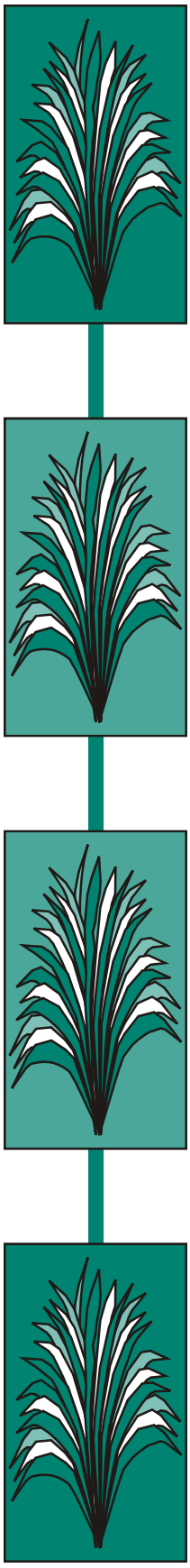
ACQUIRE Evaluation and Research Studies

Bolivia Baseline Survey, 2005: Technical Report

E & R Study #2 ◆ March 2006

USAID FROM THE AMERICAN PEOPLE

the ACQUIRE project



ACQUIRE Evaluation and Research Studies

Bolivia Baseline Survey, 2005: Technical Report

E & R Study #2 ♦ March 2006

Authors:

The ACQUIRE Project
Rachel Goldberg*
Erin Mielke
Hannah Searing

The ACQUIRE Project/Bolivia
Rosemary Durán*
Javier Monterrey*
Marjorie Viscarra

*Lead author

USAID FROM THE AMERICAN PEOPLE

the ACQUIRE project

The ACQUIRE Project
c/o EngenderHealth
440 Ninth Avenue
New York, NY 10001 U.S.A.
Telephone: 212-561-8000
Fax: 212-561-8067
e-mail: info@acquireproject.org
www.acquireproject.org

This publication is made possible by the generous support of the American people through the Office of Population and Reproductive Health, U.S. Agency for International Development (USAID), under the terms of cooperative agreement GPO-A-00-03-00006-00. The contents are the responsibility of the ACQUIRE Project and do not necessarily reflect the views of USAID or the United States Government.

Map on page 1 from: U.S. Central Intelligence Agency (CIA). 2006. *The world factbook.* Washington, DC. Retrieved from http://www.cia.gov/cia/publications/factbook/geos/bl.html, February 2006.

Printed in the United States of America. Printed on recycled paper.

Suggested citation: Goldberg, R., Durán, R., Monterrey, J., et al. 2006. *Bolivia baseline survey, 2005: Technical report.* New York: The ACQUIRE Project/EngenderHealth.

Contents

Tables

Figures

Acronyms/Abbreviations

ACQUIRE	Access, Quality, and Use in Reproductive Health
AIDS	acquired immunodeficiency syndrome
CAI	Committee for Analysis of Health Information
CIES	Centro de Investigación, Educación y Servicios/Center for Research, Education, and Services (local nongovernmental organization)
COPE®	client-oriented, provider-efficient
CS Pro	Census and Survey Processing System
D&C	dilation and curettage
DHS	Demographic and Health Survey
EmOC	emergency obstetric care
EOC	essential obstetric care
FP	family planning
HIV	human immunodeficiency virus
IEC	information, education, and communication
IMCI	Integrated Management of Childhood Illness
IR	intermediate result
IUD	intrauterine device
JSI	John Snow International, Inc.
LAM	lactational amenorrhea method
MAP®	Men As Partners
MSD	Ministerio de Salud y Deportes/Ministry of Health and Sports
MVA	manual vacuum aspiration
NGO	nongovernmental organization
NSV	no-scalpel vasectomy
ob/gyn	obstetrician/gynecologist
PAC	postabortion care
PDA	personal digital assistant
PNA	performance needs assessment
PROSIN II	Proyecto de Salud Integral II
PROSALUD	Protección a la Salud/Protection of Health (local NGO)
QI	quality improvement
RH	reproductive health
SNIS	Sistema Nacional de Información en Salud/National Health Information System
SPSS	Statistical Package for the Social Sciences
STI	sexually transmitted infection
SUMI	Seguro Universal Materno Infantil/Universal Maternal and Child Insurance
TFR	total fertility rate
USAID	U.S. Agency for International Development

Acknowledgments

The study team would like to thank the U.S. Agency for International Development (USAID)/ Bolivia for funding the baseline survey implementation, and Dr. Patricia O'Connor, Dr. Rocio Lara, and Dr. Elizabeth Drabant in particular for their sustained financial and technical support to the Access, Quality, and Use in Reproductive Health (ACQUIRE) Project in Bolivia.

We are also indebted to the Ministry of Health and Sports and to Proyecto de Salud Integral (PROSIN) II for their support throughout the baseline survey process in the review of study tools and the preliminary report, in the identification of study sites, and in the facilitation of fieldwork logistics. In particular, we would like to extend special thanks to Dr. Alberto de la Galvez Murillo, Dr. José Luis Alfaro, Dr. Jhonny López Gallardo, and each of the Regional PROSIN II Coordinators.

We would also like to thank the data collectors (see list below); without their efforts, the survey would not have been possible. We also are grateful to the programmer and data transcriptionists. And we would like to thank all of the ACQUIRE Project staff in New York and Bolivia who reviewed the study instruments and report drafts.

Additionally, we would like to thank Dr. Bates Buckner and Dr. Kavita Singh of the USAID MEASURE Evaluation Project for their invaluable technical assistance on sampling, as well as on issues related to study design and implementation. We would also like to thank Dr. Saumya RamaRao of the USAID Frontiers Project for advice regarding sampling. In addition, we would like to thank Dr. Fernando Gonzalez, Ariel Pérez, and Patricia Urquieta for sharing their experiences with the topic of interculturality.

Finally, very special thanks go to the providers, supervisors, and particularly the clients who took precious time out of their days to speak with us about their experiences with the reproductive health services of interest. We hope that their kindness will be sufficiently repaid through improvements both in services and in systems of support at the sites.

This report was edited by Lisa Remez McCormick and was formatted by Elkin Konuk; Michael Klitsch oversaw editorial development.

Baseline Data Collectors

Germán Walter Muruchi Garrón
Norma Bertha Romero Sillerico
Jaime Ángel Vargas Arévalo
Najha Damariz Cenzano Brañez
Sandra Susy Loza Cruz
Mario Santos Callizaya Camacho
Jimena Claudia Pantoja Rico
María Teresa Yana Mamani
Roxana Rivero de Flores
Marco Alberto Quezada Lanza
Cristina Flores Ramos
Nieves Janeth Jiménez Gutiérrez
Marco Antonio Mollinedo Rosas
Mary Jhanett Quispe Mamani
María Virginia Rivero de Jaldin
Rosario Ayala
Adrián Quiñajo Lozano
Roxana Yana Mamani
Denis Patricia Ávila Manjón
Cintya Anny Díaz Flores
Manuel Hugo Rubin de Celis
Fayda María Angelo Borges
Esperanza Lucía Quispe Chirinos
Esther Miriam Portugal Severich

Executive Summary

Background

According to the 2001 Bolivian Census of Population and Households, Bolivia has a population of 8.3 million people, of which approximately 2.1 million are women of reproductive age (15–49 years). Sixty-three percent of the population is urban, and the rest is rural. The largest indigenous populations in Bolivia are the Quechua and the Aymara, making up approximately 31% and 25% of the population, respectively. Fifty-nine percent of the Bolivian people live in some level of poverty, and 24% of Bolivians live in extreme poverty (Instituto Nacional de Estadística, 2001).

According to the 2003 Demographic and Health Survey, Bolivia's contraceptive prevalence rate among married women for modern methods is 35% nationally, and 25% in rural areas (Gutiérrez Sardán et al., 2004). The national rate for use of any method (natural and modern) is 58%. The most commonly used modern method is the intrauterine device (IUD) (10%), followed by injectables (8%) and female sterilization (7%). Twenty-three percent of married women have an unmet need for family planning (17% for limiting and 6% for spacing). Bolivia's total fertility rate[1] (TFR) is 3.8 lifetime births per woman; in rural areas, the TFR is 5.5 lifetime births, almost twice that in urban areas.

Bolivia has one of the highest maternal mortality ratios in Latin America, with an estimated 229 maternal deaths per 100,000 live births (Gutiérrez Sardán et al., 2004). Forty-two percent of births in the country take place at home, and 39% of births occur without the assistance of a trained health professional. (In rural areas, the latter proportion jumps to 60%.)

The ACQUIRE Project (which stands for Access, Quality, Use in Reproductive Health), a global leader with associate cooperative agreement of the U.S. Agency for International Development (USAID)/Washington, was awarded in October 2003 to EngenderHealth and its partners. EngenderHealth is the lead partner on ACQUIRE in Bolivia, where it is financed by the USAID/Bolivia Mission. EngenderHealth has been working in Bolivia since 1995 to provide technical assistance to the Ministry of Health and Sports (MSD) and local nongovernmental organizations (NGOs) to improve the quality and accessibility of voluntary family planning (FP) and other reproductive health (RH) services.

Since July 2005, the ACQUIRE Bolivia program has been one of five key actors in the new USAID/Bolivia health strategy (2005–2009), with responsibility for strengthening RH services in 33 health networks spanning 131 municipalities. In addition to continuing work on improving the quality and accessibility of voluntary FP, ACQUIRE is expanding its technical assistance to cover the areas of maternal health and postabortion care (PAC), as well as integration of FP services into other RH services. Cross-cutting focuses are adolescents, integrated RH services for men, intercultural issues, rights, quality, and infection prevention.

Baseline Study Design and Methods

The 2005 ACQUIRE Bolivia baseline survey is the first element in an evaluation whose objective is to measure the extent to which ACQUIRE program activities in Bolivia have affected the

[1] Total fertility rate is the average number of births that a woman will have over her reproductive lifetime.

availability and quality of services at the facilities it supports. A quasi-experimental, pre- and posttest design is being used. ACQUIRE technical assistance will be tracked over time, and the baseline survey will be followed up by an endline survey (posttest). Additionally, the evaluation data will be complemented at endline with routine national health system data (i.e., from the Sistema Nacional de Información en Salud [SNIS]).

The key evaluation questions are:

1. How and to what extent have ACQUIRE interventions affected access to quality services?
2. How do clients perceive the quality and content of services?
3. How have providers benefited from ACQUIRE interventions?
4. How and to what extent have ACQUIRE interventions affected the "systems"[2] of supported sites?

Based on the planned work of ACQUIRE in Bolivia from 2005–2008, the baseline study encompasses the technical areas of FP (including its integration into other RH services), maternal health, and PAC. The cross-cutting areas of RH services for men, male involvement (i.e., Men As Partners, or MAP), intercultural issues, quality, counseling, and infection prevention were also addressed in the study tools.

The baseline field work was conducted between June and August 2005 at 234 health facilities: public-sector primary-level health centers, secondary-level network hospitals, and tertiary-level referral hospitals, as well as various levels of sites operated by two NGO entities—PROSALUD and Centro de Investigación, Educación y Servicios (CIES).[3] Five facility-based instruments were used:

1. Facility inventories—divided into general, FP, maternal and neonatal health, and PAC modules—to examine facilities' capacity to provide the services of interest
2. Provider interviews, to assess provider knowledge, routine practice, and attitudes related to each service area of interest, as well as their experience with supervision systems
3. Observation checklists, to observe FP consultations
4. Client exit interview questionnaires (one for FP clients and one for antenatal care clients), to assess the services received, explore the client perspective on provider-client communication, and examine client satisfaction with the services received
5. Service statistic data collection forms, to collect service statistics from the sites on selected FP, maternal health, and PAC indicators

The instruments were based on the Quick Investigation of Quality methodology (MEASURE Evaluation) and were adapted to the Bolivia program context. They were developed by ACQUIRE staff in Bolivia and New York and were reviewed by staff from the MSD, PROSIN II, PROSALUD, and CIES, as well as by USAID/Bolivia Mission staff. In consultation with MEASURE Evaluation, a representative sample of public-sector and NGO facilities across the country was drawn; these correspond to the expected focus of ACQUIRE work between 2005 and 2009.

After the fieldwork was completed, the study data were first entered into CS Pro to allow for data quality checks (for example, checks on coding and skip patterns). They were then transferred into SPSS for data cleaning and analysis.

---

[2] The term "systems" here encompasses site-level systems of supervision, training, quality improvement, information, community involvement, etc.

[3] A description of the care provided at each of these facility types is given on pages 2 and 3.

Summary of Key Study Findings

The findings presented in this report are structured according to the ACQUIRE Intermediate Results (IR) framework:

- IR 1: Increased access to quality RH/FP services
- IR 2: Improved performance of service-delivery providers
- IR 3: Strengthened environment for RH/FP service delivery

IR1: Increased Access to Quality RH/FP Services

Availability of services and key infrastructure, equipment, and supplies

- The vast majority of facilities surveyed offer contraceptive methods. However, the study revealed significant gaps in the supply of short-acting and long-acting methods (male condoms, the pill, injectables, and IUDs), both on the day of the survey and in the six months preceding the survey.
- Interval IUD insertion is the type of IUD insertion most widely available at the facilities surveyed (81% of sites), followed by postpartum IUD (62%). Transcesarean IUD and postabortion IUD insertion were reportedly offered much less frequently.
- There was a wide range in the availability of tubal ligation, depending on the level of site. Fewer than half of facilities offering tubal ligation reported offering tubal ligation via minilaparotomy.
- Nine out of 10 health centers surveyed, and virtually all NGO sites (PROSALUD and CIES), failed to qualify as basic or comprehensive emergency obstetric care (EmOC) facilities, according to international standards. Almost half of network hospitals fit into neither EmOC category, and the referral hospitals were split largely between comprehensive care and the MSD's designation of "comprehensive minus 1."[4] Overall, the gaps were largely a result of not having performed the procedures of assisted delivery, manual extraction of placenta, administration of parenteral anticonvulsants, and removal of retained products of conception in the past three months.
- Only one-third of the antenatal care clients interviewed reported hearing or seeing a message about FP or contraceptive methods at the facility on the day of their visit.
- In relation to PAC, the public-sector health centers and network hospitals surveyed were more likely to offer dilation and curettage (D&C) than they were to offer manual vacuum aspiration (MVA), while these likelihoods were flipped at the NGO sites.

Availability of infection prevention systems

- All of the referral hospitals, and more than one-half of the network hospitals and PROSALUD sites, surveyed reported having an infection prevention committee in place.
- The majority of sites had at least one puncture-resistant container for sharps, as well as trash containers with covers for solid waste (although deficiencies were seen for some facility types). Considerably higher proportions of sites had dry heat sterilizers than autoclaves. Equipment and supplies related to infection prevention were most frequently available at the referral hospitals, and gaps were most apparent at the health centers.
- Lack of compliance with the standards of infection prevention was seen during observations of pelvic exams and injectable provision; particular gaps were seen in handwashing practices.

[4] "Comprehensive minus 1" and "basic minus 1" are defined by the Bolivian MSD as the international standards minus assisted delivery via instruments (because instrumental delivery is not widely implemented in Bolivia). For a more detailed definition of international and MSD standards of comprehensive and basic emergency obstetric care, see pg. 19.

Availability of private and confidential services

- More than one in three FP consultations observed lacked auditory and visual privacy.
- Approximately two-thirds of FP and antenatal care clients felt that the information they shared with the provider would be kept private and confidential.

Restrictive eligibility criteria

- Almost one-half of providers reported that clients should have had a particular number of children before they would offer them the pill and injectables; this proportion was almost one-third for vasectomy and tubal ligation.
- Though the Bolivia national norms for FP have no requirement for partner consent for any method, more than one-half of providers reported soliciting partner consent before offering the pill, the IUD, injectables, vasectomy, and tubal ligation. Almost one-half of providers reported that they solicit partner consent before offering condoms.

Male participation in sexual and reproductive health services

- Though most facilities reported offering male RH services, a very small proportion reported providing vasectomy services.
- While it was uncommon in general for a partner to be present during the consultation among the clients interviewed, it was more common among the antenatal than the FP clients.
- Fewer than one-half of antenatal care clients reported that the provider discussed partner participation in pregnancy care, and even fewer reported discussing partner participation during delivery.
- Policies on partner participation during delivery varied widely by facility type, with the primary-level facilities being most likely to allow it and the referral hospitals and CIES sites least likely to allow it.

Community outreach

- Almost all of the health centers and network hospitals surveyed reported that their providers visit communities on a regular basis to deliver health services. (NGO providers visit communities much less frequently, and referral hospital providers not at all.)
- FP counseling is an almost universal component of these community visits, as are immunization, antenatal consultation, and postpartum care.

IR2: Improved Performance of Service-Delivery Providers

Supervision systems and quality improvement tools

- Providers surveyed at the health centers were less likely than providers at the higher-level facilities to report having an on-site supervisor; however, health center providers reported more frequent supervision by external supervisors.
- The proportion of providers who reported receiving performance evaluations was higher at the NGO facilities than at the public-sector facilities.
- Very few providers were able to show the interviewer their job description, and fewer than one-third had received recognition for their work in the past three months.
- Only about one-third of facilities surveyed had a manual of staff functions available for observation on the day of the survey.
- Large proportions of the NGO sites reported having implemented COPE® (a quality improvement process and set of tools standing for client-oriented, provider-efficient), while much smaller proportions of public-sector sites had done so. The referral and network hospitals were more likely to have implemented facilitative supervision than to have used COPE®.

Provider training and knowledge

- Across all of the services, obstetrician/gynecologists (ob/gyns) were more likely to have received training in the past three years than were general doctors, nurses, or auxiliary nurses.
- Only around one-third of the PAC and maternal health service providers had received some training in these services in the past three years. Only 15% of providers had received training in the past three years in emergency obstetric and neonatal care.
- Although significant proportions of providers offer long-acting and permanent FP methods, far smaller proportions have received training in them in the past three years. This training gap is particularly salient for interval and postpartum IUD provision. A smaller but still noteworthy proportion of providers reported being trained recently in techniques such as postpartum and transcesarean IUD insertion, no-scalpel vasectomy (NSV), and tubal ligation via minilaparotomy but did not currently offer them, which signals issues in the implementation of skills learned in training.
- Provider knowledge on FP and obstetric warning signs varied greatly. Certain warning signs were mentioned very frequently, while others that may be of equal importance were mentioned much less frequently.
- Fewer than one in five providers accurately described the function of a dual-protection method as preventing pregnancy and STIs/HIV/AIDS.

Counseling

- On average, fewer than three contraceptive methods were discussed with clients during their FP consultations, though this mean was higher for clients new to FP or switching methods (3.6). The method most frequently discussed and received was Depo-Provera, followed by the IUD and the pill. Vasectomy and tubal ligation were discussed infrequently, even though clients articulated a desire for limiting births during the exit interviews.
- The elements of FP counseling least frequently discussed during consultations were barriers to returning for follow-up and/or resupply and the partner's opposition to method use.
- Providers consistently told antenatal clients when to return to the facility and the baby's approximate due date, but other key aspects of antenatal counseling were reported inconsistently.

Client satisfaction

- Roughly three-quarters of the FP clients and two-thirds of the antenatal clients who were interviewed reported being very satisfied with the services they received.
- Waiting time was felt to be reasonable by large proportions of clients at the health centers, but unreasonable by large proportions of clients at the hospitals.

IR3: Strengthened Environment for RH/FP Service Delivery

Written norms, guidelines, and protocols and information, education, and communication materials

- While almost three in four facilities had the written Universal Maternal and Child Insurance (SUMI) protocol available on the day of the survey, only about one-half had FP manuals and protocols, and a similar proportion had the maternal and neonatal care manual.
- The least frequently observed norms, guidelines, and protocols were those related to PAC and infection prevention.
- Teaching aids on contraceptive methods were observed at almost all of the facilities surveyed. Teaching aids on maternal health topics were observed much less frequently. Similarly, brochures and/or pamphlets on FP were observed at almost one-half of facilities, while brochures related to maternal health topics were markedly less frequently available.

Use of the Baseline Data for Decision Making

The data collected during the baseline survey have dual functions. The ultimate function is for comparison with endline data to measure the extent to which ACQUIRE program activities in Bolivia have affected the availability and quality of services at the facilities ACQUIRE supports. The more immediate function is to inform programming and planning of technical assistance for the period 2005–2008.

To this latter end, selected findings from the baseline survey have already been used in a performance needs assessment (PNA) among the partners participating in USAID's health strategy. A major result of this process was the joint development of a plan of action.

The key findings from the baseline study will also be used to:

- Describe the current status of RH services in Bolivia
- Adjust ACQUIRE Bolivia's strategy
- Guide ACQUIRE Bolivia's annual work planning to achieve the objectives and results of the project
- Guide the planning and prioritization of activities in each of the technical areas for which the project is responsible: family planning, maternal health, and PAC

The current baseline report is being disseminated widely in Bolivia to program partners, the MSD, and USAID/Bolivia for their planning purposes and as a reference document.

