</u> კ ა₁
	4.7 Extend FF Service hours and promote new schedules	34

5.	Conclusion	.35
Ref	erences	. 37

LIST OF TABLES

Table 1: Study research questions	4
Table 2: Distribution of provider sample by type of facility and training group	8
Table 3: IPS providers sample characteristics by training group	8
Table 4: IPS Beneficiary sample characteristics	10
Table 5: Number of sterlization autoclaves and IUD kits donated, by type of facility	15
Table 6: Provider confidence: Proportion of providers Agreeing or strongly agreeeing, by tra	aining
type	18

LIST OF FIGURES

FIgure 1: Timeline of SHOPS TA activities at IPS	3
Figure 4: Mean number of IUDs Distributed per type of facility, May-December 2011 vs. May-	
December 201214	ŀ
Figure 5: IPS provider knowledge and attitudes regarding IUDs	,
Figure 6: Beneficiary knowledge of IUDs26	5
Figure 7: Proportion of Beneficiaries who described IPS IUD services as "very good" or	
"excellent")

ACRONYMS

FP	Family Planning
CPR	Contraceptive Prevalence Rate
IPS	Instituto de Previsión Social (Social Security Institute)
IUD	Intrauterine device
MoU	Memorandum of Understanding
MSPBS	Ministerio de Salud Pública y Bienestar Social (Ministry of Health)
OB/GYN	Obstetrics and Gynecology
00	Oral Contraceptives
PPIUD	Postpartum IUD
PSA	Private Sector Assessment
SRH	Sexual and Reproductive Health
SHOPS	Strengthening Health Outcomes through the Private Sector
STDs	Sexually Transmitted Diseases
ТА	Technical Assistance
тот	Training of Trainers
USAID	United States Agency for International Development

ACKNOWLEDGMENTS

The authors would like to thank those individuals who contributed to this evaluation. First, we would like to thank Dawn Crosby for spearheading the SHOPS activities in Paraguay. We would also like to thank the rest of the SHOPS Paraguay team including Martha Merida, Barbara Garcete, and Enrico Aveiro for their hard work and dedication in implementing SHOPS technical assistance activities. Additionally, we would like to recognize the contributions of Erica James, formerly of Abt Associates, for her work in the design of the evaluation protocol and data collection materials. We are also very grateful to Steven Hendrix, deputy mission director of USAID Paraguay during the SHOPS program, for his support in obtaining necessary in-country approvals. The authors thank IPS leaders for their support and engagement in SHOPS activities and for the data collection of this evaluation. At IPS, we would specially like to thank Dr. Edgar Samudio, Dr. Maria Martha Gonzalez, Dr. Carlos Mongelos, Dr. Carolina Acosta and Dr. Rosa Maria Villalba. Finally, we would like to thank Minki Chatterji, Pat Shifflett, Caroline Quijada, Cynthia Klein, Christina Kramer, and Beth Brennan of Abt Associates for their guidance in the methods used to analyze the data and their thoughtful review of this report.

I. INTRODUCTION

Since 2010, Paraguay has made considerable strides towards improving access to family planning (FP) services and increasing contraceptive prevalence. Paraguay's significant increase in modern contraceptive prevalence (CPR) is largely due to unprecedented growth in FP provision through the public sector. By 2012, given these increases in FP use as well as Paraguay's increasing level of economic development, the United States Agency for International Development (USAID) planned to graduate American foreign assistance for FP. However, prior to graduation, USAID was concerned about the sustainability of recent gains in CPR and the strong reliance on the public sector for FP provision. In 2010, USAID turned to the Strengthening Health Outcomes through the Private Sector (SHOPS) project to examine Paraguay's graduation.

SHOPS began activities in Paraguay in 2010 with a Private Sector Assessment (PSA). The PSA analyzed Paraguay's market mix and segmentation, and identified trends in sourcing patterns of FP products and services. Analysis from the PSA indicated increasing utilization of oral contraceptive (OC) pills, condoms, and injectables for FP, but relatively low use of long-acting methods (Crosby, O'Hanlon, and Armand, 2010). In addition, the PSA demonstrated that the rapid growth of the public sector in providing FP did not negatively impact the private sector. In fact, the growing public sector role improved market segmentation by mainly serving the two lowest wealth quintiles of the population. Since these quintiles had historically been underserved, overall CPR increased.

The PSA focused heavily on the role of Paraguay's *Instituto de Previsión Social* (IPS – Social Security Institute), a hybrid institution (part public, part private), financed by employer and employee contributions. At a time of increasing CPR through the public sector in Paraguay, IPS did not experience significant gains in market share for FP. In fact, IPS's FP market share only grew from 1 percent in 1998 to 3 percent in 2008. Yet, IPS is a major player in Paraguay's health landscape and offers health services to employees and their dependents through 98 facilities, serving approximately 1.2 million beneficiaries or about 20 percent of Paraguay's population.

Results from the PSA indicated that FP services at IPS were underutilized, as IPS was covering 20 percent of the overall Paraguayan population, but only 3 percent of FP users. This underutilization indicated "a market inefficiency in terms of human capital, physical infrastructure, and financing" (SHOPS Project, 2012). Additional findings indicated that many IPS providers did not endorse offering FP services at IPS, and providers who offered FP services had a preference for OC pills. Few providers across IPS facilities were trained in intrauterine device (IUD) insertion, and IPS facilities had a low supply of IUDs.

In 2009, IPS invested in the establishment of a more developed Sexual and Reproductive Health (SRH) program under the leadership of its Preventive Medicine Department. IPS's SRH program took on the responsibility of strengthening the FP program by improving provider capacity and addressing procurement and supply issues, amongst other initiatives. Given IPS's potential to grow its FP provision, expand long-acting methods through its network of private providers, and overall to contribute to the sustainability of Paraguay's CPR gains in a time of graduating donor assistance, the SHOPS program in Paraguay concentrated on repositioning IPS in the marketplace and improving its FP provision. The PSA recommended four main types of interventions to strengthen IPS's FP program:

- i. Consolidate political support and commitment from IPS leadership for the re-launch of the Sexual/Reproductive Health Program
- ii. Assess client needs in FP counseling and services
- iii. Strengthen capacity in FP service delivery
- iv. "Rebrand and market" IPS's FP services to clients

Utilizing these four pillars, the SHOPS program in Paraguay sought to increase the provision of FP services by IPS by improving the Institute's supply of FP services and increasing demand for long-acting methods in its facilities.

In May 2011, a historic Memorandum of Understanding (MoU) was signed between SHOPS, IPS and USAID. This MoU detailed the direction of SHOPS technical assistance (TA) for IPS and marked the first time that IPS received direct assistance from the United States Government. As outlined in the MoU, SHOPS designed a TA program for IPS, which comprised of the following activities:

 a. Provider training on insertion and removal of postpartum IUD (PPIUD) and interval IUD. SHOPS conducted a series of trainings to serve as a contraceptive technology update for IPS Obstetrics and Gynecology (OB/GYN) physicians and nurses. The training was conducted in two stages:

Stage 1: SHOPS trained twelve master trainers located at the institution's central hospital in Asunción during June and July of 2011. Training included clinical methodology of IUD insertion, FP informed choice counseling (accurate and unbiased presentation of all FP methods to clients), and how to train their colleagues in the same methodology. The SHOPS training program exposed IPS providers to state-of-the-art FP clinical practices, including the use of Kelly forceps for post-partum IUD insertion.

Stage 2: Afterwards, the 12 master trainers led a series of trainings (six PPIUD/interval IUD trainings and four interval IUD trainings) from August-November 2011 with a sample of 118 IPS OB/GYNs and nurse/midwives from 38 IPS facilities across Paraguay.

- b. **Equipment donation for IPS facilities.** SHOPS donated equipment to 41 IPS facilities to complement the quality improvement efforts specifically targeting IUD services.
- c. Support for the design of demand generation and communications strategies. In 2011, SHOPS conducted a qualitative assessment with IPS beneficiaries who were FP users to determine why they chose or did not chose to source their FP methods from IPS. The SHOPS team and IPS leadership representatives of the Department of Preventive Medicine facilitated a series of three meetings, attended by directors of the Central Hospital's Department of Obstetrics and Gynecology, Regional Hospitals, Administration of Medicines, and representatives of IPS Communications. In these meetings attendees were presented with the results of the beneficiary qualitative assessment, which helped guide discussions for the development of the 2012-2015 Action Plan (Instituto de Prevision Social, 2012). The action plan centered on the following three strategies:

Strategy 1: Ensure availability of all six FP methods offered by IPS in all IPS facilities Strategy 2: Improve quality of FP services at IPS Strategy 3: Promote IPS FP service The descriptive study presented in this report investigates both the provider training and equipment donation components of the SHOPS TA approach for re-positioning IPS. Figure 1 details the timeline of SHOPS TA activities at IPS, and shows the year between intense TA activities and the commencement of data collection for this study. The length of time between the TA intervention and data collection provides an opportunity to identify longer-lasting changes at IPS facilities.