Introduction

Country Context[5]

Nestled in South America between Peru, Brazil, Chile, Argentina, and Paraguay, Bolivia has a population of 8.3 million people, of which approximately 2.1 million are women aged 15–49. According to Bolivia's 2001 Census of Population and Households and information gathered by the National Institute of Statistics, 63% of the Bolivian population is urban, and the rest is rural. The largest indigenous populations in the country are the Quechua and the Aymara, making up approximately 31% and 25% of the population, respectively. Fifty-nine percent of the Bolivian people live in some level of poverty, and 24% of Bolivians live in extreme poverty (Instituto Nacional de Estadística, 2001).

Bolivia's contraceptive prevalence rate for modern methods among married women has increased in recent years, from 25% in 1998 to 35% in 2003. The rate for modern methods in rural areas is 25%, compared with 40% in urban areas. The rate for any method (natural and modern) nationally is 58%. The most commonly used modern family planning (FP) method is the IUD (10% of married women), followed by injectables (8%) and female sterilization (7%). Twenty-three percent of married women have an unmet need for family planning (17% for limiting and 6% for spacing). Bolivia's total fertility rate (TFR) is 3.8 lifetime births per woman; in rural areas, the TFR is 5.5 lifetime births, almost twice that in urban areas.

Bolivia has one of the highest maternal mortality ratios in Latin America, with an estimated 229 maternal deaths per 100,000 live births. Forty-two percent of live births in the country take place at home, and 39% of deliveries occur without the assistance of a trained health professional. (In rural areas, the latter proportion jumps to 60%.) More than 70% of pregnant women in Bolivia see a trained health professional for antenatal care at least once.

The Bolivian Health System

The health system in Bolivia groups together all of the public and private institutions in the country that provide health services, under the regulation of the Ministry of Health and Sports (MSD). The health system consists of four levels of management: national, departmental, municipal, and local.

[5] Data for this section are derived from the 2003 Bolivia Demographic and Health Survey (Gutiérrez Sardán et al., 2004), unless otherwise noted.

According to the MSD's Management Model/Bolivia Plan, health care provision in the public sector occurs at three levels of care (Table 1):

Table 1. Profile of public-sector facilities

Level of care	Facility type	Profile of human resources
Primary level	Health post	Auxiliary nurse
	Health center	General physician, licensed nurse, and/or auxiliary nurse
Secondary level	Basic/network hospital	Physicians with specialties in internal medicine, surgery, ob/gyn, and pediatrics; licensed nurses; and auxiliary nurses
Tertiary level	Specialty hospitals/ referral hospitals	Physicians with specialties in many areas, including ob/gyns; licensed nurses; and auxiliary nurses

1. Primary level: These services are characterized by health promotion and prevention, ambulatory care, and short-term in-patient care, and constitute the entry-way to the health system. In the public sector, primary-level facilities include health posts and health centers (with or without beds).[6]
2. Secondary level: The services at this level include ambulatory care of increased complexity and in-patient care in the areas of internal medicine, surgery, pediatrics, obstetrics/gynecology (ob/gyn), anesthesiology, complementary diagnostic and treatment services, and in some cases traumatology. The operational unit at this secondary level is the basic, or (as known in this report) network, hospital.
3. Tertiary level: The services at this level include specialized ambulatory care, specialized in-patient hospital care, and complex and high-technology diagnostic and treatment services. The operational units at this tertiary level are general hospitals and specialty hospitals and institutes, known in this report as referral hospitals.

To give an idea of caseload at these various levels, calculations of client flow for FP counseling for a random sample of facilities in the department of La Paz[7] showed that health centers averaged 10 FP clients per month (or less than one per day) and that network hospitals averaged 37 FP clients per month (or approximately one per day). A calculation of client load for the tertiary hospitals in seven out of the nine departments showed that their average caseload in FP counseling was 348 FP clients per month (or approximately 12 per day).

The Bolivian health system is organized in networks of health facilities that encompass differing levels of care and complexity. Municipal health networks are composed of one or various primary-level facilities, along with a referral facility of higher complexity (usually a network hospital).

The nongovernmental organization (NGO) sites supported by ACQUIRE are those managed by PROSALUD and Centro de Investigación, Educación y Servicios (CIES). PROSALUD has 33 health facilities, and CIES has nine health facilities. A snapshot of the different levels of care provided by these two NGOs is given in Table 2.

[6] Other primary-level providers outside of the public sector include traditional medicine, mobile health brigades, and private clinics, all of which are outside the scope of this study.

[7] These calculations were conducted for the department of La Paz because it was the department where the lowest client flow was seen during the survey period. The calculations were conducted to understand whether what was being seen matched the realities reported in the SNIS for the same month in previous years. The average client load in other departments may differ from that given above.

Table 2. Profile of NGOs in study

NGO	Level of care	Facility type	Profile of human resources
PROSALUD	Primary level	Health center	General physician and/or physicians with specialties in ob/gyn and pediatrics; licensed nurses; and/or auxiliary nurses
	Secondary level	Clinic	Physicians with specialties in internal medicine, surgery, ob/gyn, pediatrics, and other specialties; licensed nurses; and auxiliary nurses
CIES	Primary level	Health center type A	General physician with training in sexual and reproductive health and/or ob/gyn, as well as auxiliary nurses
		Health center type B	General physician with training in sexual and reproductive health and/or ob/gyn; pediatrician; neonatologist; physicians of other specialties; licensed nurses; and auxiliary nurses
	Secondary level	Sexual and reproductive health clinic type C	Physicians with specialties in surgery, ob/gyn, pediatrics, neonatology, and other specialties; licensed nurses; and auxiliary nurses

The ACQUIRE Project

The ACQUIRE Project (which stands for Access, Quality, Use in Reproductive Health), a global leader with associate cooperative agreement funded by the U.S. Agency for International Development (USAID)/Washington, was awarded in October 2003 to EngenderHealth and its partners.[8] EngenderHealth is the lead partner on ACQUIRE in Bolivia, which is financed by USAID/Bolivia. EngenderHealth has been working in Bolivia since 1995 to provide technical assistance to the MSD and to local NGOs to improve the quality and accessibility of voluntary FP and other reproductive health (RH) services. In recent years, ACQUIRE activities have extended to all nine departments in Bolivia and include medical monitoring; development and dissemination of national norms; introduction of quality improvement (QI) processes (such as COPE® and facilitative supervision) in health networks and hospitals; and training and updates in contraceptive counseling and technology, male involvement in RH, informed choice, and infection prevention.

Since July 2005, the ACQUIRE Bolivia program has been one of five key actors[9] in the new USAID/Bolivia health strategy (2005–2009), with responsibility for strengthening reproductive health services in 33 health networks spanning 131 municipalities. In addition to continuing work on improving the quality and accessibility of voluntary FP, ACQUIRE is expanding its technical assistance to cover the areas of maternal health and postabortion care (PAC), as well as integration of FP services into other RH services. Cross-cutting focuses are adolescents, integrated RH services for men, intercultural issues, rights, quality, and infection prevention.

[8] The Adventist Development and Relief Agency International (ADRA), CARE, IntraHealth International, Inc., Meridian Group International, Inc., the Society for Women and AIDS in Africa, and SATELLIFE.

[9] The other four actors are Proyecto de Salud Integral (PROSIN) II, which serves as the implementation unit for the agreement between USAID/Bolivia and the MSD (to offer technical assistance to the MSD, Departmental Health Services, and health network management); the Programa de Coordinación en Salud Integral (PROCOSI), a network of health and community service NGOs (to work at the community level); John Snow, Inc. (JSI) (to strengthen municipal health management, as well as the quality and coverage of services in child health, nutrition, and infectious diseases); and JSI/DELIVER (to strengthen supply logistics systems).

The ACQUIRE Bolivia Baseline Survey

The 2005 ACQUIRE Bolivia baseline survey is the first element of an evaluation whose objective is to measure the extent to which ACQUIRE program activities in Bolivia have affected the availability[10] and quality of services at the facilities it supports. A quasi-experimental pre- and post-test design is being used. ACQUIRE technical assistance will be tracked over time, and the baseline survey will be followed up by an endline survey (posttest). Based on the planned work of ACQUIRE in Bolivia from 2005–2008, the baseline study encompasses the technical areas of FP (including integration of FP into other RH services), maternal health, and PAC. The cross-cutting areas of RH services for men, male involvement (i.e., Men As Partners, or MAP), intercultural issues, quality, counseling, and infection prevention were also addressed in the study tools.

The baseline field work was conducted between June and August 2005 in 234 health facilities.

[10] It should be noted that beyond the availability of services, other topics of "accessibility" are not addressed in this study. The ideal way to explore accessibility is through community-based studies that interview both those who access formal health services and those who do *not*. Because this baseline survey interviewed only those who *had* indeed accessed formal health services, the results do not paint a complete picture of the issue.

Study Design and Methodology

Study Design

The ACQUIRE evaluation uses a quasi-experimental, pre- and posttest design. The baseline study is designed to document the current status of FP, PAC, and maternal health services (prior to ACQUIRE's interventions). ACQUIRE inputs will then be tracked carefully over time, and the baseline survey will be followed up in 2008 by an identical endline survey to document changes in key project indicators. Additionally, the evaluation data will be complemented at endline with routine national health system data (i.e., from the Sistema Nacional de Información en Salud, or SNIS).

The key evaluation questions are:

1. How and to what extent have ACQUIRE interventions affected access to quality services?
2. How do clients perceive the quality and content of services?
3. How have providers benefited from ACQUIRE interventions?
4. How and to what extent have ACQUIRE interventions affected the "systems"[11] of supported sites?

Study Instruments

The baseline study used the following five data collection instruments: facility inventories; provider interviews; client-provider observation checklists; client exit interviews; and service statistics data collection forms. These instruments were adapted to the Bolivia program context from tools developed by MEASURE Evaluation for the AMKENI project[12] in Kenya, based on the Quick Investigation of Quality (QIQ) methodology.[13]

Instruments

Facility inventory

The facility inventory examined facilities' capacity to provide the services of interest. It was divided into modules on the basis of technical area: There was a general facility inventory module, as well as focused FP, maternal and neonatal health, and PAC modules, which were applied depending on the services offered at the facility. Questions covered services offered, infrastructure, supervision systems, training, monitoring, community involvement, and QI. They also included observations on the availability of drugs, supplies, and equipment.

[11] The term "systems" here encompasses site-level systems of supervision, training, quality improvement, information, community involvement, etc.

[12] AMKENI is a bilateral project led by EngenderHealth in Kenya.

[13] Aside from the AMKENI instruments, the study team also drew on many other sources of information when developing the baseline tools. These included the Bolivia national norms and protocols in FP, PAC, and maternal health; EngenderHealth publications related to infection prevention, as well as to FP and maternal health; the tools used in the other ACQUIRE baseline studies in Bangladesh, Tanzania, and Azerbaijan; and international documents and standards, such as those developed by the World Health Organization and the Averting Maternal Death and Disability (AMDD) program related to maternal health, FP, and PAC.

Provider interview

In the provider questionnaire, questions about provider knowledge, routine practices, and attitudes related to each service area of interest were explored. Providers' perspectives on communication with clients and experience with supervision systems were also elicited.

Client-provider observation checklist

A checklist was used to observe FP clients during their consultations. The first part of the checklist focused on FP counseling, while the second part focused on adherence to infection prevention standards during any clinical procedures performed.

Client exit interview

Two client exit interview questionnaires were used in this study, one for FP clients, and one for antenatal care clients. The exit interview tools were designed to assess the services clients received, explore clients' perspectives on provider-client communication, and assess their satisfaction with the services received.

Service statistics data collection form

A form was used to collect service statistics from the sites on selected FP, maternal health, and PAC indicators that are not registered in the SNIS. Statistics encompassed the period from January 2004 through March 2005.

Review and Translation of Tools

The study tools were developed by ACQUIRE staff in Bolivia and New York, and were reviewed by staff from the MSD, Proyecto de Salud Integral (PROSIN) II,[14] PROSALUD, and CIES, as well as from the USAID/Bolivia Mission. Early versions of the tools were drafted in English and translated into Spanish, while later versions were edited directly in Spanish. The client exit interview instruments were translated into Aymara and Quechua by baseline study data collectors who were fluent in both Spanish and these native languages.[15]

Sampling

ACQUIRE works at the following levels of the Bolivian health system:

- All nine public referral maternity hospitals in the country (one per department)
- Thirty-three health networks covering 131 municipalities, chosen by USAID and PROSIN II as focus networks for the period 2005–2009 under the new USAID health strategy (These networks are located in six departments in Bolivia [La Paz, Potosí, Cochabamba, Chuquisaca, Beni, and Pando]; within these networks are health posts, health centers, and network hospitals.)
- Health facilities operated by the NGOs CIES and PROSALUD

The sampling for the evaluation mirrors the above. The basic units of analysis were facilities, providers, and clients.[16] A sample of facilities was chosen using a rigorous sampling methodology

[14] ACQUIRE coordinated directly with PROSIN II, which in turn coordinated with the MSD, to review study protocols and instruments. PROSIN II also provided ACQUIRE with significant logistical support, including provision of the list of facilities (in the 33 health networks) used for sampling and use of vehicles and drivers.

[15] Small groups of data collectors fluent in Aymara and Quechua collaborated on the translations of client questionnaires into these languages. Their participation in the translation of the questionnaires made them more likely to adhere to the translation while in the field, and their intense training in the survey tools meant they clearly understood the objectives of the questions and were well suited to translating them.

[16] The sampling plan was based in large part on Turner et al., 2001.

to allow generalization to all ACQUIRE-supported sites above the health post level.[17] Stratification was done by facility type, given that the type and intensity of intervention offered will vary primarily along these lines.

Among public-sector sites, a census was taken of all nine department-level referral maternity hospitals in Bolivia and all 22 network hospitals from the 131 USAID/PROSIN II focus municipalities. From the universe of 250 health centers in the USAID/PROSIN II focus municipalities, a representative sample of 188 was selected through a process of simple random sampling. Among NGO sites, all nine CIES sites were included in the sample, as well as 30 PROSALUD sites.[18] This amounted to a total sample size calculation of 258 sites, public and NGO.

Identification of the health centers and network hospitals included in the USAID FY05–09 strategy was conducted on the basis of a list provided to ACQUIRE Bolivia by PROSIN II. The sample size of 188 health centers was determined through use of the equation $n=Z^2\ [P_1(1–P_1) + (P_2(1–P_2)]/d^2$ (Aday, 1996).[19]

Providers were interviewed at all facilities visited. At sites with four or fewer providers offering FP, maternal health, and/or PAC services on the day of the study, attempts were made to interview all such providers. At larger facilities, a sample of providers was selected such that three to five were interviewed. Likewise, attempts were made to interview and observe clients at all facilities selected for the sample. The plan was to select clients in a systematic way such that between two and four FP clients were interviewed and observed at each facility, and between two and four antenatal care clients were interviewed. However, as described in more detail below, because of the small number of clients encountered, a shift was made to attempt to interview *all* FP and antenatal care clients attending the facilities.

[17] Health posts were excluded from the sample for various reasons, including low client load, low likelihood that a provider would be available for interviews, the large sample size required for representative results (and the great expense of reaching such a large number of sites), and the fact that ACQUIRE provides less technical support to health posts than to higher-level health facilities.

[18] Three PROSALUD sites were not included due to the additional time and financial resources that would have been required to access them.

[19] The assumptions entered into the equation were that Z=1.96, d (difference precision) = .05, P_1=50%, and P_2=55%. A small universe adjustment was employed to adjust for the N of 250. Assuming a confidence interval of 95%, this yielded a sample size of 188.

Study Implementation

Interviewer Selection and Training

Data collectors were selected from a pool of applicants on the basis of previous health survey experience, professional medical training, native languages spoken, and availability for the entire survey period. Twenty-six interviewers attended a five-day training in La Paz. All data collectors were trained in the implementation of all survey tools, though the physicians were given more in-depth training on clinical aspects related to the observation and provider interview tools.

Pilot/Field Test

After the data collector training, a pilot/field test at eight sites allowed the study team to see where final revisions were necessary on the study tools and protocol; the field test also gave the data collectors an opportunity to uncover any areas of weakness that would need refresher training. Afterward, 24 data collectors were selected to participate in the study fieldwork.

Data Collection

Social unrest throughout the country led to a five-week postponement of the study fieldwork. During this time, the study tools were reviewed one additional time by experts, and small revisions were made. Before data collection began on June 27, an additional refresher training was conducted to compensate for the lag time between the original training and the actual data collection.

Eight data collection teams were formed, each consisting of one physician and two social scientists. The physician conducted the client-provider observations and the provider interviews. One social scientist conducted the facility inventory as well as the service statistics collection, while the second social scientist conducted both the antenatal care and the FP client exit interviews. In those teams sent to regions where Aymara and Quechua were commonly spoken, attempts were made to include in the data collection team a social scientist fluent in the predominant native language to conduct the client interviews. The teams followed a travel plan developed in advance and spent a full day at each facility in the sample. A second day was added at the referral maternity hospitals to compensate for the larger numbers of clients and providers at these facility types.

The field work lasted from June 27 through August 14, 2005.

Supervision

Supervision within each team rotated among the three team members, with each serving as supervisor on alternate days. Among the duties of the person responsible for supervision were collecting that day's completed surveys, conducting data-quality checks on each survey, ensuring that confidentiality and informed consent processes were followed, and relaying any issues or questions related to the data collection to the local principal investigator. Members of the ACQUIRE study team (from New York and La Paz) formed a second layer of supervision, conducting at minimum one supervisory visit to each data collection team.

Use of Personal Digital Assistants

At six health centers, data for the general facility inventory was collected using handheld computers, or personal digital assistants (PDAs), with the help of SATELLIFE, a partner on the ACQUIRE project.[20] Three data collectors were trained separately by SATELLIFE and ACQUIRE staff in the use of the technology. This new method of data collection was evaluated separately to measure the effect of PDA use on survey implementation, data entry, data analysis, and dissemination/use of data. A separate report will be written on this experience.

Summary of Sites Surveyed

In total, 234 facilities were actually surveyed—165 health centers, 21 secondary-level network hospitals, nine referral maternity hospitals, 30 PROSALUD sites, and nine CIES sites. As can be seen in Table 3, a census of all referral maternity hospitals and CIES facilities was successfully implemented, and all PROSALUD facilities selected into the sample were successfully surveyed. Of the 22 network hospitals in the focus networks, 21 were successfully surveyed.

Table 3. Comparison of facilities surveyed with sample and total universe

Facility type	Number of facilities		
	Total universe	Sample	Successfully surveyed
Health centers	250	188	165
Network hospitals	22	22	21
Referral hospitals	9	9	9
PROSALUD	33	30	30
CIES	9	9	9
Total	323	258	234

Source: ACQUIRE Project

Twelve percent of the health centers selected into the sample (23 sites) could not be surveyed. This was not due to refusals to participate, but rather to the following four general reasons: Eight health centers were closed for the entire day (or days) on which the survey was attempted; six were inaccessible due to weather and/or the state of roads (e.g., several sites in Beni were reachable only by light aircraft, a prohibitive expense); four were determined not to be PROSIN II sites (because the conformation of networks is dynamic and frequently modified); and five were determined to be health posts and thus too small a facility to be eligible to participate.

Facility Inventory

As can be seen in Table 4, of the 234 sites surveyed, all completed the general inventory module,[21] 233 the FP module, 231 the maternal and neonatal health module, and 169 the PAC module.[22]

[20] The data collected with PDAs from these six health centers are still pending inclusion in the overall baseline database. These data will be available for use in endline analyses.

[21] Results are available from only 228 facilities for the general facility inventory because, as indicated in footnote 20, the data from the six sites that recorded this data through PDAs have not yet been analyzed.

[22] Modules were implemented only in those facilities offering the corresponding services.

Table 4. Number of facilities surveyed, by type of facility and inventory module

Module	Health center	Network hospital	Referral hospital	PROSALUD	CIES	Total
General inventory	159	21	9	30	9	228
FP	165	21	9	29	9	233
Maternal and neonatal health	163	21	9	30	8	231
PAC	115	21	9	19	5	169

Sources: General inventory, FP inventory, maternal and neonatal health inventory, and PAC inventory

Provider Interview

Interviews were conducted with 524 providers. Because the sections specific to a given technical area were answered only by those who provided those services, 523 providers answered the questions that specifically related to FP, 452 answered the questions related to maternal and neonatal health, and 231 answered the questions related to PAC. As can be seen in Table 5, the provider questionnaire was implemented with a range of provider types.

Table 5. Number of providers interviewed, by facility type

Provider	Health center	Network hospital	Referral hospital	PROSALUD	CIES	Total
General physician	150	22	1	24	2	199
Ob/gyn	7	13	29	25	14	88
Other specialist physician	4	3	0	2	0	9
Licensed nurse	38	12	8	15	7	80
Auxiliary nurse	104	6	7	15	1	133
Other	9	2	0	1	3	15
Total	312	58	45	82	27	524

Source: Provider interview

Client Exit Interviews and Client-Provider Observations

Exit interviews were obtained from 322 antenatal care clients and 201 FP clients (Table 6). Provider-client interactions were observed for 200 FP clients.

Table 6. Number of clients sampled, by facility type

Client	Health center	Network hospital	Referral hospital	PROSALUD	CIES	Total
Antenatal care client (exit interview)	117	57	79	44	25	322
FP client (exit interview)	85	23	47	24	22	201
FP client (client-provider observation)	78	28	56	20	18	200

Sources: Antenatal care client exit interview, FP client exit interview, and FP client-provider observation

Data Processing and Analysis

The study data were first entered into CS Pro software to allow for detailed data quality checks not possible with other software programs (for example, checks on coding and skip patterns). They were then transferred into SPSS for data cleaning and analysis. The ACQUIRE study team conducted two rounds of data cleaning and analysis between September and December 2005.

Study Limitations

Client Flow

Client flow at the health centers, network hospitals, and PROSALUD sites was not sufficient for attaining a representative client sample. The desired scenario was to interview and/or observe two to four FP and antenatal clients per site, spending one full day at each facility (Turner et al., 2001). However, because of low client load, at the health centers, on average, fewer than one client was interviewed per site. At the network hospitals, on average, almost three antenatal clients were interviewed per site, but only one FP client. At the PROSALUD sites, the averages were 1.5 antenatal clients per site and fewer than one FP client. In contrast, at the referral hospitals, on average, nine antenatal clients and between five and six FP clients were interviewed.

The client flow encountered during the field work is consistent with MSD's SNIS data. A review of July 2004 SNIS data corresponding to the La Paz health centers and network hospitals that participated in the baseline survey showed that the average daily number of FP counseling clients visiting the sites (0.33 clients per health center and 1.23 clients per network hospital) was consistent with the mean number of FP clients interviewed during the study field work in July 2005. It thus appears that the small number of clients encountered during data collection was due to general low client attendance for these services.

Anecdotally, the data collectors were told that health center staff make frequent household visits; therefore, some clients may forgo facility visits because their FP and antenatal care service needs are being provided through community outreach. (Indeed, almost 100% of health centers in this survey reported providing community outreach in at least FP counseling and antenatal care.)

Because the client sample size was small, the results from the client exit interviews and observations at the lower-level facilities should be considered illustrative case studies, particularly since the results are skewed toward certain departments (e.g., Beni, Pando, and Cochabamba[23]) and reflect a relatively small number of sites (for example, because of higher client load in the hospitals, this level of facility was overrepresented in the client interviews).

Difficulty in Distinguishing between Facility Level and Type

The results that follow are disaggregated by facility type, which includes both level (health center, network hospital, or referral hospital) and ownership (public or either of two local NGOs, PROSALUD or CIES).[24] However, at times, it was difficult to determine whether a given public-sector site was, in reality, a health center, a health post, or a network hospital because of discrepancies in the level of care observed with the site designation and/or discrepancies between the site name used on the ground and that in the lists used for sampling. (This was largely because changes made recently in the health sector have not yet been updated in the information system.) It was also difficult at times to determine whether a site was a public-sector MSD site, a social security site, or a private-sector site. For example, a social security site may also attend to some clients who do not qualify for this coverage.

The study team made final facility-type determinations for the facilities surveyed based on the list given to ACQUIRE by PROSIN II, as well as on the designations in the SNIS.

[23] The greater FP client flow seen in the baseline in these departments, in comparison to departments of the Altiplano region such as La Paz, is consistent with FP results published in the 2003 DHS (Gutiérrez Sardán et al., 2004).

[24] PROSALUD and CIES sites are not disaggregated by level because of their small overall Ns.

Difficulties in Implementing the Service Statistics Data Collection Form

The service statistics data collection form developed for the baseline study was designed to obtain statistical information at the facility level that is *not* currently reported to the MSD's SNIS system. For example, the form sought to collect such non-SNIS data as the number of IUD insertions by type (interval, postpartum, and transcesarean) and the number of specific obstetric complications treated. The head of the MSD's Sexual and Reproductive Health Program provided assistance to the study team in designing this instrument to reflect key indicators of reproductive health. The results obtained from this tool were not as comprehensive as expected because the tool depended on the facilities' routinely and systematically compiling such non-SNIS information. At most facilities, the data collectors found that the only information compiled systematically and consistently in consolidated logs was that reported monthly to the SNIS. At some facilities where consolidated logs were not available, it was possible to find the desired data through disparate sources; at other facilities, it was not. In accordance with the baseline protocol, data collectors were instructed not to search through nonconsolidated data sources such as client histories.

ACQUIRE will not report on the data collected from this instrument in the current baseline report, aside from the finding noted above that non-SNIS service statistics are infrequently compiled. Attempts will be made to use the information collected in these forms at endline, together with SNIS data, both to see whether data consolidation systems have improved at the facilities in the sample and to examine changes in service utilization from baseline to endline.

Lack of Control Group

Since no control group was assigned to the study, ACQUIRE will not be able to fully attribute changes seen from baseline to endline to the project. However, ACQUIRE is the leading cooperating agency working with the MSD to support facility-based FP, maternal health, and PAC services in Bolivia in the focus health networks. In addition, ACQUIRE will maintain a detailed record of all interventions that take place at each facility, which will aid in determining whether and to what extent ACQUIRE may have contributed to a given effect.

Findings

The findings presented in this report are structured according to the ACQUIRE Intermediate Results (IR) framework:

- IR 1: Increased access to quality RH/FP services
- IR 2: Improved performance of service-delivery providers
- IR 3: Strengthened environment for RH/FP service delivery

This framework will be used by ACQUIRE during the project period for programmatic organization. All three of the above IRs correspond most closely to USAID/Bolivia's IRs 2 and 3: "Expanded delivery of quality services through health networks" and "Strengthened institutional capacity for health care management and sustainability."

The results are presented descriptively and in the main without interpretations or analysis of possible causes, as the study team would like the information generated by the study to be used and interpreted by managers, directors, program planners, facility heads, and others in participatory processes of health management and administration decision making.

The results are disaggregated by facility type, as they are representative at this level. Disaggregation by facility type was determined during sample design to be the best course of action for programmatic purposes, since interventions would vary along these lines. In most tables, only affirmative responses are displayed. Percentages were calculated with missing and "don't know" responses retained in the denominator, unless noted otherwise. Subtotals are given for public-sector sites, in addition to totals that cover both public- and private-sector sites.

IR 1: Increased Access to Quality RH/FP Services

The findings presented in this first section relate to access to quality RH services. Included are availability of services; existence of adequate referral systems; physical/geographic access; availability of key infrastructure, equipment, and supplies; presence of infection prevention systems; existence of private and confidential services; presence of restrictive eligibility criteria; availability of services that encourage male participation; community outreach; services that are sensitive to clients' cultural background and beliefs; and services that are integrated.

Availability of Services

Tables 7 to 12 below summarize the study results related to availability of services. It is important to note the distinction between whether a site *offers* a given service (in other words, that the service is part of the site's constellation of services) and whether a site has the resources it needs to actually *carry out* a given service at an adequate level of quality. The latter is explored more fully in later sections, such as those on availability of infrastructure, supplies, and equipment; provider training; infection prevention systems; and counseling.

Table 7 (page 16) shows the proportion of facilities surveyed that reported offering FP counseling, as well as selected short-acting FP methods. Virtually all of the sites reported offering FP counseling. For the short-acting modern methods, more than nine in 10 sites surveyed reported offering male condoms, the combined pill, and Depo-Provera. The pill was offered somewhat less

frequently at the public-sector sites than at the NGO sites. Combined (estrogen/progestin) injectables were offered infrequently across the public-sector sites (6%). (This finding is not surprising, given that combined injectables are not offered as part of the MSD constellation of methods; however, they were offered at 41% of PROSALUD sites and 78% of CIES sites.)

Table 7. Percentage of facilities that offer FP counseling and selected short-acting FP methods

Counseling/ method offered	Health centers (n=165)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=195)	PROSALUD (n=29)	CIES (n=9)	Total (n=233)
FP counseling[1]	100.0	95.2	100.0	99.5	100.0	100.0	99.6
Male condom	93.3	90.5	100.0	93.3	100.0	100.0	94.4
Combined pill[1]	89.7	85.7	88.9	89.2	100.0	100.0	91.0
Progesterone-only injectable (Depo-Provera)	92.7	85.7	100.0	92.3	100.0	100.0	93.6
Combined injectable	4.2	19.0	11.1	6.2	41.4	77.8	13.3
LAM	98.2	95.2	100.0	97.9	100.0	100.0	98.3
Rhythm method	97.0	95.2	100.0	96.9	100.0	100.0	97.4
Standard-days method	84.2	85.7	77.8	84.1	100.0	100.0	86.7

Source: FP inventory
[1] Data are missing on this item for one facility, which is retained in the denominator.

In regard to natural methods, the lactational amenorrhea method (LAM) was reported offered at almost all sites, as was the rhythm method. The standard-days method was reported offered less frequently (87% of sites). This method was offered least frequently at the referral hospitals.

Tables 8 and 9 summarize the availability of long-acting and permanent FP methods at the facilities surveyed.

Table 8. Percentage of facilities that offer IUD-related services

Service	Health centers (n=165)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=195)	PROSALUD (n=29)	CIES (n=9)	Total (n=233)
IUD insertion	70.9	90.5	100.0	74.4	100.0	100.0	78.5
IUD removal	86.1	95.2	100.0	87.7	100.0	100.0	89.7
Among facilities that offer insertion, type offered (%)	**(n=117)**	**(n=19)**	**(n=9)**	**(n=145)**	**(n=29)**	**(n=9)**	**(n=183)**
Interval IUD insertion	77.8	68.4	100.0	77.9	93.1	100.0	81.4
Postpartum IUD insertion	53.0	78.9	100.0	59.3	75.9	55.6	61.7
Transcesarean IUD insertion	8.5	26.3	55.6	13.8	13.8	33.3	14.8
IUD insertion after PAC	25.6	52.6	77.8	32.4	41.4	88.9	36.6

Source: FP inventory

As can be seen in Table 8, all of the referral maternity hospitals, PROSALUD, and CIES facilities surveyed reported offering IUD insertion. Additionally, IUD insertion was reported to be offered at 91% of network hospitals and 71% of health centers surveyed. The most frequent type of IUD insertion offered was interval insertion (at 81% of facilities offering IUD insertion), followed by postpartum insertion (62%). IUD insertion after PAC was reported available at only 37% of

facilities offering IUD insertion, and transcesarean insertion was reported offered at only 15% of these facilities.[25]

As mentioned above, these proportions reflect informants' reports as to whether the service was offered at the facility; however, it is not known whether the facility is indeed prepared to carry out the service and whether and to what extent the providers in the facility have been trained in the service. As will be seen in the section on provider training, a relatively large proportion of the providers interviewed who reported offering IUD insertions had not been trained in the service in the past three years. And as will be seen in the section on the availability of supplies, a significant proportion of sites that reported offering the service did not have IUD instrument kits and/or IUDs available on the day of the survey.

As shown in Table 9, all nine of the referral hospitals reported offering tubal ligation, as did 62% of network hospitals, 24% of PROSALUD sites, 33% of the nine CIES sites, and 15% of the health centers.[26] Approximately three in four of those facilities offering tubal ligation reported offering transcesarean tubal ligation. Fewer than one-half reported offering tubal ligation via minilaparotomy (or minilap); of those offering minilap, more than 80% reported offering interval minilap and postpartum minilap.

As can also be seen in Table 9, fewer than one-fifth of the facilities surveyed reported offering vasectomy—one-third of the referral hospitals and network hospitals, 7% of the PROSALUD sites, and fewer than one-half of the CIES sites. Of those facilities offering vasectomy, only 30% reported offering no-scalpel vasectomy (NSV). Again, these data reflect informants' reports on the services offered at the site, and it is important to also examine other indicators of facility readiness.

Table 9. Percentage of facilities that offer various permanent FP methods

Method	Health centers (n=165)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=195)	PROSALUD (n=29)	CIES (n=9)	Total (n=233)
Tubal ligation	14.5	61.9	100.0	23.6	24.1	33.3	24.0
Vasectomy	14.5	33.3	33.3	17.4	6.9	44.4	17.2
Among facilities that offer tubal ligation, type offered (%)	**(n=24)**	**(n=13)**	**(n=9)**	**(n=46)**	**(n=7)**	**(n=3)**	**(n=56)**
Transcesarean tubal ligation[1]	—[2]	—	100.0	76.1	—	—	71.4
Tubal ligation via minilap	—	—	88.9	41.3	—	—	42.9
Among facilities that offer minilap, type offered (%)	**(n=5)**	**(n=6)**	**(n=8)**	**(n=19)**	**(n=2)**	**(n=3)**	**(n=24)**
Interval minilap	—	—	100.0	84.2	—	—	87.5
Postpartum minilap	—	—	100.0	78.9	—	—	83.3
Among facilities that offer vasectomy, type offered (%)	**(n=24)**	**(n=7)**	**(n=3)**	**(n=34)**	**(n=2)**	**(n=4)**	**(n=40)**
No-scalpel vasectomy	—	—	—	23.5	—	—	30.0

Source: FP inventory

[1] Data are missing on this item for one facility, which is retained in the denominator.

[2] In each case where "—" appears, there are too few facilities for meaningful disaggregation. Disaggregations for tertiary-level hospitals were retained for most indicators because the proportion of sites responding was almost 100%.

[25] All levels of facility must at a minimum provide counseling on all methods. However, transcesarean IUD insertion and IUD insertion after PAC are not expected to be performed at health centers, though some do appear to be providing them. The few transcesarean IUD insertions reported at health centers likely derive from those few that have the capacity to perform cesarean sections.

[26] As mentioned in footnote 25, all levels of facility are expected to provide counseling on all methods. Tubal ligation and vasectomy procedures, however, are not expected to be performed at health centers, though it does appear from the data that some health centers are offering them.

Table 10 displays facilities' reports on whether they offered normal delivery, antenatal care, and postpartum care services. Virtually all facilities offer the three services, with the important exception of the CIES facilities, where only three of nine reported offering normal delivery services. This may reflect the fact that, at the time of the survey, only two of the CIES sites were secondary-level clinics, and the rest were health centers without inpatient care.

Table 10. Percentage of facilities that offer basic maternal health services

Service	Health centers (n=159)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=189)	PROSALUD (n=30)	CIES (n=9)	Total (n=228)
Normal delivery[1]	96.9	95.2	100.0	96.8	96.7	33.3	94.3
Antenatal care	100.0	95.2	100.0	99.5	100.0	100.0	99.6
Postpartum care[2]	100.0	95.2	100.0	99.5	100.0	100.0	99.6

Source: General inventory
[1] Data are missing on this item for two facilities, which are retained in the denominator.
[2] Data are missing on this item for one facility, which is retained in the denominator.

Table 11 shows the proportion of facilities that had performed key maternal and neonatal health procedures in the past three months. Because these statistics also to some extent reflect demand for services, it is noteworthy that according to the SNIS, currently 55% of women in the country deliver in facilities (with important interregional and urban/rural differences). Overall, the least frequently provided services at the sites surveyed were assisted vaginal delivery (using forceps and/or vacuum extractor, provided at 13% of facilities), cesarean section (19%), blood transfusion (19%), administration of parenteral anticonvulsants (30%), administration of drugs to combat eclampsia (32%), and dilation and curettage (D&C) and/or manual vacuum aspiration (MVA) (35%).

Table 11. Percentage of facilities that had performed key maternal and neonatal health procedures in the past three months

Procedure	Health centers (n=163)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=193)	PROSALUD (n=30)	CIES (n=8)	Total (n=231)
a. Administration of parenteral antibiotics	50.3	90.5	100.0	57.0	56.7	62.5	57.1
b. Administration of parenteral anticonvulsants	24.5	66.7	88.9	32.1	23.3	12.5	30.3
c. Administration of parenteral oxytocic drugs	66.3	100.0	100.0	71.5	76.7	25.0	70.6
d. D&C and/or MVA	25.2	100.0	100.0	36.8	23.3	37.5	35.1
e. Manual removal of placenta	38.7	90.5	100.0	47.2	13.3	12.5	41.6
f. Assisted delivery (forceps and/or vacuum extraction)	8.6	33.3	55.6	13.5	10.0	0.0	12.6
g. Cesarean section	7.4	71.4	100.0	18.7	16.7	25.0	18.6
h. Blood transfusion	8.6	76.2	100.0	20.2	13.3	0.0	18.6
i. Resuscitation of newborn	43.6	81.0	100.0	50.3	36.7	12.5	47.2
j. Administration of parenteral solutions	77.9	100.0	100.0	81.3	90.0	50.0	81.4
k. Administration of magnesium sulfate or diazepam for eclampsia	26.4	71.4	100.0	34.7	20.0	0.0	31.6
l. Repair of cervical or birth canal tear	40.5	90.5	100.0	48.7	13.3	12.5	42.9

Source: Maternal and neonatal health inventory

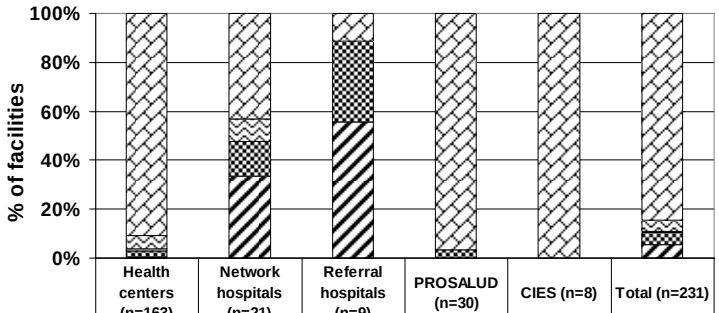
Figure 1 illustrates the availability of basic and comprehensive emergency obstetric care (EmOC) services at the facilities surveyed, as defined by international standards (UNICEF, WHO, & UNFPA, 1997). According to these standards, a facility is defined as providing *basic* EmOC if in the past three months it performed each of the following:

- Administration of parenteral antibiotics
- Administration of parenteral anticonvulsants
- Administration of parenteral oxytocic drugs
- Removal of retained products (MVA and/or D&C)
- Manual removal of placenta
- Assisted vaginal delivery (vacuum extraction and/or forceps)

A facility is defined as a *comprehensive* facility if in the past three months it performed each of the items listed above, plus surgery (e.g., cesarean section) and blood transfusions.

The availability of each of these elements is detailed in rows "a" through "h" of Table 11. The Bolivian MSD added two categories to the international standards, "Basic EmOC minus 1" and "Comprehensive EmOC minus 1," both of which exclude assisted delivery via instruments. These four categories of EmOC services are presented in Figure 1 as mutually exclusive. If the site does not qualify as a basic or comprehensive facility, it is classified as "Does not provide EmOC."

Figure 1. Percentage of facilities offering basic or comprehensive EmOC services, by type of facility



	Health centers (n=163)	Network hospitals (n=21)	Referral hospitals (n=9)	PROSALUD (n=30)	CIES (n=8)	Total (n=231)
Do not provide EMOC	90.8	42.9	11.1	96.7	100	84.4
Basic EmOC-1	5.5	9.5	0.0	0.0	0.0	4.8
Basic EmOC	0.6	0.0	0.0	0.0	0.0	0.4
Comprehensive EmOC-1	2.5	14.3	33.3	3.3	0.0	4.8
Comprehensive EmOC	0.6	33.3	55.6	0.0	0.0	5.6

Of note is that of the facilities surveyed in this study, 84% cannot be considered either basic or comprehensive EmOC facilities. Nine out of 10 of the health centers, and almost all of the NGO sites, do not meet these definitions. Approximately one-half of referral hospitals qualify as comprehensive EmOC sites, while the other half do not, largely because they have not provided assisted delivery (with forceps and/or vacuum extractor) in the past three months.[27] Besides assisted delivery, other aspects of basic EmOC that were provided rarely across the sites were manual extraction of the placenta (42% overall), administration of parenteral anticonvulsants (30%), and D&C and/or MVA (35%).

[27] Of note is that these results were largely similar to those obtained when sites were simply asked whether they offer the procedures listed in Table 9 (and not whether they had performed them in the past three months). For example, almost eight out of 10 health centers and seven out of 10 NGOs reported not offering the elements in the EmOC definitions. The findings for the referral hospitals were almost exactly the same as those using the three-month definition. Therefore, the international standards utilized above can indeed be seen as reflections of the availability of EmOC, beyond simply reflecting client flow.

Table 12 shows the availability of PAC services. Of the 169 facilities that reported offering these services, the health centers and PROSALUD sites were least likely to provide MVA and/or D&C. While all nine referral hospitals reported offering both techniques, D&C was more common than MVA at the network hospitals (95% versus 71%) and at the health centers (36% versus 26%). At the PROSALUD and CIES facilities, in contrast, MVA was more prevalent than D&C.