FIGURE 1: TIMELINE OF SHOPS TA ACTIVITIES AT IPS

2. METHODOLOGY

2.1 OBJECTIVE AND RESEARCH QUESTIONS

SHOPS conducted this study to describe the SHOPS training intervention and perceptions of both IPS providers and beneficiaries about their experiences with family planning services at IPS. Results could inform other large networks of clinics interested in utilizing FP training to strengthen their capacity to deliver IUD services. Research questions are shown in Table 1.

TABLE 1: STUDY RESEARCH QUESTIONS

	Research Questions
	Capacity of IPS to delivery FP Services
1.	How are FP services being provided at each type of facility?
2.	Was there an increase in the distribution of IPS's FP methods from 2011 to 2012?
3.	How did the capacity to provide IUD services at IPS change from July 2011 to December 2012?
4.	What are IPS providers' perspectives on the quality and effects of the IUD training they received?
	a. What are the barriers and facilitators for diffusing IUD training to other IPS providers?
5.	What are the barriers and facilitators to implementation of IUD services in IPS facilities?
	Beneficiary perspectives and experiences with FP methods and services at IPS
6.	What are beneficiaries' prior experiences using FP methods? a. What other FP methods and services did beneficiaries obtain from IPS?
7.	What are beneficiaries' perceptions of IUDs as an FP method?
	Changes in perception of quality
8.	Have the perceptions of quality of IPS IUD services changed among IPS providers from 2011 to 2012?
9.	What are beneficiaries' perceptions of quality of IPS FP and IUD services they received? a. Did these perceptions change from 2011 to 2012?

2.2 STUDY DESIGN

We conducted a descriptive study to answer the research questions outlined above. The study examined the capacity of IPS to deliver FP services, the distribution of FP methods to IPS facilities, the number of IUD insertions at the Central Hospital, provider perspectives related to IUD services, beneficiary perspectives related to FP services at IPS, and the perceived quality of FP services in general. We focused on describing the SHOPS training intervention and documenting SHOPS equipment donations.

2.3 DATA COLLECTION

SHOPS used a mixed-methods approach, collecting both qualitative and quantitative data to provide a more comprehensive analysis of FP program operations at IPS in Paraguay. SHOPS developed and translated data collection instruments into Spanish and then pre-tested them before finalizing them. The Abt Associates Institutional Review Board (IRB) approved the study in July 2012, and the IPS Research Ethics Committee of the Human Sciences Research Council (Paraguay) approved the study in October 2012. A Spanish-speaking SHOPS senior researcher and a trained local interviewer collected the data from November 2012 to January 2013.

The study consisted of the following four activities:

- a. **Document Review.** SHOPS reviewed IPS records on the FP methods distributed by IPS to its facilities between May 2011 and December 2012, and provision of FP methods by the Central Hospital between 2010 and 2012.
- b. Provider Interviews. The research team used a purposeful sampling strategy to select IPS providers who could discuss their experiences delivering FP services for IPS. Providers were selected to cover a range of specialties and different training dates. Out of 12 master trainers and 118 providers who participated in the IUD training, the research team conducted 35 qualitative interviews: seven with master trainers and 28 with trainees from the two types of trainings that SHOPS facilitated.
- c. **Provider Survey.** The research team administered an additional quantitative telephone survey to 25 of the 28 providers interviewed (the remaining three providers could not be reached via telephone). The survey measured FP and IUD knowledge using questions previously administered during the IUD trainings. The survey also measured FP and IUD attitudes and practices, drawing questions from prior research (Hohmann, Cremer, Gonzalez, & Maza, 2011).
- d. Beneficiary Interviews. The research team used a convenience sampling approach to select and interview 72 female beneficiaries (aged 18-45 years) who received a PPIUD or interval IUD from IPS during one of the following time frames: (a) February 2011 to August 2011, or (b) March 2012 to October 2012. IPS provided the research team with a list of 103 potential participants fitting these criteria and who had a phone number. The local interviewer then used the list to recruit and interview beneficiaries via phone. The interview guide included quantitative and qualitative questions regarding demographics, history of FP methods used, experience with FP services at IPS, perceptions of provider competence, and satisfaction with FP services received at IPS. Knowledge questions regarding IUDs were drawn from prior research (McDonald-Mosley, Philips, Ditzian, & Cremer, 2010).

2.4 DATA ANALYSIS

SHOPS analysts used Microsoft Excel to analyze contraceptive distribution patterns and provision of FP methods from the IPS document review. They used NVivo 10 to analyze the qualitative data from the provider interviews (NVivo, 2010). For the provider survey and beneficiary interviews, SHOPS analysts used SPSS version 19 to calculate descriptive statistics (IBM, 2010).

2.5 LIMITATIONS

The following limitations should be taken into account when interpreting the results of this study. First, for the beneficiaries, the IPS data system was incomplete and thus IPS was unable to provide the research team with complete lists of beneficiaries from each of the facilities targeted. As a result, the sample of beneficiaries is not likely to be representative of all beneficiaries. Second, due to time constraints, the research team was unable to reschedule appointments with providers to complete the provider interviews if they were unable to attend their scheduled interview. These issues limit the generalizability of the findings. Third, the research team was only able to obtain records regarding numbers of IUD insertions from the Central Hospital, so that analysis of IUD insertions is limited to data from this facility. Although the Central Hospital is the leading hospital at IPS and serves as a reference hospital, it is possible that trends there do not reflect trends at other facilities.

3. FINDINGS

This section presents results from the qualitative and quantitative data analysis. Section 3.1 provides an overview of the setting and section 3.2 provides an overview of the study sample. Section 3.3 presents an analysis of IPS's capacity to deliver FP services (answering research questions 1-5. Section 3.4 presents an analysis of beneficiary perspectives and experiences with FP methods (answering research questions 6 and 7). Section 3.5 presents an analysis of changes in perceptions of quality of FP services among IPS providers and beneficiaries (answering research questions 8 and 9).

3.1 SETTING

The IPS network is comprised of five different types of facilities, varying according to location and scope. The **Central Hospital** is located in Asuncion and its range of services includes primary, inpatient and outpatient medical care, and complex diagnostic testing. Additionally, Central Hospital serves as the national reference hospital for other IPS facilities (i.e. patients are referred to this hospital from other IPS facilities). **Peripheral Clinics** are located near Asuncion, and offer primary, inpatient care (for chronic illnesses or in case of epidemics), and urgent nonsurgical medical care. **Regional Hospitals** are located in the capital cities of each state in Paraguay serving complex medical needs of the area. The ten Regional Hospitals offer inpatient and outpatient medical care, as well as simple diagnostic testing. Regional Hospitals receive referrals from Health Centers and Health Posts, but they refer cases that are beyond their capabilities to the Central Hospital. Thirty **Health Centers** offer primary medical care consults for basic specialties such as obstetrics and pediatrics; and basic laboratory diagnostic services. Only 5 of the 23 IPS Health Centers provide labor and delivery services. Finally, fifty **Health Posts** provide primary medical care consults (they are serviced by one nurse and one physician). Health Posts do not perform any diagnostic testing or labor and delivery services.

3.2 SAMPLE

3.2.1 IPS FACILITIES AND PROVIDERS

SHOPS interviewed 35 IPS providers from a total of 10 IPS facilities (Table 2). Of the 35 providers, 7 were master trainers, 21 had been trained in PPIUD and interval IUDs, and 7 had attended the interval IUD training.

TABLE 2: DISTRIBUTION OF PROVIDERS SAMPLED BY TYPE OF FACILITY AND TH	RAINING
GROUP	

	Total		Training G	iroup	
IPS Type of Facility	e of number of Facilities Sampled	Master training	PPIUD/Interval IUD Training	Interval IUD Training	All Facilities
	n	n	n	n	n
Central Hospital	1	7	14	0	21
Regional Hospital	4	0	3	4	7
Health Centers	5	0	4	3	7
TOTAL (n)	10	7	21	7	35

IPS provider sample characteristics by training group are shown in Table 3. The mean age of participants was 38.8 years; about half were physicians, 14 percent were OB/GYN residents, and 34 percent were nurses. The mean number of years working as a healthcare provider was 13.4 years, and the mean number of years working at IPS as a healthcare provider was 8.5 years.