Table 12. Percentage of facilities that offer key PAC services

Service	Health centers (n=115)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=145)	PROSALUD (n=19)	CIES (n=5)	Total (n=169)
MVA[1]	26.1	71.4	100.0	37.2	42.1	80.0	39.1
D&C[1]	35.7	95.2	100.0	48.3	31.6	60.0	46.7
Preprocedure counseling[1]	67.8	100.0	100.0	74.5	78.9	100.0	75.7
Postprocedure counseling[1]	64.3	100.0	100.0	71.7	78.9	100.0	73.4
FP/contraceptive counseling[1]	93.0	100.0	100.0	94.5	100.0	100.0	95.3
FP/contraceptive services[1]	92.2	90.5	100.0	92.4	100.0	100.0	93.5

Source: PAC inventory
[1] Data are missing on this item for one facility, which is retained in the denominator.

All of the referral and network hospitals and CIES sites reported providing pre- and postprocedure counseling, as well as FP counseling to PAC clients. FP counseling was almost universal across sites. A slightly larger proportion of health centers reported offering counseling on PAC procedures than the actual procedures, probably because some sites that referred clients elsewhere for PAC services still counseled them on those services before referral.

Referral Systems

Referral services for complications of pregnancy, childbirth, and abortion are a critical element of quality maternal health services, as laid out in the Programme of Action adopted at the 1994 International Conference on Population and Development (United Nations, 1994).

In Table 13, one can see that almost all of the facilities surveyed that refer clients for obstetric emergencies[28] have referral forms. Of the nine referral hospitals, eight (89%) reported having access 24 hours a day to a vehicle as well as a driver. This proportion was similar at the network hospitals (86%). Fewer than one-half (47%) of the health centers, 13% of PROSALUD sites, and none of the primary- or secondary-level CIES sites had 24-hour access to a vehicle and driver. Of those facilities that did have a vehicle and driver available 24 hours, 80% reported having used this vehicle to transport a woman from a lower-level facility.

Also of note is that aside from the CIES facilities, all of the other facility types reported receiving clients referred by midwives. This was most common at network hospitals (86%) and least common at PROSALUD sites (23%).

The data for referrals for treatment of abortion complications are very similar to the data seen in Table 13 for obstetric emergencies. For example, almost all of the referral and network hospitals reported having access 24 hours a day to a vehicle as well as a driver for referrals related to PAC, in contrast to slightly more than one-half (54%) of the health centers, 21% of PROSALUD sites, and none of the CIES sites (not shown).

[28] All nine referral hospitals and six of the network hospitals reported that they do not refer for obstetric emergencies; this is probably because they are more likely to receive referred cases, rather than refer out.

Table 13. Percentage of facilities with various referral systems for obstetric emergencies

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Among all facilities (%)	**(n=163)**	**(n=21)**	**(n=9)**	**(n=193)**	**(n=30)**	**(n=8)**	**(n=231)**
Receive referrals from midwives[1]	66.3	85.7	55.6	67.9	23.3	0.0	59.7
Have 24-hour access to vehicle/driver[1]	46.6	85.7	88.9	52.8	13.3	0.0	45.9
Among facilities with access to vehicle/driver (%)	**(n=91)**	**(n=20)**	**(n=8)**	**(n=119)**	**(n=5)**	**(n=1)**	**(n=125)**
Have used it to transport a woman from a lower-level facility[2]	80.2	80.0	100.0	81.5	—[4]	—	80.0
Among facilities that refer women for obstetric emergencies (%)	**(n=162)**	**(n=15)**	**N.A.**	**(n=177)**	**(n=27)**	**(n=8)**	**(n=212)**
Possess referral form[3]	96.3	93.3	N.A.	96.0	100.0	100.0	96.7

Source: Maternal and neonatal health inventory

[1] Data are missing on this item for one facility, which is retained in the denominator.

[2] Data are missing on this item for two facilities, which are retained in the denominator.

[3] Data are missing on this item for three facilities, which are retained in the denominator.

[4] In each case where "—" appears, there are too few facilities for meaningful disaggregation.

In the facility inventory questionnaires, respondents were also asked about the proximity of the nearest referral facility for EmOC and complications of abortion and about the time it would take a client to reach the referral facility through means other than public transportation. The answers varied greatly, with referral facilities generally being farthest away from the primary-level facilities. For example, of the health centers surveyed, the mean distance to the nearest referral facility was 88 kilometers (with a range from 6 to 312). The corresponding travel time to the referral facility through nonpublic transportation was a mean of 143 minutes (more than two hours), with a range from seven minutes to 720 minutes (12 hours).

Economic Access

Table 14 (page 21) presents several indicators of economic access for the FP and antenatal care clients surveyed. In general, the FP clients were more likely than the antenatal care clients to pay for services (36% versus 24%). The largest proportions of clients paying for services can be seen at the NGO facilities: Ninety-two percent of FP clients and 93% of antenatal clients at the PROSALUD facilities paid for a supply or service on the day of their visit, as did 68% of FP clients and 100% of antenatal care clients at the CIES facilities. This is not surprising, given that the NGO facilities, being private, charge for the services they provide. The public-sector facilities, in contrast, had much lower proportions of clients who paid (23% of FP clients and 5% of antenatal care clients). In accordance with Universal Maternal and Child Insurance (SUMI) regulations, facilities should not collect fees for antenatal care services, nor should they collect fees for FP from women through the first six months postpartum.

As can also be seen in Table 14, of the FP clients who paid on the day of their visit, the most common elements they paid for overall were the consultation (57%) and the FP method itself (47%). Of the antenatal care clients who paid, the most common elements they paid for were the consultation (92%) and drugs (10%). At public-sector sites, the mean amount reported paid for services was nine bolivianos for both FP and antenatal clients, while at the NGO sites the average was 31 bolivianos for FP clients and 26 bolivianos for antenatal clients.[29]

[29] To put these numbers in context, the minimum monthly salary in Bolivia is 440 bolivianos (which corresponds to 54.46 US dollars).

Table 14. Percentage of clients reporting paying for services and/or supplies, and mean charges

Characteristic	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
FP clients	**(n=85)**	**(n=23)**	**(n=47)**	**(n=155)**	**(n=24)**	**(n=22)**	**(n=201)**
% paying for service and/or supply on day of visit	16.5	21.7	34.0	22.6	91.7	68.2	35.8
Mean amount paid (bolivianos)[1] (min/max)	5.6 (1/13)	4.0 (1/10)	12.8 (3/60)	8.7 (1/60)	37.3 (6/85)	24.3 (8/44)	21.0 (1/85)
Among paying FP clients, % paying for each type of service	**(n=14)**	**(n=5)**	**(n=16)**	**(n=35)**	**(n=22)**	**(n=15)**	**(n=72)**
Consultation	—[2]	—	—	37.1	—	—	56.9
FP method	—	—	—	5.7	—	—	47.2
Antenatal care clients	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
% paying for service and/or supply on day of visit[3]	5.1	5.3	3.8	4.7	93.2	100.0	24.2
Mean amount paid (bolivianos)[4] (min/max)	7.3 (1/20)	10.7 (5/15)	10.3 (1/15)	8.9 (1/20)	27.3 (1/80)	24.0 (1/100)	23.4 (1/100)
Among paying antenatal care clients, % paying for each type of service	**(n=7)**	**(n=3)**	**(n=3)**	**(n=13)**	**(n=41)**	**(n=25)**	**(n=78)**
Consultation[3]	—	—	—	46.2	—	—	92.3
Drugs[3]	—	—	—	30.8	—	—	10.3

Sources: FP client exit interview and antenatal care client exit interview

[1] One case with missing data, and one case with the answer "don't know," were removed from the analysis. Additionally, a case with the response "400 bolivianos" was removed from the analysis because the cost was for an MVA procedure, rather than for FP.

[2] In each case where "—" appears, there are too few facilities for meaningful disaggregation.

[3] Data are missing on this item for one client, who is retained in the denominator.

[4] One case with missing data, and one case with the answer "don't know," were removed from the analysis.

Physical/Geographic Access

The clients who were interviewed as they exited the facilities were asked several questions related to their physical access to the facility—for example, the time it took them to arrive at the facility, their means of transportation to the facility, and whether they had any difficulty accessing the facility.

One can see in Table 15 that, on average, clients traveled approximately 49 minutes to the public-sector sites and 23 minutes to the NGO sites (with the exception of two outlying FP clients at the CIES sites and one outlying antenatal client at a health center, who traveled 1,440 minutes, or 24 hours). The longest travel times were seen for clients at the health centers and network hospitals, where especially large proportions of clients walked to the sites. In general, the most common mode of transportation mentioned was walking, followed by travel in a van, minibus, or bus and by motorcycle or car.

Approximately 10% of clients reported having had a problem getting to the facility; the most frequently mentioned problem was lack of transportation (not shown). Of note also is that fewer than one-half of antenatal care clients reported having access to a form of transportation from their house for when their labor begins.

Availability of Key Infrastructure, Equipment, and Supplies

Table 16 summarizes the availability of basic infrastructure at the facilities surveyed. Eight health centers reported having no electricity. Almost all PROSALUD and CIES facilities (97% and 100%, respectively) reported having uninterrupted electricity 24 hours a day, as did 81% and 89% of network and referral hospitals, respectively, compared with only 59% of health centers.

Table 15. Measures of physical access to health facilities among interviewed clients

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
FP clients	**(n=85)**	**(n=23)**	**(n=47)**	**(n=155)**	**(n=24)**	**(n=22)**	**(n=201)**
Mean minutes to facility[1] (min/max)	56.6 (1/720)	35.9 (1/180)	44.5 (10/180)	49.9 (1/720)	24.0 (5/60)	179.3 (5/1440)	61.0 (1/1440)
Means of transportation to facility (%)							
Walked	81.2	39.1	12.8	54.2	41.7	18.2	48.8
Rode bike	1.2	13.0	2.1	3.2	0.0	0.0	2.5
Motorcycle or car	11.8	34.8	12.8	15.5	25.0	27.3	17.9
Van/minibus/bus	4.7	8.7	68.1	24.5	29.2	54.5	28.4
Walked and took van/minibus/bus	1.2	4.3	4.3	2.6	4.2	0.0	2.5
% who had a problem getting to facility	11.8	4.3	6.4	9.0	8.3	18.2	10.0
Antenatal care clients	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
Mean minutes to facility[1] (min/max)	50.8 (0/1440)	71.0 (2/480)	29.8 (5/120)	48.1 (0/1440)	20.0 (5/60)	26.8 (5/90)	42.5 (0/1440)
Means of transportation to facility[2](%)							
Walked	65.0	56.1	13.9	47.0	27.3	16.0	41.9
Rode bike	3.4	5.3	2.5	3.6	0.0	0.0	2.8
Motorcycle or car	16.2	28.1	43.1	27.3	29.5	32.0	28.0
Horse, mule, or other animal	0.9	1.8	0.0	0.8	0.0	0.0	0.6
Van/minibus/bus	6.8	8.8	38.0	17.0	40.9	52.0	23.0
Walked and took van/minibus/bus	1.7	0.0	2.5	1.6	2.3	0.0	1.6
Walked and took a car	3.4	0.0	0.0	1.6	0.0	0.0	1.2
Other	0.9	0.0	0.0	0.4	0.0	0.0	0.3
% who had a problem getting to facility[2]	12.8	12.3	7.6	11.1	4.5	4.0	9.6
% with access to transportation from house in case of labor[2]	32.5	38.6	40.5	36.4	56.8	60.0	41.0

Sources: FP client exit interview and antenatal care client exit interview
[1] Data are missing on this item for one client, who is removed from the denominator.
[2] Data are missing on this item for one client, who is retained in the denominator.

Table 16. Percentage of facilities reporting availability of basic infrastructure

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Electricity[1]	**(n=151)**	**(n=21)**	**(n=9)**	**(n=181)**	**(n=30)**	**(n=9)**	**(n=220)**
Uninterrupted electricity 24 hours a day[2]	58.9	81.0	88.9	63.0	96.7	100.0	69.1
Other basic services	**(n=159)**	**(n=21)**	**(n=9)**	**(n=189)**	**(n=30)**	**(n=9)**	**(n=228)**
Piped water	86.2	81.0	100.0	86.2	100.0	100.0	88.6
Own means of communication	85.5	100.0	100.0	87.8	100.0	100.0	89.9
Internet access	1.9	4.8	88.9	6.3	73.3	100.0	18.9
Physical space	**(n=157)**	**(n=20)**	**(n=8)**	**(n=185)**	**(n=30)**	**(n=7)**	**(n=222)**
Indoor waiting area separate from exam area[3]	91.1	100.0	100.0	92.4	100.0	100.0	93.7
Counseling area separated by curtain or wall[3]	97.5	100.0	100.0	97.8	100.0	100.0	98.2
Exam area separated by curtain or wall, and with artificial lighting and exam table[4]	87.6	100.0	87.5	88.9	75.9	85.7	87.0

Source: General inventory
[1] The universe is reduced because it does not include eight health centers that do not have electricity.
[2] Data are missing on this item for one facility, which is retained in the denominator.
[3] Data are missing on this item for six facilities, which are removed from the denominator.
[4] Data are missing on this item for 12 facilities, which are removed from the denominator.

All of the referral hospitals, PROSALUD sites, and CIES sites reported having piped water within the facility, compared with 86% of health centers and 81% of network hospitals. One hundred percent of hospitals and NGO facilities reported having their own means of communication for use in case of an emergency; 86% of health centers reported the same. Finally, very small proportions of health centers (2%) and network hospitals (5%) reported having Internet access.

Table 17 shows the availability of FP equipment and supplies on the day of the survey. Only those supplies that were actually observed by the interviewers were enumerated as being available. More than three-quarters of the nine referral hospitals had tubal ligation instrument packets, while only two-thirds had minilap instrument packets and 11% had NSV instrument kits.

IUDs (Copper T), Depo-Provera, the pill, and male condoms were available at all of the referral hospitals on the day of the survey. However, problems with supplies of short- and long-acting methods can be seen across the other public-sector facility types. For example, supplies of the IUD were only available at approximately one-half (53%) of the health centers and two-thirds (67%) of the network hospitals, while 71% and 91%, respectively, reported that they offered IUD insertions. Supplies of Depo-Provera were available at approximately three-fourths of health centers (74%) and network hospitals (71%), even though 93% and 86%, respectively, reported offering the method. Overall, the four methods provided by the MSD (IUD, Depo-Provera, oral contraceptives, and male condoms) were available on the day of the survey at 53–81% of the public-sector facilities surveyed.

Table 17. Percentage of facilities with FP supplies/equipment verified as available the day of the survey

Supplies/equipment	Health centers (n=165)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=195)	PROSALUD (n=29)	CIES (n=9)	Total (n=233)
Tubal ligation instrument kits[1]	1.8	42.9	77.8	9.7	13.8	22.2	10.7
Minilap instrument kits[2]	1.8	23.8	66.7	7.2	6.9	22.2	7.7
NSV instrument kits	1.2	4.8	11.1	2.1	6.9	22.2	3.4
IUD insertion instrument kits[3]	49.1	76.2	100.0	54.4	93.1	88.9	60.5
IUD (Copper T)[2]	52.7	66.7	100.0	56.4	93.1	88.9	62.2
Depo-Provera	73.9	71.4	100.0	74.9	93.1	88.9	77.7
Pill	72.1	71.4	100.0	73.3	93.1	88.9	76.4
Male condoms[2]	70.9	81.0	100.0	73.3	93.1	88.9	76.4
Female condoms[2]	1.2	0.0	11.1	1.5	10.3	66.7	5.2
Necklace and instructions for standard-days method[2]	7.9	14.3	55.6	10.8	27.6	55.6	14.6

Source: FP inventory
[1] Data are missing on this item for two facilities, which are retained in the denominator.
[2] Data are missing on this item for one facility, which is retained in the denominator.
[3] Data are missing on this item for 13 facilities, which are retained in the denominator.

Table 18 represents a subset of the total sample. Of the facilities with supplies available on the day of the survey, it shows the proportion that reported not having continuous availability in the past six months. Irregularities in supplies were seen for all four methods provided by the MSD. For example, Depo-Provera had been unavailable in the past six months at 11% of facilities that did have stock on the day of the survey; worth noting is that the irregularity in supplies extended to all types of facility except CIES sites. Condoms had been unavailable in the past six months at 29% (five out of 17) of the network hospitals and at 14% of the health centers that had condoms in stock on the day of the survey. Across methods, the most common reason given for the irregularity in supply of contraceptive methods was that the supplies had not been restocked by the MSD's Sexual and Reproductive Health Program (not shown).

Table 18. Percentage of facilities with supplies available the day of the survey that reported not having continuous supplies in the past six months

Availability	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Among facilities with IUDs available on day of survey (%)	**(n=88)**	**(n=14)**	**(n=9)**	**(n=111)**	**(n=27)**	**(n=7)**	**(n=145)**
IUD unavailable in past six months	5.7	0.0	0.0	4.5	0.0	0.0	3.4
Among facilities with Depo-Provera available on day of survey (%)	**(n=123)**	**(n=15)**	**(n=9)**	**(n=147)**	**(n=27)**	**(n=7)**	**(n=181)**
Depo-Provera unavailable in past six months	13.8	6.7	11.1	12.9	3.7	0.0	11.0
Among facilities with pill available on day of survey (%)	**(n=120)**	**(n=15)**	**(n=9)**	**(n=144)**	**(n=27)**	**(n=7)**	**(n=178)**
Pills unavailable in past six months	11.7	13.3	0.0	11.1	0.0	0.0	9.0
Among facilities with male condoms available on day of survey (%)	**(n=119)**	**(n=17)**	**(n=9)**	**(n=145)**	**(n=27)**	**(n=7)**	**(n=179)**
Male condoms unavailable in past six months	14.3	29.4	0.0	15.2	0.0	0.0	12.3

Source: FP inventory

Table 19 presents results on the availability of key supplies related to maternal health on the day of the survey. Results varied across the facility types, though for most items, the network and referral hospitals had the highest levels of availability. This is not surprising, since few health centers or NGO sites would be expected to have some of the supplies associated with higher levels of care, such as blood transfusion equipment and cesarean kits.

Table 19. Percentage of facilities with key maternal health supplies verified as available the day of the survey

Supplies	Health centers (n=163)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=193)	PROSALUD (n=30)	CIES (n=8)	Total (n=231)
Gooseneck lamp[1]	77.3	95.2	88.9	79.8	93.3	75.0	81.4
Surgical table[2]	18.4	90.5	77.8	29.0	40.0	37.5	30.7
Torch with batteries[1]	35.6	61.9	55.6	39.4	40.0	50.0	39.8
Electric aspirator[3]	19.6	85.7	77.8	29.5	90.0	37.5	37.7
Sphygmomanometer[1]	92.0	90.5	100.0	92.2	93.3	75.0	91.8
Stethoscope[4]	87.7	85.7	88.9	87.6	90.0	62.5	87.0
Thermometer[2]	90.2	85.7	100.0	90.2	80.0	62.5	87.9
Pinard stethoscope[5]	82.2	85.7	88.9	82.9	73.3	62.5	81.0
Oxygen cylinder with flow meter, volume meter, and mask[2]	63.8	95.2	88.9	68.4	100.0	62.5	72.3
I.V. stand[1]	98.2	100.0	100.0	98.4	100.0	62.5	97.4
I.V. kit[1]	89.6	100.0	88.9	90.7	76.7	75.0	88.3
Butterfly infusion set[1]	85.3	100.0	77.8	86.5	76.7	62.5	84.4
Mayo or Guedel cannulae[1]	22.1	52.4	55.6	26.9	50.0	25.0	29.9
Laryngoscope[1]	18.4	90.5	77.8	29.0	56.7	37.5	32.9
Endotracheal tubes[1]	11.7	47.6	77.8	18.7	46.7	25.0	22.5
Obstetric forceps[2]	10.4	52.4	55.6	17.1	0.0	12.5	14.7
Episiotomy kit[3]	64.4	76.2	100.0	67.4	93.3	37.5	69.7
Cesarean instrument kit[2]	4.9	71.4	33.3	13.5	13.3	25.0	13.9
Cesarean drapes kit[1]	6.1	61.9	55.6	14.5	13.3	25.0	14.7
Delivery drapes kit[5]	74.8	95.2	100.0	78.2	93.3	37.5	78.8
Blood bag[1]	10.4	57.1	44.4	17.1	3.3	0.0	14.7
Equipment for blood transfusion[2]	11.0	76.2	55.6	20.2	6.7	0.0	17.7

Source: Maternal and neonatal health inventory

[1] Data are missing on this item for two facilities, which are retained in the denominator.

[2] Data are missing on this item for three facilities, which are retained in the denominator.

[3] Data are missing on this item for five facilities, which are retained in the denominator.

[4] Data are missing on this item for seven facilities, which are retained in the denominator.

[5] Data are missing on this item for four facilities, which are retained in the denominator.

Overall, 87% of the facilities surveyed reported that supplies and equipment necessary for maternal and neonatal care were available to clients 24 hours a day, seven days a week, free of barriers such as locked doors or cabinets or unavailable keys (not shown). This was reported by 91% of health centers, 86% of network hospitals, 78% of referral hospitals, 80% of PROSALUD sites, and 63% of CIES sites. The absence of 24-hour accessibility to supplies and equipment represents an important barrier to the timely provision of critical services.

Table 20 presents results on the availability of key drugs related to maternal health on the day of the survey. As with the findings on equipment and supplies, the referral and network hospitals generally had the highest levels of availability. The least frequently available drugs were naloxone (5% overall, and proportions below 25% at all facilities), fentanyl (14% overall, though 89% at referral hospitals), and sodium thiopental (15% overall, though 78% at referral hospitals).

Table 20. Percentage of facilities with key maternal health drugs verified as available the day of the survey

Drug	Health centers (n=163)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=193)	PROSALUD (n=30)	CIES (n=8)	Total (n=231)
Oxytocin 5 UI[1]	84.7	81.0	100.0	85.0	66.7	37.5	81.0
Lidocaine 2% 20 mL[2]	88.3	90.5	100.0	89.1	66.7	62.5	85.3
Ferrous salt/folic acid tablets[2]	78.5	81.0	77.8	78.8	16.7	25.0	68.8
Paracetamol 500 mg[2]	84.0	90.5	100.0	85.5	50.0	50.0	79.7
Gentamicin 20 mg[1]	63.2	71.4	88.9	65.3	43.3	37.5	61.5
Penicillin G[3]	58.9	76.2	88.9	62.2	26.7	0.0	55.4
Erythromycin 500 mg[3]	60.1	66.7	55.6	60.6	36.7	37.5	56.7
Metronidazole 500 mg[3]	69.3	85.7	77.8	71.5	30.0	25.0	64.5
Ampicillin 1 g[3]	56.4	90.5	77.8	61.1	33.3	37.5	56.7
Methyldopa 500 mg[3]	61.3	81.0	100.0	65.3	20.0	25.0	58.0
Nifedipine 10 mg[2]	52.1	61.9	100.0	55.4	20.0	37.5	50.2
Diazepam 10 mg[2]	68.1	85.7	88.9	71.0	60.0	50.0	68.8
Magnesium sulfate 10% 10 mL[4]	48.5	71.4	100.0	53.4	36.7	25.0	50.2
Atropine[2]	68.1	95.2	100.0	72.5	46.7	50.0	68.4
Fentanyl 0.05 mg/10 mL[2]	5.5	42.9	88.9	13.5	13.3	25.0	13.9
Naloxone 0.4 mg/ mL[2]	1.2	23.8	11.1	4.1	3.3	25.0	4.8
Sodium thiopental[2]	6.1	57.1	77.8	15.0	10.0	37.5	15.2
Betamethasone 4 mg[3]	24.5	42.9	88.9	29.5	16.7	25.0	27.7
Ritodrine 10 mg	19.0	57.1	100.0	26.9	6.7	0.0	23.4
Dexamethasone[1]	76.1	85.7	88.9	77.7	56.7	62.5	74.5

Source: Maternal and neonatal health inventory
[1] Data are missing on this item for five facilities, which are retained in the denominator.
[2] Data are missing on this item for three facilities, which are retained in the denominator.
[3] Data are missing on this item for two facilities, which are retained in the denominator.
[4] Data are missing on this item for four facilities, which are retained in the denominator.

As can be seen in Table 21, which summarizes the availability of PAC supplies and equipment on the day of the survey, 89% of the referral hospitals and 80% of the CIES sites providing PAC services had MVA kits, but only 24% of health centers had the same equipment. (These reports on the availability of MVA equipment largely match facilities' reports on the availability of MVA services.) Overall, only three of the PAC items were available at more than one-half of the facilities—a speculum at 87% of all sites, Pozzi forceps at 65% of all sites, and uterine curettage instruments at 54% of all sites. All other items were available at only one-third of all sites. Overall, gaps in PAC supplies were greatest at health centers and PROSALUD sites.

Table 21. Percentage of facilities with key PAC-related equipment/supplies verified as available the day of the survey

Equipment/supplies	Health centers (n=115)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=145)	PROSALUD (n=19)	CIES (n=5)	Total (n=169)
MVA kits[1]	24.3	71.4	88.9	35.2	15.8	80.0	34.3
Single-valve MVA syringe[1]	19.1	61.9	77.8	29.0	15.8	80.0	29.0
Double-valve MVA syringe[1]	22.6	61.9	66.7	31.0	10.5	80.0	30.2
Adapters[2]	22.6	81.0	77.8	34.5	15.8	80.0	33.7
Flexible Karman cannulae[1]	25.2	71.4	77.8	35.2	15.8	80.0	34.3
Foerster forceps[2]	35.7	66.7	66.7	42.1	31.6	60.0	41.4
Pozzi forceps[1]	61.7	85.7	66.7	65.5	57.9	80.0	65.1
Flexible dilators[1]	30.4	85.7	66.7	40.7	15.8	80.0	39.1
Uterine dilators[1]	41.7	76.2	77.8	49.0	15.8	60.0	45.6
Speculum[3]	87.8	95.2	88.9	89.0	73.7	80.0	87.0
Uterine curettage instruments[3]	47.0	90.5	77.8	55.2	42.1	60.0	53.8

Source: PAC inventory
[1] Data are missing on this item for three facilities, which are retained in the denominator.
[2] Data are missing on this item for four facilities, which are retained in the denominator.
[3] Data are missing on this item for two facilities, which are retained in the denominator.

Availability of Infection Prevention Systems

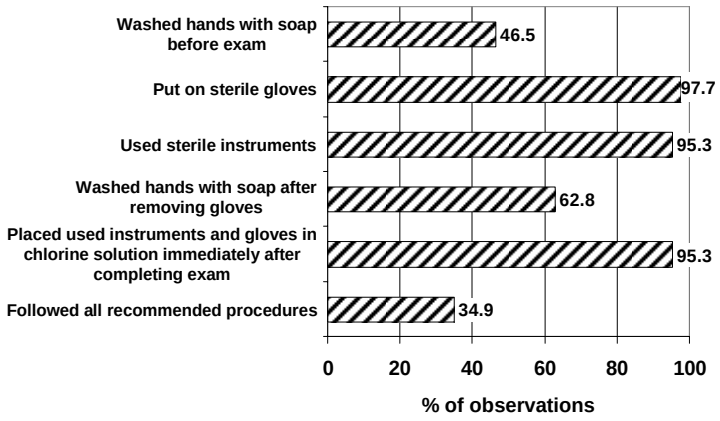
Table 22 presents a variety of indicators related to systems for infection prevention at the facilities surveyed. One indicator of a facility's compliance with MSD standards for infection prevention is the presence of an infection prevention committee. Infection prevention committees regulate and oversee the implementation, supervision, and evaluation of infection prevention standards in health networks and facilities, in accordance with MSD norms. All nine of the referral hospitals reported having one, compared with 62% of network hospitals, 16% of health centers, 53% of PROSALUD sites, and 33% of the CIES sites.

Table 22. Percentage of facilities with availability of equipment and systems for infection prevention

Equipment/systems	Health centers (n=159)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=189)	PROSALUD (n=30)	CIES (n=9)	Total (n=228)
Have infection prevention committee	16.4	61.9	100.0	25.4	53.3	33.3	29.4
Separate contaminated and noncontaminated solid waste	74.8	81.0	100.0	76.7	100.0	88.9	80.3
Transport solid waste to a dump or incinerate/burn it with protection	58.5	95.2	100.0	64.6	93.3	100.0	69.7
Autoclaves[1, 2]	22.6	66.7	77.8	30.2	20.0	22.2	28.5
Dry heat sterilizers ("pupinels")[1, 2]	68.6	100.0	77.8	72.5	96.7	88.9	76.3
Bleach[1,2]	90.6	95.2	100.0	91.5	96.7	88.9	92.1
Containers with lids for solid waste[1]	79.2	71.4	100.0	79.4	83.3	100.0	80.7
Puncture-resistant containers for sharps[1]	88.7	85.7	100.0	88.9	100.0	100.0	90.8
Containers with lids for disinfection[1]	55.3	47.6	77.8	55.6	76.7	66.7	58.8

Source: General inventory
[1] Availability confirmed by data collectors.
[2] Data are missing on this item for one facility, which is retained in the denominator.

Figure 2. Percentage of observations of pelvic examinations in which providers complied with infection prevention procedures (n=43)

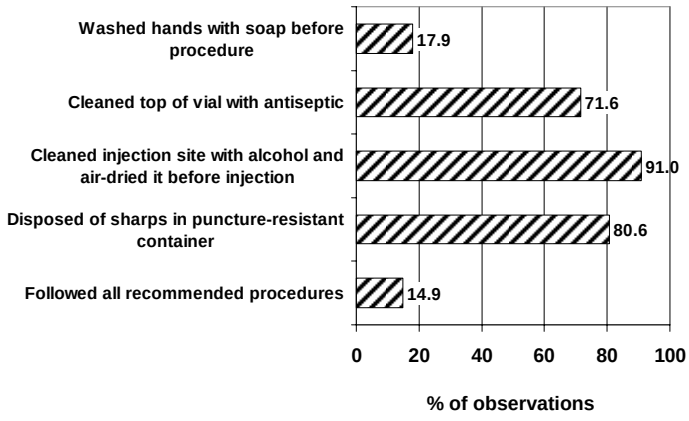


While 100% of referral hospitals and CIES sites and the vast majority of network hospitals and PROSALUD sites either transport their solid waste to a dump or incinerate/burn it with protection, only 59% of health centers do the same. All referral hospitals and NGO sites (CIES and PROSALUD) had at least one puncture-resistant container for sharps, as did close to 90% of health centers and network hospitals. Containers with lids for solid waste disposal were available at 79% of health centers and 71% of network hospitals.

Bleach was available on the day of the survey at over nine out of 10 sites surveyed, with minimal variation by facility type. Dry heat sterilizers (*pupinels*) were available at 69% of health centers, 100% of network hospitals, 78% of referral hospitals, 97% of PROSALUD facilities, and 89% of CIES facilities. Autoclaves were less likely to be available than dry heat sterilizers across all facility types. They were available at 23% of health centers,[30] 20% of PROSALUD sites, 22% of CIES sites, 67% of network hospitals, and 78% of the referral hospitals.

Figures 2 and 3 are based on the observations of 43 pelvic examinations and 67 injections of Depo-Provera and report on provider compliance with infection prevention quality standards during these procedures.[31]

Figure 3. Percentage of observations of injectable provision in which providers complied with infection prevention procedures (n=67)



Providers followed all recommended infection prevention procedures in only 35% of observed pelvic examinations (Figure 2). The least commonly observed prevention steps were washing hands with soap before the exam (47%) and washing hands with soap after removing gloves (63%).

During the observations of Depo-Provera injections, 91% of providers cleaned the injection site with alcohol and air-dried it before the injection, 81% disposed of sharps in a puncture-resistant container, and 72% cleaned the top of the vial with anti-septic. However, only 18% washed their hands with soap before the procedure (Figure 3). In only 15% of observed injections were the providers observed following all of the recommended procedures.

[30] Health centers are required at a minimum to have either an autoclave or a dry heat sterilizer.
[31] Disaggregations are not given by facility type because of the small number of cases.

Availability of Private and Confidential Services

As can be seen in Table 23, approximately two-thirds of FP and antenatal care clients (66% and 70%, respectively) told interviewers that they felt that the information they had shared with the provider on the day of the survey would be kept private and confidential.

Table 23. Percentage of clients reporting perception of confidentiality of information shared

Perception of confidentiality	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
FP clients	**(n=85)**	**(n=23)**	**(n=47)**	**(n=155)**	**(n=24)**	**(n=22)**	**(n=201)**
Felt information shared with provider would be kept private and confidential	60.0	78.3	55.3	61.3	83.3	77.3	65.7
Antenatal care clients	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
Felt information shared with provider would be kept private and confidential [1]	63.2	73.7	64.6	66.0	79.5	92.0	69.9

Sources: FP client exit interview and antenatal care client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.

Table 24 presents observation data on privacy. One can see that both auditory and visual privacy were observed in six out of every 10 consultations.[32]

Table 24. Percentage of consultations with privacy observed

Measure	Health centers (n=78)	Network hospitals (n=28)	Referral hospitals (n=56)	Subtotal (n=162)	PROSALUD (n=20)	CIES (n=18)	Total (n=200)
Visual privacy (no other person could observe the consultation)[1]	62.8	53.6	66.1	62.3	60.0	83.3	64.0
Auditory privacy (no other person could hear the consultation)[1]	62.8	60.7	69.6	64.8	55.0	83.3	65.5
Both auditory and visual privacy	60.3	53.6	66.1	61.1	55.0	83.3	62.5

Source: FP client-provider observation
[1] Data are missing on this item for five clients, who are retained in the denominator.

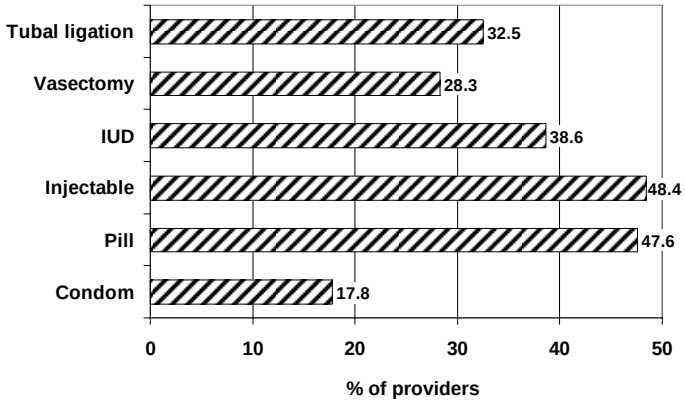
Restrictive Eligibility Criteria

The baseline study assessed providers' attitudes to see whether biases related to clients' age, parity, and the need for partner consent might be limiting clients' access to contraceptive methods.

Figure 4 (page 30) shows the proportion of providers who reported using a client's number of children as a criterion for offering particular FP methods. (Neither the Bolivia national guidelines for FP nor the World Health Organization's Medical Eligibility Criteria suggest imposing parity restrictions on method use.) For permanent methods of contraception (vasectomy and tubal ligation), 28% and 33% of providers, respectively, reported that clients should have had a particular number of children before they would offer them the method. This proportion was even greater for

[32] Lack of privacy may be caused by aspects of the physical space of the room (e.g., lack of walls, etc.), interruptions during the consultation, or the presence of another provider in the room for training purposes (which is most likely at the referral hospitals).

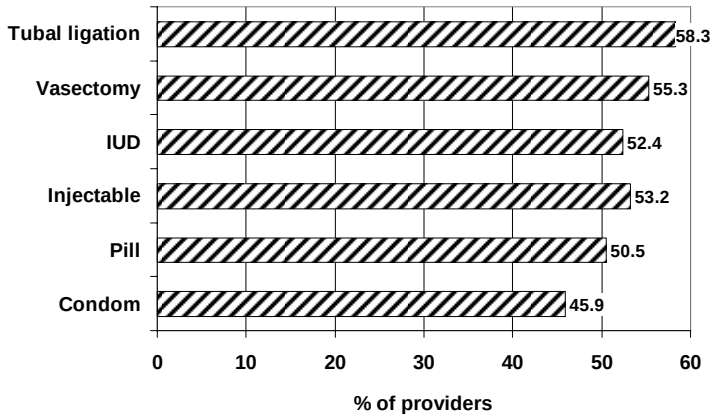
Figure 4. Percentage of providers who report using a client's number of children as a criterion for offering the following FP methods (n=523)



the pill and injectables (48%). For condoms, 18% of providers reported the existence of this criterion.

Requiring a partner's consent before offering contraceptive methods affects clients' access to FP. The Bolivia national norms for FP have no requirement for partner consent for any method. Figure 5 shows that this criterion was reported for all methods. More than 50% of providers reported soliciting partner consent before offering the pill (51%), the IUD (52%), injectables (53%), vasectomy (55%), and tubal ligation (58%). For condoms, 46% of providers reported that they solicit partner consent.

Figure 5. Percentage of providers who report that they solicit partner consent before offering the following FP methods (n=523)



Male Participation in Sexual and Reproductive Health Services

Table 25 presents several indicators related to male participation in sexual and reproductive health services. The majority (82%) of the facilities surveyed reported offering RH services for men.[33] The NGO facilities were most likely to offer these services (90% of PROSALUD and all CIES facilities) and network hospitals were least likely to do so (62%). Only a small minority (17%) of all facilities offer vasectomy services; the types of facilities most likely to do so are CIES facilities (44%), referral hospitals (33%), and network hospitals (33%).

[33] The term "RH services for men" is a broad concept that includes services ranging from STI treatment to treatment of sexual dysfunction to male sterilization. It was not defined explicitly for respondents in the questionnaire, and thus affirmative responses may refer to any combination of these services.

Table 25. Percentage of facilities offering ways for men to participate in sexual and reproductive health care

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
All facilities (%)	**(n=159)**	**(n=21)**	**(n=9)**	**(n=189)**	**(n=30)**	**(n=9)**	**(n=228)**
Offer RH services for men[1]	81.8	61.9	77.8	79.4	90.0	100.0	81.6
Among facilities that offer family planning (%)	**(n=165)**	**(n=21)**	**(n=9)**	**(n=195)**	**(n=29)**	**(n=9)**	**(n=233)**
Offer vasectomy services	14.5	33.3	33.3	17.4	6.9	44.4	17.2
Among facilities that offer maternal health services (%)	**(n=163)**	**(n=21)**	**(n=9)**	**(n=193)**	**(n=30)**	**(n=8)**	**(n=231)**
Allow partner participation during delivery[2]	95.7	81.0	44.4	91.7	90.0	37.5	89.6
Have brochures available about partner participation during pregnancy care[3]	6.7	14.3	11.1	7.8	13.3	25.0	9.1

Sources: General inventory, FP inventory, and maternal and neonatal health inventory
[1] Data are missing on this item for one facility, which is retained in the denominator.
[2] Data are missing on this item for seven facilities, which are retained in the denominator.
[3] Data are missing on this item for three facilities, which are retained in the denominator.

Wide variation by site can be seen in the proportion allowing partner participation during delivery, which ranged from 38% of CIES facilities and 44% of referral hospitals to 96% of health centers. Fewer than 10% of the facilities surveyed had brochures available on partner participation in pregnancy care. This proportion was highest at the CIES facilities (25%) and lowest at the health centers (7%) and referral hospitals (11%).

Table 26 presents data on partner involvement from the client interviews. Antenatal care clients were more likely than FP clients to have their partner accompany them during their consultation (15% versus 8%), though the overall proportions having a partner present during the consultation were low for both types of clients. The vast majority of both FP and antenatal care clients whose partner did not accompany them said that they would have liked him/her to (91–92%, not shown).

Almost one-half of the antenatal care clients reported that the provider discussed with them partner participation in pregnancy care, and approximately one-third had discussed partner participation during the delivery. Antenatal care clients at the referral hospitals were least likely to report having discussed both of these topics.

Table 26. Percentage of clients reporting various means of partner involvement

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
FP clients	**(n=85)**	**(n=23)**	**(n=47)**	**(n=155)**	**(n=24)**	**(n=22)**	**(n=201)**
Reported partner presence during today's consultation	7.1	17.4	4.3	7.8	8.3	9.5	8.0
Antenatal care clients	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
Reported partner presence during today's consultation[1]	8.5	15.8	16.5	12.6	27.3	20.0	15.2
Discussed with provider partner participation in pregnancy care	50.4	47.4	35.4	45.1	52.3	64.0	47.5
Discussed with provider partner participation in delivery[2]	40.2	28.1	21.5	31.6	43.2	36.0	33.5

Sources: FP client exit interview and antenatal care client exit interview
[1] Data are missing on this item for four clients, who are retained in the denominator.
[2] Data are missing on this item for one client, who is retained in the denominator.

Community Outreach

As can be seen in Table 27, 97% of the health centers and 91% of the network hospitals surveyed reported that their providers visit communities on a regular basis to deliver health services. In contrast, only one-fifth of PROSALUD facilities, one-third of CIES facilities, and none of the referral hospitals reported such community visits. When asked a follow-up question about the frequency of these community visits, the most common response was monthly (55%), followed by weekly (23%) and twice a week (12%) (not shown).