TABLE 3: IPS PROVIDERS SAMPLE CHARACTERISTICS BY TRAINING GROUP

		Training	Group	
Description	Master Training	Postpartum/ Interval IUD Training	Interval IUD Training	All Facilities
	n (percent)	n (percent)	n (percent)	n (percent)
Age				
25-34	2 (28.6)	10 (47.6)	0	12 (34.3)
35-44	3 (42.9)	6 (28.6)	4 (57.1)	13 (37.1)
45-56	2 (28.6)	5 (23.8)	3 (42.9)	10 (28.6)
Healthcare Specialty				
Physician ^a	7 (100)	11 (52.4)	0	18 (51.4)
Resident ^b	0	5 (23.8)	0	5 (14.3)
Nurse ^c	0	5 (23.8)	7 (100.0)	12 (34.3)
Number of years as a healthcare provider				

1-9 years	2 (28.6)	11 (52.4)	0	13 (37.1)
10-19 years	3 (42.9)	5 (23.8)	1 (14.3)	9 (25.7)
20 years or more	2 (28.6)	5 (23.8)	6 (85.7)	13 (37.1)
Number of years working at IPS				
0-5 years	1 (14.3)	12 (57.1)	3 (42.9)	16 (45.7)
6-10 years	3 (42.9)	4 (19.0)	1 (14.3)	8 (22.9)
11-15 years	1 (14.3)	2 (9.5)	0	3 (8.6)
More than 15 years	2 (28.6)	3 (14.3)	3 (42.9)	8 (22.9)
TOTAL (n)	7	21	7	35

a Gynecology, Obstetrics and general medicine b First, second and third year residents c Obstetrics and Nursing and Obstetrics

3.2.2 IPS BENEFICIARIES

SHOPS conducted interviews with 72 IPS beneficiaries who received an IUD at one of four facilities: 38 participants from the Central Hospital, four participants from one Regional Hospital, and 30 participants from two Health Centers (Health Center A=19, Health Center B=11). The mean age of beneficiary participants was 33.3 years; 40 percent had an educational level higher than 9th grade; 67 percent were employed outside the home; and 88 percent were married or living with a partner (Table 4).

			IPS Facility		
Description	Central Hospital	Regional Hospital	Health Center A	Health Center B	All Facilities
	n (percent)	n (percent)	n (percent)	n (percent)	n (percent)
Age					
21-29	16 (42.1)	2 (50)	4 (21.1)	1 (9.1)	23 (31.9)
30-39	20 (52.6)	2 (50)	7 (36.8)	6 (54.5)	35 (48.6)
40-49	2 (5.3)	0	8 (42.1)	4 (36.4)	14 (19.4)
Education					
< 9 th grade	23 (60.5)	1 (25.0)	14 (73.7)	5 (45.5)	43 (59.7)
> 9 th grade	15 (39.5)	3 (75.0)	5 (23.3)	6 (54.5)	29 (40.3)
Employed outside the home					
No	15 (39.5)	2 (50)	3 (15.8)	4 (36.4)	24 (33.3)
Yes	23 (60.5)	2 (50)	16 (84.2)	7 (63.6)	48 (66.7)
Marital status					
Single	2 (5.3)	0	1 (5.3)	0	3 (4.2)
Married/Living with a partner	33 (86.8)	3 (75)	17 (89.5)	10 (90.9)	63 (87.5)
Widowed / Divorced / Separated	3 (7.9)	1 (25)	1 (5.3)	1 (9.1)	6 (8.3)
TOTAL (n)	38	4	19	11	72

|--|

Additionally, beneficiary participants had an average parity rate of 2.4; 15 percent (n=11) reported giving birth once; 76 percent (n=55) reported giving birth 2-3 times and eight percent (n=6) reported giving birth more than four times. Twenty-one percent (n=15) of beneficiary participants received their IUD from IPS in 2011 and 79 percent (n=57) received their IUD in 2012.

3.3 CAPACITY OF IPS TO DELIVER FP SERVICES

This section presents analysis of the capacity of IPS to deliver FP services. The analysis consists of a description of how FP services are currently delivered at IPS facilities (including FP counseling and IUD insertion/follow-up procedures), distribution patterns for FP methods with a focus on IUDs, and how IPS capacity to provide IUD services changed over the study period. This section also includes findings related to IPS providers' perspectives on the SHOPS IUD training, along with their reported barriers and facilitators to diffusing the IUD training.

3.3.1 DELIVERY OF FP SERVICES AT EACH TYPE OF FACILITY

FP counseling at all types of facilities

Most providers described making efforts to deliver FP counseling to all patients who need and request it (regardless of marital status or age). Providers conducted FP counseling during regular visits to the FP office or gynecological consult, prenatal care, labor, and/or postpartum rooms. Along with this, nurses provided FP information to patients in the form of a talk or presentation in waiting areas or in postpartum hospital rooms (which are generally shared with several other patients). Moreover, providers reported that recommendations for particular FP methods depended on patients' clinical history (e.g. history of hypertension), socio-economic level and previous history of adherence to FP methods. Still, providers emphasized that they gave information about all FP methods to patients with the intention of letting patients make an *informed choice* about their FP method. Providers were clear that the choice of FP method lay on the patient:

It is always the beneficiary who chooses the method. Beneficiaries who come for the first time are always given FP counseling. We tell them about all the FP methods and they are the ones that choose.

-Health Center Provider

During FP counseling, providers addressed myths about FP methods, explained the importance of spacing pregnancies for the health of the patient, how FP methods work (often using diagrams they draw or from educational materials), how to take short-term methods (i.e. importance of adherence), or how IUDs are inserted. All of the providers interviewed understood the importance of FP counseling and valued it. As a result of FP counseling, providers perceived their patients to be to be better informed about their method of choice and more willing to accept and adhere to an FP method.

IUD insertion and follow-up process: differences among facilities

Differences between the Central Hospital, regional hospitals and health centers were a result of the scope of services provided at each type of facility, the resources available (e.g. space, number of physicians, number of nurses, etc.) and the patient load. The delivery of FP services varied according to the internal dynamics of the facility and the commitment of leadership in those hospitals to improving FP services.

• **Central Hospital.** As the leading IPS hospital, the Central Hospital offered comprehensive obstetrics, gynecological and FP services. In the Obstetrics Department

of the Central Hospital, as a matter of policy, every patient had to be counseled and if possible leave the hospital with an FP method. It was primarily the first and second year residents who were responsible for FP counseling, inserting IUDs, or giving patients an alternative FP method. Residents were supervised by senior physicians, who often checked in with patients to verify if they had received FP counseling or to check that IUDs were properly inserted. In the FP Department, they served any beneficiary seeking an FP method and performed follow-up care for beneficiaries who received a postpartum or interval IUD. FP services were performed by two senior physicians and one nurse. Residents also rotated in the FP department for one month, to assist in the provision of FP services.

- Regional Hospitals. All of the regional hospitals included in this sample were in the early stages of establishing their FP department. FP services were included by weekday consults delivered by one designated physician or nurse, and supported by nurses at alternating times and locations. Most nurses interviewed worked two twelve hour shifts per week in the Obstetrics Departments of these hospitals. Thus nurses offered FP counseling in labor and postpartum recovery rooms, and they provided IUD services during consults of patients that they had previously seen or who were referred by another physician. In one hospital, nurses supplemented their shifts by providing six hours of FP services. Nurses also described performing follow-up IUD care to some of the same patients for whom they inserted an IUD. However, the follow-up care they provided was often contingent on their availability (which often was not clear given their shifts and competing responsibilities).
- Health Centers. Among the health centers in this sample, delivery of FP services was more limited. One health center had just one nurse and one physician offering FP services a couple of days per week, while the one with the most capacity for FP service delivery had six nurses and two physicians. Three of the four health centers in the sample performed PPIUD insertion, and all performed interval IUD insertion. IUD follow-up care was mainly performed by nurses, who noted that their FP patient load was low. Along with this, one health center described providing IUD follow-up care to patients who had received an IUD at the Central Hospital.

3.3.2 CHANGES IN DISTRIBUTION OF FP METHODS

Figure 3 shows the total number of IUDs distributed to all IPS facilities from May 2011 through December 2012. A total of 33 IPS facilities (1 central hospital, 10 regional hospitals, 14 health centers, 5 health posts, and 3 peripheral clinics) received IUDs during this timeframe. Distribution is based on orders by facilities and may serve as a proxy for actual utilization with two assumptions made: facility orders reflect current need for IUDs, and actual distribution to IPS facilities accurately reflects facility orders.



FIGURE 3: TOTAL IUDS DISTRIBUTED TO IPS FACILITIES, MAY 2011 - DECEMBER 2012

It is important to note that the mean number of IUDs distributed may vary monthly or seasonally, and facility orders of IUDs also may fluctuate monthly. It is possible that certain facilities order more IUDs certain months, and even if they do not order the following month, they still perform insertions using stock from an earlier order. To obtain a more accurate comparison of IUD distribution in 2011 vs. 2012, Figure 4 presents these data for the same time period during which data were available (May through December) each year. Overall, the mean number of IUDs received monthly in all IPS facilities increased from 149.5 during May-December 2011 to 270.6 during May-December 2012. With the exception of peripheral clinics, all types of facilities had an increase in the mean number of IUDs received: 28 percent increase in the Central Hospital, 335 percent increase among regional hospitals, 117 percent increase among health

centers, and 100 percent increase among health posts. However the mean number of IUDs received by peripheral clinics decreased 65 percent.



FIGURE 4: MEAN NUMBER OF IUDS DISTRIBUTED PER TYPE OF FACILITY, MAY-DECEMBER 2011 VS. MAY-DECEMBER 2012

3.3.3 CHANGES IN CAPACITY TO PROVIDE IUD SERVICES – JULY 2011- DECEMBER 2012

Equipment donation

In order to support improvements in the capacity to offer IUD services at IPS facilities, SHOPS procured and donated 41 sterilization autoclaves, 40 PPIUD kits, and 78 interval IUD kits to 41IPS facilities. This included all 38 facilities where SHOPS trainees operated, plus three additional facilities where providers had received the same training through the Ministry of Health under a separate project. Table 5 shows the equipment distribution across different types of facilities.

		Type of Equipment Donated		
Type of Facility	Total number of type of facility	Sterilization autoclave	PPIUD Kit	Interval IUD Kit
Central Hospital	1	2	6	4
Regional Hospitals	12	11	24	25
Health Centers	11	11	10	22
Health Post	12	12	0	17
Peripheral Clinics	5	5	0	10
Total (n)	41	41	40	78

TABLE 5: NUMBER OF STERILIZATION AUTOCLAVES AND IUD KITS DONATED, BY TYPE OF FACILITY

Policies and Procedures

Before 2011, many providers reported that they were unaware of IUD best practices: they would wait 30-40 days for PPIUD insertion and manually insert IUDs, or they would remove an IUD after 2-5 years of insertion or if an x-ray showed that the IUD was less than 20 mm from the uterus fundus (encouraged by x-ray technicians).¹ IPS subsequently changed several policies and procedures, and increased their commitment to providing quality FP services to their beneficiaries. For instance, in order to accommodate the needs of their beneficiaries, the FP Department at the Central Hospital extended its afternoon and evening hours of operation. IPS also updated its guidelines regarding the removal of IUDs to 10-12 years after insertion, and convened a meeting with Central Hospital x-ray technicians to explain new guidelines for the location of the IUD (to correct the previous 20 mm guideline).

IPS Provider PPIUD Insertions

Data from the Central Hospital from 2010-2012 revealed an overall 121 percent increase in the number of PPIUD insertions between 2010 (n=215) and 2011(n=476), and a 25 percent increase in the number of PPIUD insertions between 2011 and 2012 (n=594). Since SHOPS began its trainings in June 2011, we analyzed the data separately for the January-May time period and the June-December time period, and found that between January-May 2011 (immediately before training) and January-May 2012 (immediately after training) there was an 81percent increase in PPIUD insertions. Additionally, between June-December 2011 (training period) and June-December 2012 (one year after training) there was a 13 percent increase.

IPS Provider Knowledge and Attitudes

Additionally, the study examined providers' attitudes about inserting IUDs in various situations. All providers agreed that IUDs are effective and safe FP methods (Figure 5). All master trainers felt comfortable inserting IUDs on women who had a history of pelvic infections, while 27 percent (n=4) postpartum/interval IUD trainees and 33 percent (n=1) of interval IUD trainees felt comfortable with insertion in this situation. All master trainers and interval IUD trainees, and most postpartum/interval IUD trainees (80 percent) felt comfortable inserting IUDs on women who are not married. Furthermore, 75 percent (n=6) of master trainers and all interval IUD trainees (n=3) felt comfortable inserting IUDs on women who are nulliparous, while 53 percent (n=8) of postpartum/interval IUD trainees felt comfortable. In addition, all master trainers (n=7) and interval IUD trainees (n=2), and 93 percent (n=14) of postpartum/interval IUD trainees felt comfortable inserting IUDs on women who wanted future fertility.

¹ PPIUDs may be inserted within 48 hours of delivery, and IUDS may be removed 10-12 years after insertion.

IPS provider - knowledge and attitudes regarding IUDs IUDs are effective family planning methods IUDs are safe family planning methods Feel confortable inserting IUDs on women who want future fertility Interval IUD Post-partum/Interval IUD Feel comfortable inserting IUDs Master training on women who are nulliparous Feel comfortable inserting IUDs on women who are not married Feel comfortable inserting IUDs on women who have a history of pelvic infections 0 20 100 40 60 80 Percentage (%) of providers agreeing

FIGURE 5: IPS PROVIDER KNOWLEDGE AND ATTITUDES REGARDING IUDS

IPS Provider Confidence

All trained providers reported a high level of confidence in providing FP counseling on all FP methods (Table 6). As providers noted:

[The IUD training] made me self-sufficient, it gave me confidence. Above all, I know what I am doing, and I do it with confidence and knowledge. Because before FP was an abstract thing, some providers would implement it and others wouldn't. And communication was not fluid, nor the learning process.

- Central Hospital Provider

All master trainers reported that they were confident in using infection prevention techniques during interval IUD insertion, in being able to remove IUDs, in being able to perform early insertion of PPIUDs, and in being able to use Kelly forceps to insert PPIUDs. On the other hand, just 57.2 percent of master trainers agreed that they have sufficient time to counsel patients about FP methods.

TABLE 6: PROVIDER CONFIDENCE: PROPORTION OF PROVIDERS AGREEING OR STRONGLY AGREEEING, BY TRAINING TYPE

Statement	Master Trainers (n=7)	Interval IUD training or PPIUD/interval IUD training (n=18)	Total (n=25)
I feel confident in my ability to provide counseling on all 6 FP methods offered by IPS	100%	100%	100%
I feel confident in using techniques that help prevent infection during interval IUD insertion	100%	94.4%	96.0%
I feel confident in being able to conduct a routine follow-up appointment and to identify and manage potential problems (or refer the patient)	85.7%	88.2%	87.5%
I feel confident in being able to remove an IUD	100%	88.9%	92.0%
I feel confident in being able to perform early insertion of postpartum IUDs	100%	94.1%*	95.8%
I feel confident in being able to insert postpartum IUDs with Kelly forceps	100%	83.3%	88.0%
I have sufficient time to counsel patients about the FP methods offered by IPS	57.2%	70.6%*	66.7%

*Data from n=17 out of 18 providers who had received either interval IUD training or PPIUD/interval IUD training. Thus the total for these statements is n=24.

Most (70.6 percent) providers trained on PPIUDs and interval IUDs felt they had sufficient time to counsel patients about the FP methods offered by IPS. In contrast, just 57 percent of master trainers felt that they had sufficient time for counseling. Qualitative interviews indicated that trained providers had a greater understanding of the importance of FP counseling and informed choice:

I think that giving all women an opportunity to really choose and decided in which moment she wants to get pregnant, it is fundamental. It resonated with me...even as I think about how we can fight poverty.

-Central Hospital Provider

3.3.4 IPS PROVIDERS' PERSPECTIVES OF IUD TRAINING

Master trainers

All master trainers reported being very satisfied with the IUD Training of Trainers (TOT). Specifically, master trainers described feeling well-prepared to facilitate IUD trainings for their colleagues. All master trainers seemed to enjoy and appreciate that the format of the training not only taught them technical skills, but also taught them how to train other providers in a manner that was interactive and increased the likelihood that their trainees learned. In addition, master trainers reported that the TOT helped prepare them to facilitate the trainings by equipping them with all the materials they needed: a kit that included manuals, brochures,

19

evaluations and anatomical models for insertion practice. The curriculum included very detailed evaluation guidelines of trainee knowledge and skills, and master trainers felt confident that their trainees learned the new IUD insertion technique.

Master trainers experienced a few difficulties in their role. Some master trainers pointed out that it was difficult for them to coordinate preparing and facilitating the training with other responsibilities at IPS and with jobs at other facilities. During the training, master trainers also encountered a high degree of resistance from trainees: older or more experienced providers felt that a training on FP knowledge and skills was unnecessary, and some physicians did not feel comfortable being trained by master trainers who were younger than they were. In addition, master trainers found it difficult to coordinate live patients for IUD insertion so that all trainees would have an opportunity to practice. One master trainer noted that in her training of nurses from a Regional Hospital, language was a barrier she had to overcome in the verification of skills, as Guarani was the first language of many nurses.