Of note is that of the facilities that regularly conduct community visits, virtually all reported including FP counseling in these visits. Approximately 82% of facilities reported offering short-acting contraceptive methods during community visits: Seventy-nine percent offer condoms, 82% offer the pill, and 86% offer injectables. A smaller proportion of the facilities overall reported giving referrals for long-acting and permanent methods. Also of note is that 94% of facilities provide antenatal care during these visits, 89% offer assistance at home deliveries, and 93% provide postpartum care. Though nearly 75% of health centers and network hospitals reported offering referrals for diagnosis and treatment of sexually transmitted infections (STIs), lower proportions offer referrals for HIV diagnosis and treatment (38% and 53%, respectively).[34]

Table 27. Percentage of facilities reporting community outreach activities or services conducted by facility staff

Activity/service	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Community activities	**(n=159)**	**(n=21)**	**(n=9)**	**(n=189)**	**(n=30)**	**(n=9)**	**(n=228)**
Have health workers visit communities	96.9	90.5	0.0	91.5	20.0	33.3	79.8
Conduct meetings with traditional healers or traditional health practitioners	15.1	14.3	0.0	14.3	0.0	11.1	12.3
Participate in Committees for Analysis of Health Information (CAIs)[1]	78.0	76.2	11.1	74.6	3.3	22.2	63.2
Type of service provided during community visits (%)	**(n=154)**	**(n=19)**	**(n=0)**	**(n=173)**	**(n=6)**	**(n=3)**	**(n=182)**
a. Sexual education	98.1	100.0	N.A.	98.3	100.0	100.0	98.4
b. FP counseling	99.4	100.0	N.A.	99.4	100.0	100.0	99.5
c. Provision of condoms	77.9	84.2	N.A.	78.6	83.3	100.0	79.1
d. Provision of pill	81.2	84.2	N.A.	81.5	100.0	100.0	82.4
e. Provision of injectables (Depo-Provera)	84.4	89.5	N.A.	85.0	100.0	100.0	85.7
f. Referral for IUD	69.5	78.9	N.A.	70.5	100.0	100.0	72.0
g. Referral for tubal ligation	53.9	57.9	N.A.	54.3	50.0	66.7	54.4
h. Referral for vasectomy	34.4	36.8	N.A.	34.7	50.0	66.7	35.7
i. Pregnancy test	69.5	68.4	N.A.	69.4	16.7	33.3	67.0
j. Immunization	97.4	100.0	N.A.	97.7	66.7	33.3	95.6
k. Antenatal care consultation	96.8	100.0	N.A.	97.1	33.3	33.3	94.0
l. Provision of iron tablets	96.1	100.0	N.A.	96.5	16.7	33.3	92.9
m. Assisted home delivery	92.9	84.2	N.A.	91.9	16.7	33.3	88.5
n. Postpartum care	98.1	94.7	N.A.	97.7	0.0	33.3	93.4
o. Referral for STI diagnosis/treatment	74.7	73.7	N.A.	74.6	33.3	33.3	72.5
p. Referral for HIV diagnosis/treatment	38.3	52.6	N.A.	39.9	50.0	66.7	40.7

Source: General inventory

[1] CAIs work at the local level to support health planning, decision making, and allocation of resources. They also help do community mobilization (for example, vaccination campaigns).

[34] The frequency with which each of these individual components is conducted is not known, since the frequency data collected cover only the community visits in general.

As can also be seen in Table 27, a small minority of the facilities surveyed (from 0% to 15%) reported conducting meetings with healers or traditional health practitioners to discuss health-related topics. As shown in Table 28, a minority of the clients interviewed reported ever having consulted with traditional healers or traditional health practitioners.

Table 28. Percentage of clients reporting that they had ever consulted with traditional healers/health practitioners

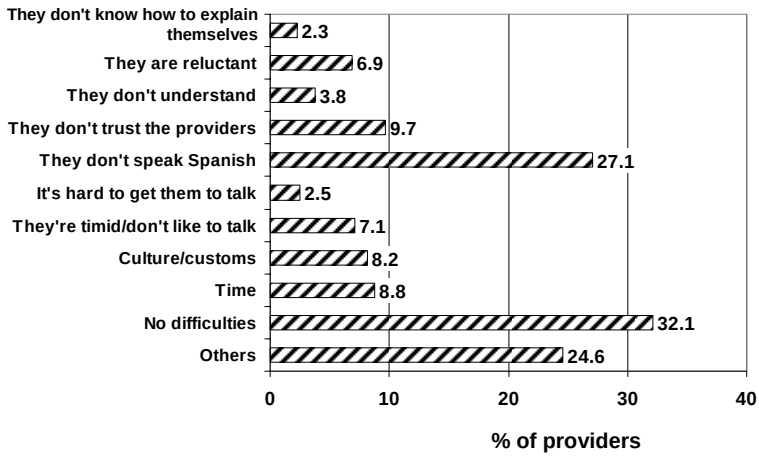
Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
FP clients	**(n=85)**	**(n=23)**	**(n=47)**	**(n=155)**	**(n=24)**	**(n=22)**	**(n=201)**
Ever consulted a traditional healer or traditional health practitioner	15.3	17.4	10.6	14.2	0.0	9.1	11.9
Antenatal care clients	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
Ever consulted a traditional healer or traditional health practitioner for a pregnancy complication[1]	15.4	12.3	7.6	12.3	11.4	4.0	11.5

Sources: FP client exit interview and antenatal care client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.

Intercultural Communication and Sensitivity to Cultural Beliefs

Table 29 (page 34) presents several indicators from the provider interviews related to providers' communication with their clients. Overall, 91% of providers interviewed reported that they communicate with their clients in Spanish, 42% in Quechua, and 24% in Aymara. While a similar proportion of physicians and of nurses of all types reported speaking Quechua with clients, a higher proportion of auxiliary nurses than of other health care providers reported speaking Aymara with clients. In terms of self-identification with a particular indigenous ethnic group, 42% of the providers interviewed reported that they did not belong to any indigenous group, while 28% self-identified as Quechua and 23% as Aymara.

Figure 6. Percentage of providers reporting the principal difficulties impeding good communication with their clients (n=524)



In the interviews, providers were asked what they found to be the principal difficulties impeding good communication with their clients. As can be seen in Figure 6, 32% responded that they had no such difficulties. The most commonly cited difficulties were that clients did not speak Spanish (27%), that they distrusted the providers (10%), lack of time with the clients (9%), and clients' cultures/customs (8%).[35]

[35] The majority of these responses represent categories pretested in this and other studies and precoded on the questionnaires. However, several (e.g., "culture/customs of clients" and "lack of time with clients") emerged spontaneously during the interviews and were coded later from an "other" category.

Finally, as can be seen in Table 29, 90% of the providers that provide maternal health services reported having given a placenta to a woman or her family upon request (to dispose of it as they wished). (Burial of the placenta is an important element of the culture and traditions of the Aymara and Quechua in Bolivia.) The ob/gyns were the least likely providers to report having done this.

Table 29. Providers' reports on their communication with clients and sensitivity to cultural beliefs

Measure	General doctor (n=199)	Ob/gyn (n=88)	Other specialist (n=9)	Nurse (n=80)	Auxiliary nurse (n=133)	Other (n=15)	Total (n=524)
% of providers who report using specific languages with clients[1]							
Spanish	92.0	93.2	100.0	91.3	88.7	93.3	91.4
Quechua	49.7	36.4	33.3	47.5	33.8	33.3	42.4
Aymara	17.6	10.2	11.1	22.5	45.9	20.0	24.2
Guaraní	0.5	1.1	0.0	0.0	0.0	0.0	0.4
% distribution of providers by identification with indigenous group[2]							
Quechua	29.1	22.7	11.1	40.0	26.3	20.0	28.4
Aymara	19.1	10.2	22.2	21.3	39.1	26.7	23.3
Guaraní	2.0	2.3	0.0	0.0	1.5	0.0	1.5
Other	3.5	0.0	0.0	2.5	3.8	0.0	2.7
None	43.7	61.4	66.7	35.0	28.6	53.3	42.2
% of providers who have given a placenta to a woman/family upon request[3]	**(n=198)**	**(n=81)**	**(n=7)**	**(n=58)**	**(n=101)**	**(n=7)**	**(n=452)**
Yes	91.9	79.0	85.7	93.1	95.0	85.7	90.3

Source: Provider interview
[1] Data are missing on this item for seven providers, who are retained in the denominator.
[2] Data are missing on this item for 10 providers, who are retained in the denominator.
[3] Data are missing on this item for six providers, who are retained in the denominator.

Integration of FP Services into Maternal Health Services

Table 30 illustrates some findings from the antenatal care client exit interviews related to integration of FP services into antenatal care services.[36] About one-third of the antenatal care clients interviewed reported that they had heard or seen a message about FP and/or contraceptive methods at the facility on the day of their visit. Of those that responded affirmatively, the greatest proportion (66%) reported having seen a poster on FP, followed by having heard about FP during a health talk (59%).

Table 30. Percentage of clients reporting exposure to FP/contraceptive messages on day of antenatal visit

Measure	Health Centers	Network Hospitals	Referral Hospitals	Subtotal	PROSALUD	CIES	Total
Among all antenatal care clients (%)	**(n=117)**	**(n=57)**	**(n=79)**	**(n=253)**	**(n=44)**	**(n=25)**	**(n=322)**
Heard or saw something about FP/ contraceptive methods at facility on day of visit	36.8	28.1	35.4	34.4	18.2	48.0	33.2
Among antenatal care clients exposed to FP message *(%)*	**(n=43)**	**(n=16)**	**(n=28)**	**(n=87)**	**(n=8)**	**(n=12)**	**(n=107)**
Saw a poster on FP[1]	60.5	56.3	75.0	64.4	62.5	83.3	66.4
Saw a brochure/pamphlet on FP	34.9	25.0	50.0	37.9	62.5	50.0	41.1
Discussed FP during health talk	60.5	68.8	60.7	62.1	50.0	41.7	58.9
Discussed FP during consultation	39.5	50.0	60.7	48.3	50.0	16.7	44.9

Source: Antenatal care client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.

[36] These data do not distinguish between specific antenatal visits (i.e., first visit, second visit, etc.).

IR 2: Improved Performance of Service-Delivery Providers

The findings presented in this section relate to the performance of service-delivery providers. They include data on the following topics: supervision systems and QI tools; provider training and the ability of trained staff to apply their acquired knowledge; availability of periodic updates for facility staff; adherence to standards in counseling; provider knowledge; and client satisfaction with the services they received.

Supervision Systems and QI Tools

Table 31 summarizes data from the provider interviews related to supervision systems. One can see that smaller proportions of providers at the health centers than of those at the higher-level facilities reported having supervisors on-site (40% at health centers, 48% at network hospitals, and 51% at referral hospitals). At PROSALUD sites, 72% of providers interviewed reported having a supervisor on-site, as did 56% of CIES providers interviewed.

Table 31. Percentage of providers reporting various measures of supervision

Measure	Health centers (n=312)	Network hospitals (n=58)	Referral hospitals (n= 45)	Subtotal (n=415)	PROSALUD (n=82)	CIES (n=27)	Total (n=524)
Have on-site supervisor[1]	39.7	48.3	51.1	42.2	72.0	55.6	47.5
% distribution of providers by number of external supervisor visits in past three months[2]							
1	43.3	27.6	13.3	37.8	17.1	22.2	33.8
2	15.1	20.7	8.9	15.2	18.3	3.7	15.1
≥3	7.4	20.6	4.4	8.9	11.0	0.0	8.8
None	29.8	15.5	64.4	31.6	42.7	63.0	34.9
Don't know	3.5	10.3	8.9	5.1	9.8	7.4	5.9
Have job description that was shown to interviewer [1]	8.0	13.8	4.4	8.4	9.8	11.1	8.8
Receive performance evaluations [1]	56.4	48.3	53.3	54.9	74.4	85.2	59.5
Have received verbal or written recognition for their work in past three months[1]	28.5	25.9	24.4	27.7	32.9	25.9	28.4

Source: Provider interview
[1] Data are missing on this item for seven providers, who are retained in the denominator.
[2] Data are missing on this item for eight providers, who are retained in the denominator.

Almost two-thirds (66%) of providers at the health centers reported that they had received at least one visit from an external supervisor in the past three months, as did 69% of providers at network hospitals. Much smaller proportions of providers at the referral hospitals and NGO sites reported external supervisory visits.

Overall, only 9% of the providers interviewed were able to show the interviewer their job description. Sixty percent of providers reported that they received performance evaluations, with the highest proportions seen at the NGO sites. Only three out of every 10 providers said that they had received verbal or written recognition for doing their work well over the past three months.

As shown in Table 32, between 22% and 34% of the public-sector sites, and roughly 50% of NGO sites, had a manual of staff functions available on the day of the survey.[37] Large proportions of the PROSALUD and CIES sites reported having implemented COPE® QI tools (93% and 78%, respectively), while a much smaller proportion of the public-sector sites overall (10%) had done so. Over one-half of the referral hospitals and one-third of the network hospitals reported implementing facilitative supervision, as did 70% of PROSALUD sites and 44% of CIES sites. An action plan for improving quality of care was reported by almost 62% of the sites surveyed; however, respondents at those sites that had not implemented such QI tools may not have understood the meaning of this concept and may have overreported this indicator. Sites may also have plans not based on QI tools/methodologies.

Table 32. Percentage of facilities reporting various measures of supervision systems and QI tools

Measure	Health centers (n=159)	Network hospital (n=21)	Referral hospital (n=9)	Subtotal (n=189)	PROSALUD (n=30)	CIES (n=9)	Total (n=228)
Have a manual of staff functions available[1]	34.0	33.3	22.2	33.3	53.3	44.4	36.4
Have any QI tools/methodologies	13.8	38.1	66.7	19.0	96.7	88.9	32.0
Have implemented COPE®	8.2	14.3	22.2	9.5	93.3	77.8	23.2
Have implemented facilitative supervision	5.7	33.3	55.6	11.1	70.0	44.4	20.2
Have a QI action plan	54.1	71.4	66.7	56.6	86.7	88.9	61.8
Have a QI committee	44.7	57.1	88.9	48.1	53.3	88.9	50.4
Have a site-specific supervision instrument available	28.9	33.3	22.2	29.1	53.3	22.2	32.0

Source: General inventory
[1] Data are missing on this item for one facility, which is retained in the denominator.

Provider Training

Providers were asked whether they had received any training in the past three years in a variety of topics.[38] Tables 33 and 34 present findings for training related to FP methods, together with findings on provider reports of their performance of specific FP procedures; Figure 7 summarizes the data presented in the tables. For each method, data were collected on the proportion of providers who have received method-specific technical training in the past three years and offer the method; the proportion who have been trained but do not offer the method; the proportion who have not received this training but offer the method; and the proportion who neither have been trained nor offer the method.

One can see in Table 33 and Figure 7 that while 13% of the providers interviewed have been trained in interval IUD insertions over the past three years and perform the procedure, 21% have *not* been trained in the procedure in the past three years and perform it. It appears that the ob/gyns who offer the method are more likely to have been trained than the general physicians.

[37] A manual of staff functions is a written description of the functions of each and every health provider in a facility, regardless of facility or provider level and type.
[38] Providers were not asked to explain the nature of the training (e.g., whether it was on-site or off-site, the formality and duration of the training, the sponsor of the training, etc.). Further information on training received is a possible topic for future study.

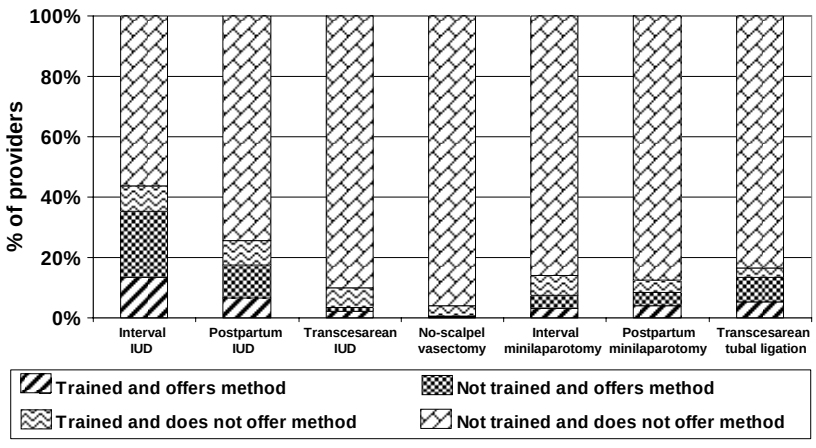
Table 33. Percentage of providers trained in the past three years in IUD provision and percentage actually offering the method

Measure	General doctor (n=199)	Ob/gyn (n=88)	Other specialist (n=9)	Nurse (n=80)	Auxiliary nurse (n=132)	Other (n=15)	Total (n=523)
Interval IUD[1] (%)							
Was trained and offers method	9.5	46.6	0.0	6.3	1.5	0.0	12.8
Was trained and does not offer method	10.6	3.4	0.0	10.0	6.8	6.7	8.0
Was not trained and offers method	27.1	38.6	44.4	8.8	6.8	0.0	20.7
Was neither trained nor offers method	44.7	5.7	55.6	71.3	83.3	86.7	53.3
Postpartum IUD[2] (%)							
Was trained and offers method	5.0	22.7	0.0	3.8	0.0	0.0	6.3
Was trained and does not offer method	8.0	20.5	0.0	3.8	3.8	0.0	8.0
Was not trained and offers method	17.1	19.3	11.1	0.0	3.0	0.0	10.7
Was neither trained nor offers method	66.3	35.2	88.9	88.8	91.7	93.3	72.1
Transcesarean IUD[3] (%)							
Was trained and offers method	0.5	11.4	0.0	0.0	0.0	0.0	2.1
Was trained and does not offer method	4.0	20.5	0.0	3.8	3.0	0.0	6.3
Was not trained and offers method	1.0	4.5	11.1	0.0	0.0	0.0	1.3
Was neither trained nor offers method	90.5	61.4	88.9	91.3	95.5	93.3	87.0

Source: Provider interview
[1] Data are missing on this item for eight providers, who are retained in the denominator.
[2] Data are missing on this item for nine providers, who are retained in the denominator.
[3] Data are missing on this item for 11 providers, who are retained in the denominator.

Similar trends can be seen for postpartum IUD provision, where 6% of the providers interviewed reported having been trained in the procedure in the past three years and performing it, while 11% have *not* been trained in the method and perform it. For transcesarean IUD insertion, while more providers who offer the method have been trained in it than have not (2% versus 1%), the overall proportion offering this FP method at all is very small. Also of note is that for postpartum and transcesarean IUD insertions, 21% of the ob/gyns interviewed *have* received training in the procedure but do *not* offer it. Nurses and auxiliary nurses are unlikely to have received training in or to offer these methods.

Figure 7. Percentage of providers trained in provision of an FP method and percentage actually offering that method, by method



In Table 34 and Figure 7, one can see that the overall proportion of providers interviewed who perform NSV is very small (0.6%). Among the ob/gyns interviewed, 1% have been trained in the past three years in NSV and offer the procedure, and 1% have *not* been trained and offer it. In relation to minilap, among the ob/gyns interviewed, 16% have been trained in interval minilap and currently offer it, while 26% have *not* been trained but currently offer it. Of note is that 23% of ob/gyns *have* been trained in interval minilap but do *not* perform it. Twenty-two percent of ob/gyns perform postpartum minilap and have been trained in the past three years, compared with 24% who have not been trained but perform the procedure. As with the IUD, very low proportions of nurses and auxiliary nurses offer or have been trained in these methods.

Table 34. Percentage of providers trained in the past three years in permanent FP methods and percentage actually offering such methods

Measure	General doctor (n=199)	Ob/gyn (n=88)	Other specialist (n=9)	Nurse (n=80)	Auxiliary nurse (n=132)	Other (n=15)	Total (n=523)
NSV[1] (%)							
Was trained and offers method	0.0	1.1	0.0	0.0	0.0	0.0	0.2
Was trained and does not offer method	1.5	10.2	0.0	1.3	2.3	6.7	3.3
Was not trained and offers method	0.5	1.1	0.0	0.0	0.0	0.0	0.4
Was neither trained nor offers method	96.5	85.2	100.0	97.5	97.0	86.7	94.6
Interval minilap[1] (%)							
Was trained and offers method	0.5	15.9	0.0	1.3	0.0	0.0	3.1
Was trained and does not offer method	3.0	22.7	0.0	2.5	3.0	6.7	6.3
Was not trained and offers method	0.0	26.1	0.0	0.0	0.0	0.0	4.4
Was neither trained nor offers method	95.0	33.0	100.0	93.8	96.2	86.7	84.5
Postpartum minilap[1] (%)							
Was trained and offers method	0.5	21.6	0.0	1.3	0.0	0.0	4.0
Was trained and does not offer method	1.5	12.5	11.1	2.5	2.3	0.0	3.8
Was not trained and offers method	0.5	23.9	0.0	1.3	0.0	0.0	4.4
Was neither trained nor offers method	96.5	39.8	88.9	92.5	97.0	93.3	86.2
Transcesarean tubal ligation[1] (%)							
Was trained and offers method	0.0	29.5	0.0	1.3	0.0	0.0	5.2
Was trained and does not offer method	2.5	5.7	0.0	2.5	3.0	0.0	3.1
Was not trained and offers method	3.0	38.6	11.1	0.0	0.0	6.7	8.0
Was neither trained nor offers method	94.0	22.7	88.9	93.8	96.2	86.7	82.2

Source: Provider interview

[1] Data are missing on this item for eight providers, who are retained in the denominator.

Table 35 summarizes the training data for topics related to PAC and maternal health. Of the PAC providers interviewed, 39% reported having been trained in MVA over the past three years and 17% having been trained in D&C. Approximately one-fourth of all providers who offer PAC services have been trained in counseling PAC clients before (27%), during (22%), and after (23%) the procedure. A similar proportion (27%) reported having been trained in infection prevention.