Trainees

Trained providers reported that they were very satisfied with the IUD training, the materials they received and with the ability of their master trainers to teach. They reported that the format in which the IUD trainings were delivered helped them feel comfortable asking questions, and they felt that their questions were properly acknowledge and answered. Trainees also highlighted that the practice component of the training helped them learn the new technique. Finally, trainees reported that the IUD training equipped them with the confidence, knowledge, and skills to provide quality IUD services.

IPS provider perspectives of quality and effects of IUD training

MASTER TRAINERS

Taught them how to train other providers

...we had the opportunity to learn to teach other providers. I think that is fundamental, and it is something that you usually don't learn in other trainings. In other trainings you either focus on the scientific knowledge or in the technique. Not with this training, we had both!

-Master Trainer

-Master Trainer

Prepared them to address resistance

At the beginning, everyone started very resistant to the training, with an attitude of "What are you going to teach me?!" And at the end, they would leave happy with the training...people would leave convinced that the IUD is an effective method, that it is safe and cheap. And they would also leave convinced of the importance of family planning.

TRAINEES

Equipped them with the confidence, knowledge and skills to provide quality IUD services:

[The training] influenced a lot...because the service that I can offer is much more complete than just labor and delivery services. It transcends to patients' lifestyle and quality of life.

-Central Hospital Provider

Having been trained, I feel stronger and more able to deal with patients.

-Regional Hospital Provider

3.3.5 BARRIERS AND FACILITATORS TO DIFFUSING IUD TRAINING TO OTHER IPS PROVIDERS

Quantitative analysis indicated that 95 percent (n=20) of postpartum/interval trainees, 71 percent (n=5) interval trainees, and 86 percent (n=6) of master trainer participants shared what they learned at SHOPS IUD trainings with other colleagues. Provider trainees shared their knowledge with other IPS providers, and with colleagues in other facilities or their private practice. The context in which they shared their knowledge varied from commenting with colleagues IUD best practices (e.g. waiting time for PPIUD), to demonstrating the new insertion techniques.

Trained providers reported the following barriers to sharing IUD training knowledge: having schedules that differ with the schedules of other untrained providers, and resistance and lack of motivation from untrained providers about acquiring new skills.

At the Central Hospital, first year residents attended the IUD training and then became master trainers. When they became second year residents, they were responsible for training the new group of first year residents. The second year residents demonstrated the IUD insertion technique with Kelly forceps to their first year resident colleagues, but their training did not include any written materials or classroom time. Even after being taught insertion with Kelly forceps, first year residents reported they preferred manual IUD insertion. One trainee expressed concern that once second year residents became third year residents and moved to the next stage of their residency, the IUD insertion training with Kelly forceps would not continue for new residents:

To me it is very important that current first year residents take the [SHOPS] training, because when we become third year residents, we will not be here. We will move to the next service, and they will be in charge [of IUD insertion at the Obstetrics Department]. They are about to move to the next level, and they will not be able to teach the new first year residents.

-Central Hospital

At regional hospitals and health centers, nurse trainees seemed eager to share their knowledge and skills with other nurses. Some nurses even made copies of the training manual they received for colleagues who had not attend the training. However, nurses who either shared the manual or demonstrated the insertion technique to other colleagues did not know how much their colleagues had learned or if their colleagues had attempted insertion with the new technique. A nurse trainee from one health center reported that her supervisor was supportive and interested in the rest of the staff learning the new IUD insertion technique. At the time of her interview, this nurse was organizing a full training for her colleagues with the support of the Coordinator of the SRH program (a SHOPS master trainer).

All master trainers also expressed a desired to continue facilitating IUD trainings, but most were unsure when new trainings could be scheduled. The IPS SHR program leadership also expressed a desire to deliver additional trainings for new IPS Central Hospital residents and for providers from regional hospitals and health centers. However, the main barrier that the SRH program leadership faced was lack of funding for travel expenses, providers' time (trainers and trainees), and food and beverages (given that the training lasts four days).

3.3.6 BARRIERS AND FACILITATORS TO IMPLEMENTATION OF IUD SERVICES

Qualitative interviews were used to explore barriers and facilitators experienced by IPS providers related to providing IUD services. We explored barriers and facilitators at three stages: FP counseling, IUD insertion and follow-up care.

Barriers to implementation of IUD services

Within the different stages of implementation of IUD services, trained and untrained providers from the three types of facilities reported several barriers. At the counseling stage, providers described having difficulties with beneficiary beliefs in myths about IUDs. The three most reported myths were that IUDs cause cancer, IUDs produce bleeding in women, and IUDs can be felt by a male sexual partner during intercourse. In addition, providers working in Obstetrics indicated that lack of previous prenatal counseling was a major barrier they had to overcome. Even when providers counseled patients in the postpartum recovery rooms, they reported that their patients often had not been counseled about FP during prenatal care, which gave less time for patients to consider their FP choices.

At the insertion stage, providers reported issues with access to IUDs, clinical difficulties with insertion, IUD equipment unavailable or being used for other procedures, provider position and schedule at IPS, and lack of knowledge of IUD best practices among other providers, which sometimes resulted in conflicting advice and confusion among patients:

Patients respect what the physician says and teaches them. But it's very hard. Let's say you are my patient, and I counsel you and tell you how great the IUD is. Then you go and ask another physician, who says "No, no, don't put that thing on. It will make you bleed and you will bleed a lot!" It's hard to have a different opinion than your colleagues

-Central Hospital Provider

Providers reported that there were x-ray technicians and untrained providers in other IPS facilities who were still recommending the removal of IUDs based on old guidelines. Nurses working at regional hospitals and health centers reported issues with access to IUDs as a result of not having access to the IPS computer system. Without a username and password, nurses were unable to retrieve IUDs from the pharmacy. To retrieve an IUD some nurses resorted to requesting assistance from physicians who had access to the system. This extra step resulted in extra waiting time for patients and in some cases having to reschedule patients. In a couple of Health Centers this barrier was resolved by the SRH Program Coordinator, who arranged for IUDs to be stored in a cabinet easily accessible by nurses.

Furthermore, some providers at the Central Hospital felt that the number of IUDs inserted in the Obstetrics Department could be higher, if it were not for the lack of fully trained providers. Half of the residents trained by SHOPS were in the next stage of their residency training in the Gynecological Department, and they were no longer conducting PPIUD insertions. As a result, second year residents were the only SHOPS-trained residents inserting IUDs in the Obstetrics department. First year residents did perform IUD insertions, but they preferred to conduct insertions manually. In fact, many seemed to focus on their own comfort, rather than their patients' safety and comfort:

Respondent: It is faster and more practical to do manual insertion [of the IUD]. But insertion with the forceps is more of a process. And for me, it is easier to the manual insertion...

Interviewer: Is it easier for the patient too?

Respondent: In any case it will be uncomfortable.

- Central Hospital Provider

Overall, first year residents did not seem to understand the benefits of inserting IUDs with Kelly forceps (e.g. patient's comfort, lower risk of infection, lower risk of IUD expulsion, etc.). Resident supervisors were aware of this problem, and were attempting to address it, but felt that they needed to conduct a full training in order for first year residents to learn and understand the importance of the new insertion technique.

At regional hospitals and health centers, the main barrier to IUD insertion was lack of human and physical infrastructure to insert IUDs. In some facilities, FP services were supported by Obstetrics nurses but were provided at sporadic time-points, and were dependent on the availability of nurses who had other competing responsibilities.

Many IPS facilities operated at maximum capacity, as IPS infrastructure has not increased at the same pace as their number of beneficiaries. During data collection, two facilities (one regional hospital and one health center) were under construction and IPS providers were operating out of facilities of the MSPBS. Providers from these facilities reported that the lack of space affected their ability to deliver all the FP services they would usually offer, and added to the burden on IPS facilities in neighboring cities and on MSPBS facilities:

We do perform postpartum IUD insertions, but not as many because we do not have many patients with vaginal deliveries at IPS. We are working in a Ministry of Health hospital building. We have two beds for obstetrics. At this moment, it is very uncomfortable. We are in a small space. Most pregnant women are probably going to the neighboring city. It's very difficult.

— Health Center Provider

Still it seemed that at regional hospitals and health centers interviewed, sharing space with providers from another service was the norm. FP service providers often found themselves negotiating space. Moreover, without a private and fully equipped medical office to insert IUDs, nurses at one regional hospital often had to attempt to find available space (such as a labor and delivery room) to insert IUDs. The lack of space added several layers of difficulty, as nurses had to first obtain the IUD from the pharmacy, and then try to find the space available and carry insertion equipment to the room, all while their patient waited:

We don't have an exclusive FP office, which is necessary to have FP methods ready that facilitates the process for the provider and the patient. Because right now, in order to insert an IUD, I have to first go to the pharmacy to obtain the IUD, then I have to find a place where I can conduct the insertion, then I have to find the materials for insertion and take everything to this location. We don't have a designated space to do IUD insertions. Usually I insert in the labor and delivery room, but sometimes it is being used and we have to wait.

- Regional Hospital Provider

At the follow-up stage, care was described as irregular and something that needed to be improved. Some providers reported that their schedule or the type of service they worked in frequently prevented them from providing IUD follow-up care. For example, a patient might

return to a facility for a follow-up appointment but not see the same provider who inserted their IUD because the patient came on a day or time the provider was not working or the provider was working in a different department. According to providers, many patients receive their IUD at one facility, but attend a follow-up appointment at a facility that is located more conveniently to where they live. Therefore, patients might be attending their IUD follow-up care appointments but not seeing the same provider.

Generally patients don't want to come back [for follow-up care]. The ones that come back are few. Many don't come back because they live far away in another city or town. — Central Hospital Provider

Analysis of beneficiary data confirmed that patients have difficulty attending follow-up appointments due to the distance between their home and the IPS facility, lack of proper transportation and lack of time. Moreover, many beneficiaries reported having had difficulty making appointments through the IPS call center:

Sometimes, it is very complicated to get an appointment by phone. Sometimes going to the health center to get an appointment is easier.

— Health Center Beneficiary

It is really hard to get an appointment by phone, because the line is always busy.

- Central Hospital Beneficiary

Facilitators to implementation of IUD services

Providers also described elements of their work, as strategies or factors that facilitated the implementation of IUD services. Providers viewed FP counseling in itself as essential strategy in the process of providing IUD services. Even though most IPS providers viewed the IUD as an effective FP method, they approached FP counseling with an emphasis on *informed choice*. IPS providers counseled their patients about FP methods (tailoring to medical need), and then allowed their patients to choose the method that worked best for them. The availability of education materials to give to patients to take home to read, think about and/or to discuss with their partner was also described as an important tool. For many providers, having a patient who had been previously counseled about FP methods or received information in waiting areas seemed to simplify the process.

Across all types of facilities, providers described the availability of new equipment donated by SHOPS as an important factor that facilitated and improved the IUD services they provide:

The equipment is new, the forceps and the scissors work well...We just go across a hallway and remove the equipment from the stove. We wash our equipment, and then put it back in the stove.

— Regional Hospital Provider

It is a lot easier [with the Kelly forceps]. One doesn't contaminate. Previously we would use our hand, and you practically have to put your arm in up to your elbow! The globe only covers so much. The Kelly forceps are long, and better to avoid contamination. – Central Hospital Provider

At the Central Hospital and one regional hospital the availability of IUDs was seen as an important factor in the support that providers receive from IPS leadership. At the Obstetrics

Department at the Central Hospital, the availability of IUDs was closely monitored and managed by an OB/GYN, who ensured IUDs were in stock and available for insertion.

At the follow-up stage, providers across the different types of facilities reported counseling patients about the importance of IUD follow-up care, explaining the need to "cut the IUD strings" and check that the IUD is in place. Provider trainees often scheduled the follow-up appointments for patients in order to facilitate attendance to follow-up care. Overall, health centers reported a high degree of continuity in their IUD care. Since health centers are located in small towns and tend to serve a lower volume of patients, providers in health centers have the ability to establish a relationship with their patients, which can facilitate IUD follow-up care.

Quantitative analysis of beneficiary attendance to IUD follow-up care appointments indicated that 81 percent (n=58) of beneficiary participants attended their IUD follow-up care appointments. Forty-three percent (n=31) of participants attended at least one follow-up care appointment and 38 percent attended two or more appointments. Only beneficiaries from the Central Hospital reported never attending their follow-up appointment. These participants comprised 19 percent of the total beneficiary sample, but 37 percent of the Central Hospital sample. Also, beneficiaries who attended their IUD follow-up appointment reported that the service was quick and easy, and overall that they did not have difficulties:

In the Family Planning [Department], the attention is fast, there aren't that many problems to see [a provider].

- Central Hospital Beneficiary

3.4 BENEFICIARY EXPERIENCES WITH FP METHODS AND SERVICES AT IPS

This section examines beneficiary experiences using FP methods, other FP services received at IPS, and their current perceptions about the IUD (benefits and disadvantages).

3.4.1 BENEFICIARY EXPERIENCES USING SHORT-TERM FP METHODS

Quantitative analysis of beneficiary data indicates that prior to their recent IUD insertion, beneficiaries used the following **short-term FP methods**: 54 percent (n=39) oral contraceptives; 43 percent (n=31) injectable contraceptives; and 26 percent (n=19) male condoms. Eleven beneficiaries had previously received these FP methods from IPS and none had previously used emergency contraception. Overall, 17 percent (n=12) had not used any short-term methods; 44 percent (n=32) had used one short-term FP method; 38 percent (n=27) had used two FP short-term methods; and one participant had used three FP short-term methods, In addition, 14 percent (n=10) had used traditional FP methods (e.g. withdrawal, rhythm, etc.) and one participant had never used traditional or modern contraception.

3.4.2 BENEFICIARY EXPERIENCES USING IUDS

For 71 percent of beneficiaries (n=51) it was the first time they had used an IUD. Of the new IUD users, only 14 percent (n=7) had previously received an FP method at IPS. Therefore, 86 percent (n=44) of these first-time IUD users were also first-time FP users at IPS: 66 percent (n=29) from the Central Hospital; seven percent (n=3) were from a regional hospital; 11 percent (n=5) were from Health Center A and 16 percent (n=7) were from Health Center B.

86% off first-time IUD users were also first-time FP users at IPS

Conversely, twenty nine percent (n=21) of beneficiaries had previously used IUDs as a FP method: 81 percent (n=17) had used them twice; and 19 percent (n=4) had used them 3-4 times. Of those who had used IUDs more than once, 21 percent (n=8) were from the Central Hospital, 25 percent (n=1) was from a regional hospital; 42 percent (n=8) were from Health Center A and 36 percent (n=4) were from Health Center B.

3.4.3 BENEFICIAIRY SOURCES OF INFORMATION

Beneficiaries confirmed that IPS providers provide FP counseling (one-on-one) and most (92 percent) said that IPS providers were their main source of information about FP services: 97 percent (n=37) at the Central Hospital, 75 percent (n=3) at the regional hospitals, and 87 percent (n=26) at the health centers. Other sources of information about IPS FP services included a friend or family member (25 percent), a brochure (7 percent), and IPS waiting area television (1 percent). None of the participants reported receiving information from the IPS text message service, the IPS social marketing banners, or local radio stations.

3.4.4 BENEFICIARY IUD KNOWLEDGE

The study also assessed beneficiary knowledge regarding the IUD: 83 percent (n=60) correctly answered that the IUD is more effective than oral contraceptives; 83 percent (n=60) correctly answered that the IUD is more effective than injectable contraception (n=60); 79 percent (n=57) correctly answered that the IUD cannot protect against sexually transmitted diseases (STDs); and 70 percent (n=51) correctly answered that the IUD does not cause infertility. Figure 6 provides a summary of these knowledge levels by facility type.



FIGURE 6: BENEFICIARY KNOWLEDGE OF IUDS

3.4.5 BENEFICIARIES' PERCEPTIONS OF THE IUD

Beneficiaries identified the following benefits of the IUD as their FP method of choice: comfortable, easy to use (no need to worry about forgetting a dose, little to no sideeffects), can be used long-term, and it is safe and trustworthy. For a few beneficiaries, the IUD was recommended due to health conditions that may be affected by other FP methods (e.g. hypertension). A small number of beneficiaries reported experiencing discomfort when using the IUD and had it removed. Most of these participants reported experiencing heavy menstruation flow and believed the IUD had been inserted incorrectly.

Beneficiary views of the IUD

No side effects

With the IUD, my menses are more normal. I feel more peaceful. With the pill, my stomach would hurt a lot; it did not suit me well. — Regional Hospital Beneficiary

Easy to use

I don't need to worry to take it every day as with the pills. — Beneficiary from Health Center A

Safe and trustworthy method

My doctor recommended I protect myself with the IUD because it is very safe. So far, I haven't had any problems, it is safe. — Central Hospital Beneficiary

3.5 PERCEIVED QUALITY IMPROVEMENTS IN IPS FP AND IUD SERVICES

This section explores perceived changes in the quality of FP and IUD services at IPS facilities among providers and beneficiaries.