Of the providers interviewed who offered maternal and/or neonatal health services, 21% reported having been trained in the past three years in essential obstetric and neonatal care, while 15% reported having been trained in emergency obstetric and neonatal care; these proportions were particularly low among auxiliary nurses (9% in essential care and 7% in emergency care, respectively). Approximately one-fourth of the providers had received training in antenatal care, and 17% had received training in postpartum care. Training in infection prevention was reported by 26% of these providers.

Table 35. Percentage of providers trained in PAC and maternal health

Percentage trained	General doctor	Ob/gyn	Other specialist	Nurse	Auxiliary nurse	Other	Total
Among providers offering PAC (%)	**(n=123)**	**(n=74)**	**(n=4)**	**(n=7)**	**(n=19)**	**(n=4)**	**(n=231)**
MVA[1]	26.0	68.9	75.0	42.9	0.0	25.0	39.0
D&C[2]	10.6	36.5	0.0	0.0	0.0	0.0	17.3
Preprocedure counseling[2]	13.8	59.5	0.0	14.3	5.3	0.0	27.3
Counseling during procedure[2]	10.6	48.6	0.0	14.3	5.3	0.0	22.1
Postprocedure counseling[2]	10.6	51.4	0.0	14.3	5.3	0.0	22.9
Infection prevention [2]	16.3	50.0	25.0	14.3	21.1	0.0	27.3
Among providers that offer maternal health services (%)	**(n=198)**	**(n=81)**	**(n=7)**	**(n=58)**	**(n=101)**	**(n=7)**	**(n=452)**
Essential obstetric and neonatal care[3]	23.2	33.3	14.3	18.9	8.9	0.0	20.8
Emergency obstetric and neonatal care[4]	15.2	27.2	14.3	10.3	6.9	0.0	14.6
Antenatal care[4]	24.7	39.5	28.6	15.5	23.8	0.0	25.7
Delivery care[4]	16.2	33.3	28.6	12.1	22.8	0.0	20.1
Postpartum care[4]	13.6	32.1	28.6	10.3	16.8	0.0	17.3
Support for breastfeeding[4]	28.8	43.2	28.6	31.0	29.7	0.0	31.4
Infection prevention[5]	22.2	49.4	28.6	17.2	20.8	0.0	25.9

Source: Provider interview

[1] Data are missing on this item for one provider, who is retained in the denominator.

[2] Data are missing on this item for two providers, who are retained in the denominator.

[3] Data are missing on this item for three providers, who are retained in the denominator.

[4] Data are missing on this item for four providers, who are retained in the denominator.

[5] Data are missing on this item for five providers, who are retained in the denominator.

Ability of Trained Staff to Apply Their Acquired Knowledge

Tables 36, 37, and 38 summarize provider reports on their ability to apply the knowledge they gained during the training they received over the past three years.[39]

As can be seen in Table 36, high proportions of providers have been able to apply the knowledge they gained for most of the FP training topics. However, lower proportions can be seen for the long-acting and permanent methods. For example, the proportions of providers reporting being able to apply the knowledge they gained in postpartum IUD and transcesarean IUD insertion were only 59% and 56%, respectively. This finding is consistent with the training data in Table 33, which shows that relatively large proportions of providers had been trained in the past three years in postpartum and transcesarean IUD insertions but did *not* currently offer the procedures (21% each of ob/gyns for both procedures). Similarly, Table 36 shows that only 44% of the providers trained in NSV reported being able to apply the training they received. This result is consistent with Table 34, which showed that that the proportion of ob/gyns who had been trained in NSV but did not perform it was 10 times higher than the proportion that had been trained and did perform it.

Table 36. Percentage of providers trained in the past three years in FP who were able to apply their acquired knowledge

Training topic	%
Counseling/informed choice[1] (n=246)	94.7
Contraceptive technology update[2] (n=186)	91.4
Interval IUD insertion[2] (n=117)	70.9
Postpartum IUD insertion[2] (n=81)	59.3
Transcesarean IUD insertion[3] (n=52)	55.8
NSV[3] (n=25)	44.0
Interval tubal ligation via minilapa[3] (n=56)	62.5
Postpartum tubal ligation via minilap[3] (n=48)	58.3
Transcesarean tubal ligation[4] (n=49)	61.2
Use of "SoloShot" disposable syringe for Depo-Provera[4] (n=83)	81.9
Birth spacing[3] (n=141)	92.9
Infection prevention[5] (n=218)	92.7
Men's reproductive health[6] (n=76)	84.2
FP counseling for couples[5] (n=187)	90.9
FP for clients living with HIV/AIDS[3] (n=61)	39.3

Source: Provider interview
[1] Data are missing on this item for four providers, who are retained in the denominator.
[2] Data are missing on this item for five providers, who are retained in the denominator.
[3] Data are missing on this item for seven providers, who are retained in the denominator.
[4] Data are missing on this item for six providers, who are retained in the denominator.
[5] Data are missing on this item for nine providers, who are retained in the denominator.
[6] Data are missing on this item for eight providers, who are retained in the denominator.

In contrast, a full 93% of those trained in infection prevention have been able to apply what they learned in training, as have 95% of those trained in counseling/informed choice. Also of note is that only 39% of providers trained in contraception for clients with HIV/AIDS have been able to apply the knowledge they gained during training.

[39] All n's differ by training topic because they are based on the number of providers that reported having been trained in that topic over the past three years.

Providers were probed on their reasoning for not being able to apply the knowledge they gained (data not shown). For postpartum IUD, for example, the most frequently given response was a lack of demand from clients for the method, followed by not working in a facility or department that offers the method. The providers' most common response for not being able to perform transcesarean IUD insertion was that the facility or department they work in does not offer the method. For NSV, a lack of client demand was cited most frequently; also mentioned was lack of practice and lack of confidence in provision of the method.

Of note in Table 37 is that only 69% of the PAC providers trained in the past three years in MVA reported being able to apply the knowledge they gained, compared with 83% of the PAC providers trained in D&C. The most commonly given reason for not being able to apply the knowledge gained in MVA training was absence of equipment, followed by absence of supplies and lack of clients/cases.

Table 37. Percentage of providers trained in the past three years in PAC who were able to apply their acquired knowledge

Training topic	%
MVA[1] (n=91)	69.2
D&C[1] (n=42)	83.3
Preprocedure counseling[1] (n=65)	87.7
Counseling during procedure[1] (n=53)	88.7
Postprocedure counseling [1] (n=55)	94.5
Infection prevention[2] (n=65)	93.8

Source: Provider interview
[1] Data are missing on this item for two providers, who are retained in the denominator.
[2] Data are missing on this item for three providers, who are retained in the denominator.

As can be seen in Table 38, more than 90% of the providers trained in the past three years in antenatal care, delivery, and postnatal care have been able to apply the knowledge they gained. Eighty-seven percent of those trained in emergency obstetric and neonatal care have been able to apply what they learned in the training, as have 85% of those trained in essential obstetric and neonatal care.

Table 38. Percentage of providers trained in the past three years in maternal health services who were able to apply their acquired knowledge

Training Topic	%
Essential obstetric and neonatal care[1] (n=97)	84.5
Emergency obstetric and neonatal care [2] (n=70)	87.1
Antenatal care[2] (n=114)	95.0
Delivery care[2] (n=95)	91.6
Postpartum care[2] (n=82)	93.9
Support in breastfeeding[2] (n=143)	96.5
Infection prevention[3] (n=122)	92.6

Source: Provider interview
[1] Data are missing on this item for three providers, who are retained in the denominator.
[2] Data are missing on this item for four providers, who are retained in the denominator.
[3] Data are missing on this item for five providers, who are retained in the denominator.

Availability of Updates in Standards, Norms, Guidelines, and Protocols for Facility Staff

As can be seen in Table 39, of the facilities that offer FP and/or maternal health services, 43% reported that they offer refresher training to their staff on standards, norms, guidelines, and protocols. Of the facilities that provide PAC services, 36% offer these types of updates. Across all of the technical areas, health centers were the least likely to report offering these refresher trainings.

Table 39. Percentage of facilities reporting availability of refresher training in standards, norms, guidelines, and protocols

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Among facilities that offer FP services (%)	**(n=165)**	**(n=21)**	**(n=9)**	**(n=195)**	**(n=29)**	**(n=9)**	**(n=233)**
Offer refresher training on standards, norms, guidelines and protocols	32.7	52.4	55.6	35.9	79.3	66.7	42.5
Among facilities that offer maternal and neonatal health services (%)	**(n=163)**	**(n=21)**	**(n=9)**	**(n=193)**	**(n=30)**	**(n=8)**	**(n=231)**
Offer refresher training on standards, norms, guidelines and protocols[1]	32.5	47.6	77.8	36.3	80.0	62.5	42.9
Among facilities that offer PAC services (%)	**(n=115)**	**(n=21)**	**(n=9)**	**(n=145)**	**(n=19)**	**(n=5)**	**(n=169)**
Offer refresher training on standards, norms, guidelines and protocols	26.1	38.1	77.8	31.0	68.4	60.0	36.1

Sources: FP inventory, maternal and neonatal health inventory, and PAC inventory
[1] Data are missing on this item for one facility, which is retained in the denominator.

Adherence to Standards in Counseling

Tables 40, 41, and 42 summarize client reports on the FP methods discussed during FP consultations. As can be seen in Table 40, an average of 2.7 methods were discussed per consultation across all sites. On average, 61% of clients reported that the provider discussed more than one method with them. At network hospitals, this was reported by fewer than one-half of clients.

Table 40. Number of FP methods discussed during consultation, by facility type

Measure	Health centers (n=85)	Network hospitals (n=23)	Referral hospitals (n=47)	Subtotal (n=155)	PROSALUD (n=24)	CIES (n=22)	Total (n=201)
Average number of methods discussed	2.7	2.3	2.5	2.6	2.9	3.6	2.7
% of clients reporting that provider discussed more than one method	61.2	43.5	53.2	56.1	70.8	81.8	60.7

Source: FP client exit interview

As can be seen in Table 41, the average number of methods discussed varied considerably by whether the client was new or continuing.[40] An average of 3.6 methods were discussed with new clients, compared with 2.1 for continuing clients. Likewise, 86% of new clients reported that the provider discussed more than one method with them, compared with fewer than half (43%) of continuing clients.

Table 41. Number of FP methods discussed during consultation, by type of client

Measure	New (N=83)	Continuing (N=118)	Total (N=201)
Average number of methods discussed	3.6	2.1	2.7
% of clients reporting that provider discussed more than one method	85.5	43.2	60.7

As shown in Table 42, Depo-Provera was the method most frequently discussed during consultations, with 72% of clients reporting having discussed the method. Fifty-seven percent of clients reported discussing the IUD, 50% the pill, and 34% the male condom. Discussions of vasectomy and tubal ligation were reported by only 3% and 12% of clients, respectively. The proportion of clients reporting having discussed vasectomy was highest at CIES sites (9%), while the proportions discussing tubal ligation were highest at referral hospitals (17%) and CIES sites (18%). The infrequent discussion of permanent methods is noteworthy because more than one-half of the 188 clients with at least one living child reported in their exit interview that they did not want more children (not shown in table).

Analyses by client type (new or continuing) showed that for virtually all methods, new clients were more likely to have discussed the method during the consultation than were continuing clients (not shown). For example, 52% of new clients reported discussion of the male condom, compared with only 21% of continuing clients. Likewise, tubal ligation was discussed with 24% of new clients, compared with only 4% of continuing clients. Interestingly, vasectomy was discussed with more continuing clients (4%) than new clients (1%).

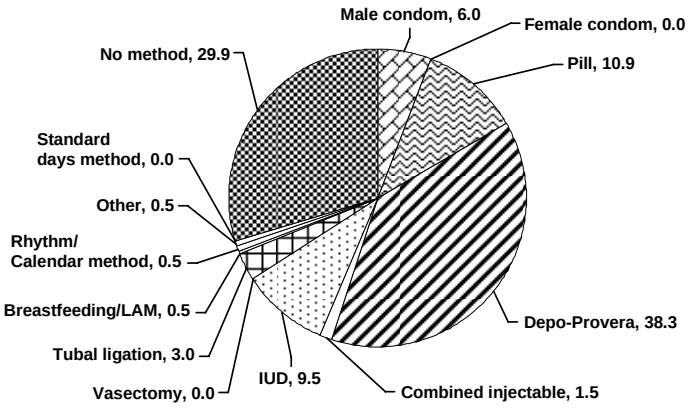
Table 42. Percentage of clients reporting discussion of various FP methods

Method	Health centers (n=85)	Network hospitals (n=23)	Referral hospitals (n=47)	Subtotal (n=155)	PROSALUD (n=24)	CIES (n=22)	Total (n=201)
Male condom	35.3	21.7	31.9	32.3	33.3	45.5	33.8
Female condom	9.4	4.3	2.1	6.5	4.2	9.1	6.5
Pill	52.9	52.2	36.2	47.7	58.3	59.1	50.2
Depo-Provera	75.3	73.9	74.5	74.8	58.3	63.6	71.6
Combined injectable	5.9	4.3	10.6	7.1	20.8	31.8	11.4
IUD	47.1	39.1	66.0	51.6	79.2	72.7	57.2
Vasectomy	2.4	4.3	2.1	2.6	0.0	9.1	3.0
Tubal ligation	9.4	8.7	17.0	11.6	12.5	18.2	12.4
LAM	9.4	0.0	2.1	5.8	8.3	0.0	5.0
Rhythm method	11.8	8.7	8.5	10.3	4.2	27.3	11.4
Standard-days method	5.9	4.3	2.1	4.5	0.0	18.2	5.5
Other	4.7	4.3	0.0	3.2	8.3	4.5	4.0

Source: FP client exit interview

[40] New clients are defined as those clients that were either new to FP in general, or new to a specific method (e.g., they switched methods on the day of the survey).

Figure 8. Percentage of clients receiving or referred for an FP method, by method



As can be seen in Figure 8 and Table 43, the findings on methods that clients most frequently reported having received, or having been referred elsewhere to receive,[41] largely match the findings in Table 42 on the methods most frequently discussed. Depo-Provera was the method that the largest proportion of clients (38%) received or were referred elsewhere for (as new or continuing users), followed by the pill (11%), the IUD (10%), and the male condom (6%). Six percent of clients interviewed at referral hospitals received tubal ligation or were referred elsewhere for the procedure, as were 14% of clients at CIES facilities. No clients received or were referred to receive a vasectomy.

Of note is that 30% of the clients interviewed left their consultation reporting having not received or been referred for any method at all. It is not clear why this is the case. Anecdotally, it appears that there were cases in which the client needed to wait for pregnancy test results, the client wanted to discuss the options with her partner, the client was pregnant at the time of the consultation and would return postpartum for the method, and the client came to have an IUD removed and did not choose another method. However, there were also cases where no reason was given.

Table 43. Percentage of clients who received particular FP methods or were referred elsewhere to receive them

Method	Health centers (n=85)	Network hospitals (n=23)	Referral hospitals (n=47)	Subtotal (n=155)	PROSALUD (n=24)	CIES (n=22)	Total (n=201)
Male condom	9.4	4.3	2.1	6.5	83.0	0.0	6.0
Female condom	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pill	15.3	26.1	2.1	12.9	4.2	4.5	10.9
Depo-Provera	45.9	47.8	42.6	45.2	12.5	18.2	38.3
Combined injectable	0.0	0.0	2.1	0.6	0.0	9.1	1.5
IUD	1.2	4.3	17.0	6.5	20.8	18.2	9.5
Vasectomy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tubal ligation	0.0	0.0	6.4	1.9	0.0	13.6	3.0
LAM	1.2	0.0	0.0	0.6	0.0	0.0	0.5
Rhythm method[1]	1.2	0.0	0.0	0.6	0.0	0.0	0.5
Standard-days method	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	4.5	0.5
No method	27.1	17.4	27.7	25.8	54.2	31.8	29.9

Source: FP client exit interview

[1] One client received both male condoms and instructions on the rhythm method. For this reason, the total sums to slightly more than 100%.

[41] Of the clients reported here as receiving a method or a referral elsewhere for a method, the vast majority actually did receive a method on the day of the survey. Only five received a referral elsewhere, two for the IUD and three for tubal ligation.

Table 44 summarizes clients' reports on discussion of key issues related to FP method use. Eighty-two percent of the clients interviewed were told how to use the method they were given or referred for, and 75% were told what to do if they had a problem with the method. Only 34% of clients reported that their provider discussed problems they could have with their partner related to method use; these proportions were lowest for clients at the referral hospitals and NGO sites. While 94% of clients reported that they were told when to return for follow-up, only 38% reported that their provider discussed problems they could have in returning to the facility for follow-up or resupply; again, these proportions were lowest at the referral hospitals and NGO sites. Noteworthy is that there were no major differences between new and continuing clients in regard to these indicators.

Table 44. Percentage of clients reporting discussions with the provider of key issues related to FP method use

Issue	Health centers (n=62)	Network hospitals (n=19)	Referral hospitals (n=34)	Subtotal (n=115)	PROSALUD (n=11)	CIES (n=15)	Total (n=141)[1]
How to use method	87.1	78.9	79.4	83.5	54.5	86.7	81.6
What to do if client has problem with method	88.7	68.4	64.7	78.3	45.5	66.7	74.5
When client should return for follow-up	96.8	100.0	91.2	95.7	81.8	93.3	94.3
Whether method protects against STI/HIV/AIDS	29.0	31.6	32.4	30.4	27.3	20.0	29.1
Problems client could have in returning to facility for follow-up or resupply	50.0	52.6	20.6	41.7	27.3	13.3	37.6
Problems client could have with partner related to use of method	46.8	36.8	14.7	35.7	27.3	26.7	34.0

Source: FP client exit interview

[1] Total n is 141 rather than 201 because denominator includes only those clients that received or were referred elsewhere for a method.

Table 45 (page 46) summarizes clients' reports on the counseling they received during the current or previous antenatal care visits. Of note is that overall, 91% of pregnant clients were told when to return to the facility, and 81% were told their approximate due date. However, only 60% were given information and/or advice about diet and nutrition, 49% heard about the importance of vaccinating the baby, 48% discussed where they would give birth, 41% were given information about breastfeeding, and 31% were given information on HIV/AIDS.

Provider Knowledge

Providers' knowledge related to FP, maternal health, and PAC was measured in the provider questionnaire, largely through use of questions without probes that asked about information contained in the Bolivian norms, guidelines, and protocols.

Table 45. Percentage of clients receiving key elements of counseling during this and/or previous antenatal care visit

Key information	Health centers (n=117)	Network hospitals (n=57)	Referral hospitals (n=79)	Subtotal (n=253)	PROSALUD (n=44)	CIES (n=25)	Total (n=322)
Approximate due date	81.2	82.5	74.7	79.4	86.4	92.0	81.4
Normal changes/small discomforts to expect during pregnancy	67.5	66.7	62.0	65.6	77.3	72.0	67.7
Information/advice about diet and nutrition[1]	56.4	50.9	58.2	55.7	75.0	72.0	59.6
Information about breastfeeding	42.7	40.4	30.4	38.3	50.0	48.0	40.7
Place of birth[1]	54.7	45.6	34.2	46.2	52.3	52.0	47.5
Benefits of birth at a health facility[1]	52.1	42.1	25.3	41.5	45.5	32.0	41.3
Participation of partner in pregnancy care	50.4	47.4	35.4	45.1	52.3	64.0	47.5
Participation of partner in delivery[1]	40.2	28.1	21.5	31.6	43.2	36.0	33.5
Information on STIs	47.0	38.6	35.4	41.5	45.5	56.0	43.2
Information on HIV/AIDS	29.9	26.3	31.6	29.6	31.8	44.0	31.1
Information on caring for baby[1]	46.2	38.6	34.2	40.7	43.2	40.0	41.0
Information on importance of vaccinating baby[2]	55.6	52.6	39.2	49.8	50.0	36.0	48.8
When to return to the facility	93.2	94.7	84.8	90.9	93.2	92.0	91.3

Source: Antenatal care client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.
[2] Data are missing on this item for two clients, who are retained in the denominator.

Counseling regarding signs of method side effects is a key component of FP counseling. Providers were asked without probes to list the warning signs for each method. As can be seen in Table 46, knowledge of warning signs varied greatly across the methods. Providers most frequently mentioned warning signs such as severe headaches for pill users (73%), intense abdominal pain for IUD users (54%), and heavy vaginal bleeding for injectable users (73%). Other warning signs that may be of equal importance were mentioned less frequently. Nonnegligible proportions of providers also mentioned some warning signs not included in the national norms for a given method. For example, 37% of providers mentioned bleeding as a warning sign for pill users, and 18% of providers mentioned weight gain as a warning sign for injectable users (not shown). There were no clear trends in knowledge by type of provider.

Table 47 presents several other indicators related to FP knowledge. Almost three-fourths (73%) of providers told interviewers that the recommended interval for birth spacing was two years, while 17% mentioned three to five years.[42] When asked what function a dual-protection method serves, only 22% of providers interviewed correctly mentioned both pregnancy prevention and STI/HIV/AIDS prevention. Almost 40% said they did not know. Auxiliary nurses appeared least likely to correctly identify the function of dual protection.

[42] The MSD has not yet endorsed the recommendation of a three-to-five-year birth-spacing interval.