3.5.1 PERCEIVED QUALITY IMPROVEMENTS AMONG PROVIDERS

The study explored perceived quality improvements among providers and focused on changes that occurred between 2011 and 2012.

In most facilities, providers highlighted the availability of FP methods (including the IUD) as a significant change in the quality of the care they provided. They reported that having FP methods in stock and easily accessible enhanced their ability to provide care and improved the satisfaction of their patients.

Now that we have enough methods, I don't have to tell patients "I don't have any more methods."

- Health Center Provider

In addition, some providers viewed the implementation of an FP counseling routine in IPS facilities as a significant quality of care improvement. In fact, many providers described having a change in consciousness about the importance of FP in the care of patients (and seeing this change in their colleagues.) It became important to them to offer FP talks in waiting areas and FP counseling to their patients:

The work that we do is more comprehensive. Our work is not limited to the birth of the baby, we can also do FP and talk to the patient about the importance of a spacing between pregnancies, and offer an FP method. The service is more complete. — Central Hospital Provider

At the Obstetrics Department in the Central Hospital, the change in consciousness trickled down from program leaders to residents. The importance of FP was illustrated in the phrase "Every [postpartum] patient must leave with a family plan," which was repeated almost as a motto. Moreover, at the Central Hospital, FP became a team effort instead of something addressed individually by providers. Providers in the both the Obstetrics Department and the FP Department reported observing more publicity within the hospital about IPS FP services (e.g. posters, banners) and had education materials (e.g. brochures) in stock to give to their patients as part of FP counseling.

Furthermore, at the Central Hospital, the hours of operation for the FP department were extended and the new schedule was from 7 am to 8 pm. This change was implemented in order to facilitate attendance of beneficiaries:

Previously patients had to leave their work to come to attend an FP consult. Now, they can attend in the afternoon or in the evening.

— Central Hospital Provider

Master trainers and trainees reported several benefits to having the new equipment: (1) the equipment is new and of better quality than the equipment they had before, (2) the autoclave sterilizer allows providers to sterilize Kelly forceps and helps them be properly prepared for IUD insertions, and (3) the equipment helps providers insert IUDs using the technique they learned in the IUD training. Moreover, trained providers reported that the use of Kelly forceps helped them insert IUDs faster, and improved the quality of care they provided by reducing the risk of infection and IUD expulsion. The forceps also helped with the comfort of their patients during insertion. As one provider pointed out:

We used to insert IUDs manually, and it was very uncomfortable for patients, it would hurt so much! Even when we would initiate the process of insertion, patients didn't want to continue...So we would stop. Because of that we couldn't insert the IUD to many patients. And now, patients barely feel anything when we insert with Kelly forceps. The service improved so much! — Central Hospital Provider

Support from IPS Leadership

Among providers the SHOPS TA was perceived as a major contributor to increasing the involvement and support they received from program leaders to improve the FP programs at IPS facilities (three program leaders were master trainers). Providers described the support in various forms: (1) they ensured that FP methods were in stock and readily available; (2) they changed policies and procedures to facilitate insertion of IUDs; (3) they had an open line of communication with providers across the network of IPS facilities to ensure that difficulties were being addressed; and (4) in the Obstetrics Department at the Central Hospital, they monitored FP counseling and the number of women who received an FP method per shift; as one provider highlighted:

[Program leaders] are permanently there next to us monitoring the amount of IUDs that are being inserted, looking to see if there is a need for more IUDs or not. They ask what are our difficulties...they are there accompanying us.

- Central Hospital Provider

Although the distance across the network of IPS facilities and competing responsibilities sometimes made it difficult for program leaders to address issues, many providers at these facilities felt that they had an open line of communication with the SRH Program Coordinator. Providers felt free to call the SRH Coordinator for support when they had difficulties within the FP department of their facility.

3.5.2 PERCEPTIONS OF QUALITY AMONG BENEFICIARIES

This study also assessed beneficiaries' perceptions about the quality of FP and IUD services they received. Most beneficiaries reported a high level of satisfaction with the FP services and rated the following services as "very good" or "excellent": overall IUD services they received (90 percent); the usefulness of the information regarding IUDs received by providers (78 percent); the kindness and respect of medical personnel to beneficiary questions (97 percent); and the skill of medical personnel regarding PPIUD insertions (90 percent) (Figure 7). Data from the Regional Hospital, in particular, suggest that the usefulness of the information provided to beneficiaries (or the way in which such information is communicated) about the IUD can be improved.

FIGURE 7: PROPORTION OF BENEFICIARIES WHO DESCRIBED IPS IUD SERVICES AS "VERY GOOD" OR "EXCELLENT"



Beneficiaries also noted several strengths of IPS's FP services: the competency of providers, polite and professional treatment from providers, and efficiency in the services being provided. These strengths were also previously noted by potential clients who were interviewed in the course of program operations in the 2011. A notable difference between 2012 and 2011 participants was the level of satisfaction with FP counseling. In the 2011 study, participants had described the FP counseling they received as insufficient or in many cases were unaware that IPS offered FP services. Participants in the 2012 study were very satisfied with the FP counseling they received the FP information provided to them as thorough:

[I liked everything about my experience with the family planning services at IPS], especially the explanations from the obstetrician regarding the IUD, and her skills. All of my expectations were filled.

- Central Hospital Beneficiary

On other hand, beneficiaries described the following weaknesses in the FP services they received: difficulty scheduling appointments through the call center, long waiting times to see providers, inadequate physical infrastructure, lack of providers or services in small towns, and limited office hours. At health centers, a few participants also described unprofessional and disrespectful treatment from administrative and operational personnel. Most of these

weaknesses were also previously noted by participants in the 2011 qualitative study, except for inadequate physical infrastructure, and lack of providers or services in small towns.

4. DISCUSSION AND RECOMMENDATIONS

The SHOPS project, in partnership with IPS leadership, set out to reposition IPS in the FP market by strengthening its capacity to deliver quality FP services and recapturing IPS beneficiaries seeking FP services from other providers. With these goals in mind, SHOPS conducted four TA activities: (1) provider IUD insertion training, (2) equipment donation, (3) a beneficiary qualitative study, and (4) the development of an action plan, with input from key IPS leaders. This descriptive study sought to document how IPS operated its FP program and examined the program's successes and challenges. Findings from this study indicate that recent changes at IPS have contributed to improved performance of the FP program.

4.1 SHOPS PROVIDER TRAINING AND EQUIPMENT DONATION EXPOSED PRIVATE PROVIDERS TO MORE CURRENT FP SKILLS AND PRACTICES

The format of the IUD training, which highlighted an *informed choice* approach to FP counseling, the science behind the new insertion technique, and trainee participation (e.g., asking questions, practicing the technique) provided trainees with knowledge and skills of the new IUD insertion method. SHOPS partner Jhpiego utilized a state-of-the-art methodology for post-partum insertions with the Kelly forceps. The SHOPS equipment donation allowed providers to put into practice the skills they learned during the IUD training, increasing the number of IUD insertions and improving the quality of care of their patients. Higher quality equipment like the Kelly forceps lowered the risk of client infection and IUD expulsion while supporting patient comfort.

4.2 IPS HAS BEGUN TO RECAPTURE FP BENEFICIARIES

Given IPS's extremely low FP provision prior to SHOPS TA, the ability of IPS to recapture FP beneficiaries is a noteworthy finding. The majority of first-time IUD users in this study sample were also first-time FP users at IPS. Large-scale marketing of FP services can be a helpful strategy in recapturing FP beneficiaries, but it takes time and planning, and can be costly. This study highlights that IPS providers are now playing a key role in the promotion of FP services through FP counseling and talks in waiting areas. In fact, for the majority of beneficiaries in this study, providers were their main source of information regarding IPS FP services, which suggests that these provider-driven communication strategies are working and should continue given their effectiveness and low cost. This enhanced role of IPS providers in FP information is a significant improvement from beneficiaries in the 2011 study who were not aware that IPS had a FP program. Finally, most beneficiaries in this study reported positive experiences with the FP program at IPS and reported a high level of satisfaction with the FP counseling they received, in contrast to beneficiaries in the 2011 study.

4.3 ADDRESSING STRUCTURAL AND SYSTEMIC BARRIERS EXPERIENCED BY IPS PROVIDERS IS NECESSARY FOR CONTINUED IMPROVEMENT OF FP SERVICES

Although IPS has made various strides towards improving the quality of FP services at IPS, many structural and systemic barriers still exist across IPS facilities. The most notable barriers include:

- Lack of prenatal FP counseling. Lack of buy-in from untrained providers who offer prenatal care leads to limited prenatal FP counseling. This missed opportunity to promote IPS's FP services and give women the time they require to reflect on their FP choices suggests a need to specifically target and train providers responsible for prenatal care.
- Lack of physical infrastructure and dedicated human resources. At IPS, the number of FP beneficiaries increased during the time of SHOPS TA but the infrastructure did not keep up with this growth. Many providers in Regional Hospitals and Health Centers did not have the designated space to perform FP counseling or IUD insertions. These physical limitations imposed obstacles for providers offering care and deterred patients from seeking FP services. Furthermore, the irregularity of nurses' schedules for FP services in Regional Hospitals and Health Centers signified the need to increase the number of designated providers that can offer FP services regularly.
- Limited Diffusion of Training. The success of the SHOPS model is predicated on continued diffusion of FP training by master trainers to new medical residents. At the Central Hospital, medical residents are at the forefront of FP care. In order for IPS to continue conducting post-partum IUD insertions with the technique taught by SHOPS, medical residents need to be fully trained. Gaps in the diffusion of training at IPS results in new medical residents without adequate knowledge of Kelly forceps and state-of-the-art FP care.
- **Appointment system**. As with the 2011 qualitative study, many beneficiaries in the study sample reported difficulties making appointments through the IPS call center. The inability to make appointments through the IPS call center can affect continuity of care (e.g., appointments for OCs) or contribute to patients seeking services elsewhere.

Based on these above findings, the evaluation team proposes the below **recommendations** to help IPS sustain recent improvements and continue to expand the impact of its FP program.

4.4 TRAIN PROVIDERS PERFORMING PRENATAL CARE

Beneficiaries receiving prenatal care at IPS attend at least four prenatal care appointments during their pregnancy. Results indicate that the lack of trained providers in FP counseling is a missed opportunity during these timely prenatal care visits. Generating buy-in with physicians and nurses performing prenatal care is an important step in giving patients a unified message and allowing them more time to consider their FP choices.

To obtain buy-in from physicians and nurses performing prenatal care, the study team recommends that IPS master trainers conduct a series of trainings with these providers. Trainings should focus on:

- the importance of FP for patients, illustrating how providers are an important source of information;
- how to conduct informed choice FP counseling;

- how to address myths regarding FP methods;
- how to approach difficult situations;
- the importance of a unified message across IPS;
- IUD best practices and new guidelines; and
- an overview of recent changes at IPS to support quality of care.

At the same time, trainers should use this time to have an open dialogue with providers to address any barriers to and anxiety around FP counseling they may foresee (e.g., perception that FP counseling may take too much time).

4.5 INCORPORATE IUD INSERTION AS PART OF THE FORMAL TRAINING OF PROVIDERS

Even though the training of master trainers was a first step towards building a strong FP program at IPS, the lack of a sustainable plan for continued diffusion of IUD best practices may jeopardize recent progress. The IUD training at IPS is dependent on additional funding for a four-day training that covers food expenses, labor time of attendees, and travel accommodations (for trainings conducted for providers working in facilities other than the Central Hospital). IPS is vulnerable to a small pool of master trainers that could leave employment at IPS and no longer diffuse skills learned through the SHOPS trainings. The evaluation team recommends the development of a diffusion and sustainability plan that covers the following areas:

- At the **Central Hospital**, the IUD training curriculum should be integrated into the formal training curriculum of first year and second year OB/GYN residents. Untrained residents in this sample reported that they had not received any written information regarding IUD best practices and did not understand the benefits of using Kelly forceps during insertion. The integration of the IUD training into the formal curriculum is necessary and offers a cost-effective approach for sustaining program changes.
- At **Regional Hospitals**, current master trainers should conduct additional trainings for untrained providers offering FP and Obstetrics services. Another more cost-effective option would be to train new master trainers in Regional Hospitals so that they can train other providers and integrate the IUD curriculum into the training of OB/GYN residents. New master trainers should include respected leaders within these hospitals (e.g., Director of Obstetrics, Director of Gynecology). At **Health Centers**, new trainings could be led by current master trainers to train providers who were not part of the original training, or they could be integrated into the trainings at Regional Hospitals if they are close in proximity.
- Selection of Master Trainers is crucial. The importance of strategic selection of master trainers, who hold leadership positions, should not be underestimated. These leaders may have the power to facilitate needed operational changes (as with the Central Hospital). In addition, study findings indicate that some providers were reluctant to receiving training from younger master trainers. Clearly, selecting the right master trainers that can command the respect of a broader pool of IPS providers is essential.

4.6 INCREASE BENEFICIARY OC SUPPLY

At the time of data collection, beneficiaries were only allowed to receive a monthly supply of OCs. This study found that beneficiaries experienced several personal barriers to attend FP appointments at IPS (e.g., work, distance, or transportation) as well as difficulties making

appointments through the call center. Increasing the OC supply of beneficiaries from a onemonth to a three-to-six month supply (like many clinics in the United States) improves the odds of continuity (White & Westhoff, 2011).

4.7 EXTEND FP SERVICE HOURS AND PROMOTE NEW SCHEDULES

In Regional Hospitals and Health Centers, there is a need for a regular FP service schedule and for FP service hours to be extended in the evening. The Central Hospital implemented an extended schedule with evening hours. FP providers reported that this change increased attendance among beneficiaries who work during the day. However, many beneficiaries in the sample were not aware of this change. IPS could promote the change in schedule by sending a text message or e-mail newsletter to beneficiaries and by having OB/GYNs inform patients of the new schedule during prenatal consultations or FP counseling.

5. CONCLUSION

Findings from this study offer valuable insights about the implementation of a multi-pronged, SHOPS-initiated TA program to reposition IPS in Paraguay's FP marketplace. As previous research in FP operations has recognized (Bruce, 1990), investing in the training of providers is an essential and cost-effective approach to building capacity and improving quality of care. This study indicated that SHOPS training and equipment donation not only increased provider knowledge and led to greater availability of IUDs at IPS facilities, but also changed provider views about the importance of providing FP services. For many providers, offering FP services signaled that they were providing a comprehensive service to their patients with long-lasting effects.

Results from this study also highlight the critical importance of building a diffused training model with long-term prospects for sustainability. Given USAID's graduation from FP assistance in Paraguay and limited possibilities for donor-funded trainings in FP in the future, ensuring that both the right master trainers are selected and that diffusion practices continue (both within IPS and through inclusion of FP content during pre-service education) is essential.

In Paraguay, in partnership with IPS program leaders, the SHOPS TA program set the base for sustainable improvements in the quality of IPS's FP services. Study results confirm a positive, perceptible shift in how beneficiaries view IPS's FP offerings. If IPS continues to implement its **2012-2015 Action Plan**, and considers recommendations outlined in this report, it has the opportunity to increase the overall number of FP users it serves and enhance its standing in the Paraguayan market.

REFERENCES

- Bruce, J. (1990). Fundamental Elements of the Quality of care: A simple framework. *Studies in Familiy Planning*, 21(2), 61-91.
- Crosby, D., O'Hanlon, B., & Armand, F. (2010). *Paraguay Assessment Report.* Bethesda, MD: Strengthening Health Outcomes through the Private Sector, Abt Associates.
- Hohmann, H. L., Cremer, M. L., Gonzalez, E., & Maza, M. (2011). Knowledge and attitudes about intrauterine devices among women's health care providers in El Salvador. *Rev. Panam Salud Publica*, 29(3), 198-202.
- IBM Corp. Released 2010. IBM SPSS Statistics for Windows, Version 19.0. Armonk, NY: IBM Corp.
- Instituto de Prevision Social. (2012). Plan de Accion 2012-2015: Estrategias de generacion de demana para los servicios de Planificación Familiar del Instituto de Prevision Social. Stregthening Health Outcomes through the Private Sector Project.
- McDonald-Mosley, R., Philips, K., Ditzian, L., & Cremer, M. (2010). Acceptability of the intrauterine device among women in El Salvador. *International Journal of Gynecology and Obstetrics, 108*, 152-160.
- NVivo qualitative data analysis software; QSR International Pty Ltd. Version 9, 2010.
- Rollnick, S., Mason, P., & Butler, C. (1999). *Health Behavior Change: A guide for practitioners.* London: Churchill Livingstone.
- SHOPS Project. (2012). *Paraguay Private Sector Assessment. Brief.* Bethesda, MD: Strengthening Health Outcomes through the Private Sector, Abt Associates.
- White, K. O., & Westhoff, C. (2011, Sep). The effect of pack supply on oral contraceptive pill continuation: a randomized control trial. *Obstetrics and Gynecology*, *118*(3), 615-22.