Table 46. Percentage of providers mentioning (without probes) specific warning signs related to method use

Warning sign	General doctor (n=199)	Ob/gyn (n=88)	Other specialist (n=9)	Nurse (n=80)	Auxiliary nurse (n=132)	Other (n=15)	Total (n=523)
For pill users							
Severe headache	67.8	69.3	88.9	85.0	75.8	46.7	72.5
Tinnitus	1.0	4.5	11.1	5.0	0.0	0.0	2.1
Chest pain	8.5	15.9	11.1	11.3	4.5	6.7	9.2
Intense abdominal pain	16.1	11.4	11.1	15.0	9.8	6.7	13.2
Intense pain in extremities	9.5	28.4	22.2	13.8	3.0	6.7	11.9
Blurry vision	6.5	8.0	0.0	5.0	9.8	13.3	7.5
For IUD users							
Intense abdominal pain	57.8	60.2	66.7	60.0	42.4	40.0	54.3
Missed period	11.6	19.3	11.1	15.0	7.6	20.0	12.6
Pain during intercourse	5.0	8.0	11.1	7.5	6.1	13.3	6.5
Lower abdominal pain with fever	18.6	40.9	33.3	18.8	10.6	13.3	20.5
IUD strings longer, absent, or shorter	11.6	11.4	33.3	20.0	8.3	13.3	12.4
Abnormal vaginal discharge	35.2	38.6	55.6	26.3	9.1	33.3	28.1
For Depo-Provera users[1]							
Heavy vaginal bleeding	71.9	79.5	55.6	71.3	74.2	73.3	73.4
Severe headaches	53.3	52.3	55.6	63.8	57.6	40.0	55.4
Intense abdominal pain	16.1	15.9	33.3	18.8	9.1	13.3	14.9
For tubal ligation users[2]							
Moderate or intense abdominal pain	43.7	55.7	33.3	30.0	20.5	26.7	37.1
New tumor or increase in size of existing tumor in operation area	11.1	12.5	11.1	10.0	2.3	13.3	9.0
Fever above 38°C	21.6	34.1	11.1	21.3	9.8	20.0	20.5
Nausea or dizziness	1.5	4.5	0.0	1.3	0.8	0.0	1.7
Hematoma or pus in operation area	20.6	30.7	44.4	11.3	7.6	20.0	18.0
Don't know	25.1	5.7	33.3	40.0	58.3	46.7	33.3

Source: Provider interview
[1] Data are missing on this item for two providers, who are retained in the denominator.
[2] Data are missing on this item for five providers, who are retained in the denominator.

Table 47. Percentage of providers with knowledge on birth spacing and dual protection

Knowledge	General doctor	Ob/gyn	Other specialist	Nurse	Auxiliary nurse	Other	Total
Recommended birth spacing interval[1]	**(n=195)**	**(n=88)**	**(n=9)**	**(n=80)**	**(n=125)**	**(n=15)**	**(n=512)**
2 yrs.	78.5	69.3	66.7	73.8	69.6	46.7	72.9
3–5 yrs.	15.9	17.0	22.2	13.8	20.8	26.7	17.4
Other interval	5.1	12.5	11.1	12.5	8.0	20.0	8.8
Function of dual protection[2]	**(n=199)**	**(n=88)**	**(n=9)**	**(n=80)**	**(n=132)**	**(n=15)**	**(n=523)**
Prevention of pregnancy and STI/HIV/AIDS	24.6	33.0	22.2	25.0	9.1	26.7	22.2
Pregnancy prevention	37.7	51.1	33.3	37.5	22.7	40.0	36.1
Prevention of STI/HIV/AIDS	39.7	59.1	22.2	47.5	38.6	33.3	43.4
Other response	7.0	9.1	0.0	5.0	2.3	0.0	5.5
Don't know	42.7	17.0	66.7	37.5	47.0	46.7	39.2

Source: Provider interview
[1] Data are missing on this item for three providers, who are retained in the denominator.
[2] Data are missing on this item for five providers, who are retained in the denominator.

In Table 48, one can see that as was the case for knowledge about warning signs for FP methods, providers' knowledge about warning signs related to pregnancy and delivery varied. For pregnancy, warning signs such as vaginal bleeding (81%), edema (71%), and hypertension (59%) were mentioned very frequently. Other signs, such as blurred vision (10%), were mentioned much less frequently. The most frequently mentioned labor and delivery warning signs were heavy vaginal bleeding (60%) and convulsions (37%), whereas the least frequently mentioned problem was fever/chills (5%). There were no clear trends by provider type.

Table 48. Percentage of providers mentioning (without probes) specific warning signs related to pregnancy and delivery

Warning sign	General doctor (n=198)	Ob/gyn (n=81)	Other specialist (n=7)	Nurse (n=58)	Auxiliary nurse (n=101)	Other (n=7)	Total (n=452)
During pregnancy[1]							
Previous bad obstetric history	9.6	4.9	28.6	6.9	6.9	0.0	8.0
Hypertension	62.6	59.3	57.1	48.3	59.4	42.9	59.1
Edema	69.2	69.1	71.4	79.3	69.3	100.0	71.0
Moderate/severe anemia	8.6	6.2	14.3	12.1	14.9	0.0	10.0
Absence of fetal movement	10.6	25.9	14.3	15.5	5.0	28.6	13.1
Vaginal bleeding	79.3	86.4	57.1	81.0	81.2	85.7	81.0
Premature rupture of membranes	23.2	40.7	0.0	17.2	5.0	28.6	21.2
Severe headache	43.9	40.7	42.9	63.8	34.7	42.9	43.8
Blurred vision	12.1	13.6	0.0	5.2	4.0	28.6	9.7
Acute abdominal pain	17.7	30.9	0.0	10.3	1.0	28.6	15.3
Accelerated fetal movement	2.0	1.2	0.0	0.0	1.0	0.0	1.3
Fever	20.2	18.5	0.0	12.1	10.9	14.3	16.4
Uncontrollable vomiting	10.1	14.8	14.3	20.7	16.8	0.0	13.7
Nausea/dizziness	8.6	8.6	14.3	5.2	8.9	0.0	8.2
Convulsions	17.2	14.8	28.6	8.6	7.9	28.6	13.9
During labor and delivery[1]							
Heavy vaginal bleeding	57.6	72.8	42.9	55.2	60.4	42.9	60.2
Convulsions	38.4	40.7	28.6	46.6	26.7	28.6	36.9
Fever/chills/discharge	6.1	3.7	0.0	8.6	4.0	0.0	5.3
Labor longer than 12 hours	30.8	29.6	42.9	36.2	20.8	42.9	29.4
Malpresentation of fetus	28.8	24.7	57.1	34.5	39.6	14.3	31.4
Increase in fetal heartbeat to over 200 bpm	28.3	48.1	71.4	20.7	6.9	57.1	27.2
Decrease in fetal heartbeat to under 120 bpm	31.3	46.9	71.4	19.0	8.9	71.4	28.8
Presence of placenta previa	13.1	7.4	14.3	8.6	23.8	14.3	13.9

Source: Provider interview

[1] Data are missing on this item for one provider, who is retained in the denominator.

As can be seen in Table 49, for the postpartum period, heavy vaginal bleeding (91%) and fever/chills (45%) were the maternal warning signs mentioned most frequently, while dyspnea (shortness of breath) and coughing with expectoration were mentioned least frequently (0.2%). The warning signs mentioned most frequently for newborns were cyanosis (43%) and difficulty breathing (39%). However, no one particular warning sign was mentioned by more than 50% of providers.

Table 49. Percentage of providers mentioning (without probes) specific postdelivery warning signs in mothers and newborns

Warning sign	General doctor (n=198)	Ob/gyn (n=81)	Other specialist (n=7)	Nurse (n=58)	Auxiliary nurse (n=101)	Other (n=7)	Total (n=452)
Mother[1]							
Heavy bleeding	88.9	95.1	85.7	89.7	90.1	100.0	90.5
Convulsions	26.3	21.0	28.6	24.1	24.8	14.3	24.6
Fever/chills	48.0	42.0	57.1	44.8	38.6	71.4	44.9
Foul-smelling discharge	32.8	28.4	28.6	31.0	15.8	42.9	28.1
Severe lower abdominal pain	7.6	14.8	14.3	5.2	4.0	14.3	8.0
Sensitive uterus	5.1	23.5	14.3	6.9	3.0	28.6	8.6
Intense headache	11.1	6.2	14.3	19.0	5.9	14.3	10.2
Dyspnea	0.5	0.0	0.0	0.0	0.0	0.0	0.2
Cough with expectoration	0.5	0.0	0.0	0.0	0.0	0.0	0.2
Newborn[1]							
Not breathing/gasping	26.8	29.6	28.6	17.2	17.8	14.3	23.9
Difficulty breathing	38.4	43.2	57.1	48.3	31.7	42.9	39.4
Hypothermia	24.2	24.7	14.3	29.3	24.8	0.0	24.6
Cyanosis	43.9	33.3	57.1	53.4	40.6	28.6	42.5
Convulsions	6.6	4.9	0.0	6.9	1.0	14.3	5.1
Lethargy	22.7	13.6	14.3	19.0	6.9	14.3	16.8
Low birth weight	13.1	7.4	14.3	10.3	20.8	14.3	13.5
Low Apgar score[2]	32.8	37.0	14.2	25.9	10.9	25.0	27.9

Source: Provider interview

[1] Data are missing on this item for two providers, who are retained in the denominator.

[2] Though low Apgar score was not one of the response categories on the questionnaire, it is included here because a large proportion of providers mentioned it as a summary of all warning signs.

Client Satisfaction with the Services Received

Tables 50 and 51 (page 50) present several indicators of clients' satisfaction with the services they received.[43] Seventy-seven percent of the FP clients and 67% of the antenatal clients interviewed reported being very satisfied with the services they received. While at the health centers, 82% of FP clients and 74% of antenatal clients felt that the waiting time was reasonable, only 28% of FP clients and 34% of antenatal clients at referral hospitals felt the waiting time was reasonable. This is likely because client flow is lowest at the health centers.

As can also be seen in Tables 50 and 51, 80% of the FP clients and 88% of the antenatal clients interviewed said that the provider's explanations were easy to understand. Nearly the same proportion of FP clients as of antenatal clients said that they felt comfortable asking the provider questions during their consultation (78–79%). Finally, among all paying clients (FP and antenatal), approximately three-quarters felt that what they paid was appropriate.

[43] A challenge in eliciting client satisfaction from exit interviews is the well-known problem of "courtesy bias," whereby clients may be reluctant to express negative opinions of services, especially while still at the service site (Williams, Schutt-Aine, & Cuca, 2000). In this study an unknown proportion of clients likely overstated their satisfaction with the services they received.

Table 50. Percentage of FP clients reporting satisfaction with various services received

Characteristic	Health centers (n=85)	Network hospitals (n=23)	Referral hospitals (n=47)	Subtotal (n=155)	PROSALUD (n=24)	CIES (n=22)	Total (n=201)
% distribution of clients by how satisfied they were with services							
Very	83.5	65.2	66.0	75.5	75.0	90.9	77.1
A little	14.1	34.8	31.9	22.6	25.0	9.1	21.4
Not at all	1.2	0.0	0.0	0.6	0.0	0.0	0.5
Felt waiting time was reasonable	82.4	56.5	27.7	61.9	70.8	77.3	64.7
Thought provider's explanations were easy to understand	76.5	78.3	83.0	78.7	79.2	90.9	80.1
Felt comfortable asking questions[1]	78.8	69.6	76.6	76.8	87.5	86.4	79.1
Among paying clients (%)	**(n=14)**	**(n=5)**	**(n=16)**	**(n=35)**	**(n=22)**	**(n=15)**	**(n=72)**
Thought fee was appropriate	—[2]	—	—	77.1	—	—	73.6

Source: FP client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.
[2] In each case where "—" appears, there are too few facilities for meaningful disaggregation.

Table 51. Percentage of antenatal care clients reporting satisfaction with various services received

Characteristic	Health centers (n=117)	Network hospitals (n=57)	Referral hospitals (n=79)	Subtotal (n=253)	PROSALUD (n=44)	CIES (n=25)	Total (n=322)
% distribution of clients by how satisfied they were with services[1]							
Very	65.0	59.6	58.2	61.7	84.1	92.0	67.1
A little	29.1	40.4	41.8	35.6	13.6	8.0	30.4
Not at all	4.3	0.0	0.0	2.0	0.0	0.0	1.6
Felt waiting time was reasonable[2]	73.5	52.6	34.2	56.5	63.6	52.0	57.1
Thought provider's explanations were easy to understand[1]	87.2	86.0	88.6	87.4	88.6	92.0	87.9
Felt comfortable asking questions[1]	75.2	77.2	74.7	75.5	90.9	84.0	78.3
Among paying clients (%)	**(n=7)**	**(n=3)**	**(n=3)**	**(n=13)**	**(n=41)**	**(n=25)**	**(n=79)**
Thought fee was appropriate[1]	—[3]	—	—	61.5	—	—	74.7

Source: FP client exit interview
[1] Data are missing on this item for one client, who is retained in the denominator.
[2] Data are missing on this item for two clients, who are retained in the denominator.
[3] in each case where "—" appears, there are too few facilities for meaningful disaggregation.

IR 3: Strengthened Environment for RH/FP Service Delivery

The results presented in this final section summarize study findings on environmental factors influencing RH service delivery, which include systems for determining client/community opinion and for using data for decision making; availability of written norms, guidelines, and protocols; and availability of information, education, and communication (IEC) materials.

Systems for Determining Client/Community Opinion and for Using Data for Decision Making

In Table 52, one can see that 81% of the facilities reported analyzing service statistics for use in decision making over the past three months. This proportion was significantly lower at the referral hospitals than at the other facility types (44% versus 79–97%). More than three-quarters of the facilities surveyed reported having a formal mechanism, such as a committee, for using service statistics for decision making.

Table 52. Percentage of facilities using data for decision making and having systems for determining client/community opinion

Measure	Health centers (n=159)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=189)	PROSALUD (n=30)	CIES (n=9)	Total (n=228)
Possess formal mechanism for using service statistics in decision making	71.7	81.0	88.9	73.5	90.0	88.9	76.3
Analyzed service statistics in past three months	78.6	90.5	44.4	78.3	96.7	88.9	81.1
Have been approached by organized groups from the community	70.4	61.9	22.2	67.2	40.0	77.8	64.0
Have system in place to determine client opinion	58.5	66.7	77.8	60.3	86.7	100.0	65.4

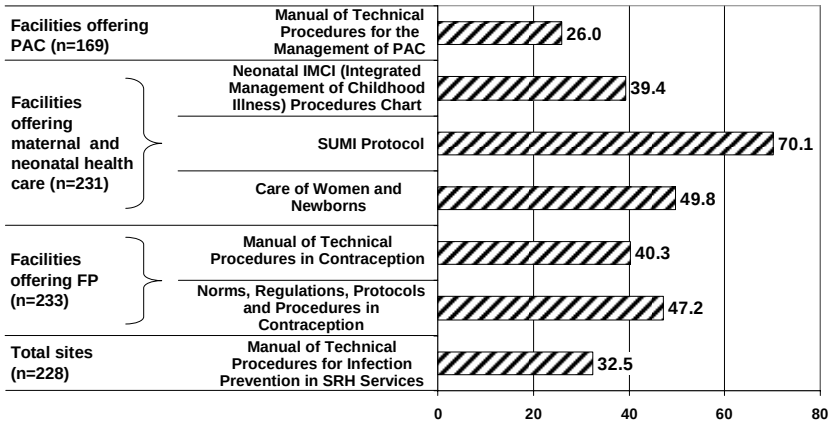
Source: General inventory

Overall, 65% of the facilities surveyed reported having a system in place to determine client opinion. This proportion was lowest at the health centers (59%), and highest at the NGO facilities (87% of the PROSALUD sites and 100% of the CIES sites). In total, 64% of facilities reported that community groups had approached the facility to participate in health-related topics, as did 70% of the health centers and 62% of the network hospitals, but only 22% of referral hospitals. Among the NGO sites, 78% of CIES facilities reported that community groups had approached the facility to participate in health-related topics, as did 40% of PROSALUD facilities.

Availability of Written Norms, Guidelines, and Protocols

Figure 9 and Table 53 (page 52) summarize the availability on the day of the survey of norms, guidelines, and protocols related to the reproductive health services of interest in the baseline study. The proportions given are for those facilities at which the relevant documents were actually *observed* by the data collectors.

Figure 9. Percentage of facilities where various written norms, guidelines, and protocols were available, by type of facility



As can be seen in Figure 9, the norms, guidelines, and protocols least commonly observed at the facilities surveyed were those related to PAC (26% overall). Also infrequently observed was the manual related to infection prevention (33% overall).

The most commonly observed document was the SUMI protocol, seen at approximately 70% of facilities. The guidelines on maternal and neonatal health were observed at about one-half of the facilities surveyed. In relation to FP, 47% of the facilities surveyed had the norms and protocols on contraception, and 40% had the manual on technical procedures in contraception.[44] As is apparent in Table 53, the referral hospitals and CIES facilities were the most likely facility types to have these FP documents available.

Table 53. Percentage of facilities with written norms, guidelines, and protocols available the day of the survey, by type of facility

Measure	Health centers (n=159)	Network hospitals (n=21)	Referral hospitals (n=9)	Subtotal (n=189)	PROSALUD (n=30)	CIES (n=9)	Total (n=228)
Manual of Technical Procedures for Infection Prevention in Sexual and Reproductive Health Services	30.2	28.6	44.4	30.7	40.0	44.4	32.5
Among facilities offering FP services (%)	**(n=165)**	**(n=21)**	**(n=9)**	**(n=195)**	**(n=29)**	**(n=9)**	**(n=233)**
Norms, Regulations, Protocols, and Procedures in Contraception[1]	43.0	47.6	88.9	45.6	44.8	88.9	47.2
Manual of Technical Procedures in Contraception	32.7	38.1	88.9	35.9	55.2	88.9	40.3
Among facilities offering maternal and neonatal health services (%)	**(n=163)**	**(n=21)**	**(n=9)**	**(n=193)**	**(n=30)**	**(n=8)**	**(n=231)**
Care of Women and Newborns[2]	54.0	42.9	55.6	52.8	36.7	25.0	49.8
SUMI Protocol[1]	85.3	76.2	77.8	83.9	0.0	0.0	70.1
Neonatal IMCI Procedures Chart[1]	45.4	42.9	55.6	45.6	6.7	12.5	39.4
Among facilities offering PAC services (%)	**(n=115)**	**(n=21)**	**(n=9)**	**(n=145)**	**(n=19)**	**(n=5)**	**(n=169)**
Manual of Technical Procedures for the Management of PAC	22.6	47.6	33.3	26.9	15.8	40.0	26.0

Sources: General inventory, FP inventory, maternal and neonatal health inventory, and PAC inventory

[1] Data are missing on this item for one facility, which is retained in the denominator.

[2] Data are missing on this item for two facilities, which are retained in the denominator.

[44] The SUMI protocol summarizes key points on the provision of all procedures covered under this insurance. The MSD norms and manuals provide detailed standards for each of the services.

IEC Materials

Table 54 summarizes the availability of IEC materials on the day of the survey, confirmed through observation. Shown in the table are both materials for providers to use as teaching aids during client counseling and brochures/handouts for clients to take home. The most commonly available teaching aids, available at almost all facilities (97% overall), were displays and/or flipcharts on contraceptive methods. The least commonly available teaching aids were penis models for condom demonstrations (29% overall, though these aids were available more frequently at referral hospitals and CIES sites than at other facilities), and teaching aids on postpartum warning signs that clients should look for after they have been discharged from the facility (27% overall).

Brochures/handouts on FP were more frequently available than were informational materials on maternal health. For example, whereas 49% of all facilities had materials on FP, just 24% of facilities had brochures/handouts on breastfeeding, 16% on nutrition and warning signs during pregnancy, and 8% on warning signs during labor. In general, the NGO sites were more likely than the public-sector sites to have brochures/handouts.

Table 55 (page 54) presents provider responses on their individual possession of teaching aids for use in client counseling and on the training they received in the use of these materials. A full 95% of FP providers reported having materials for use during FP counseling; of these, 45% reported having been trained in the use of these materials. By comparison, a much smaller proportion of PAC providers said they had materials for use during postprocedure counseling (36%), and a similar proportion of them had been trained in their use (45%). Finally, 64% of maternal health providers reported having materials related to maternal health for use during their consultations, but only 32% of providers with these materials reported being trained in their use.

Table 54. Percentage of facilities with IEC materials available

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Among facilities offering FP services (%)	**(n=165)**	**(n=21)**	**(n=9)**	**(n=195)**	**(n=29)**	**(n=9)**	**(n=233)**
Displays and/or flipcharts on contraceptive methods[1]	97.0	90.5	100.0	96.4	100.0	100.0	97.0
Penis models[2]	21.2	42.9	77.8	26.2	24.1	100.0	28.8
Brochures/handouts on FP/contraception[2]	41.2	38.1	55.6	41.5	86.2	88.9	48.9
Among facilities offering maternal and neonatal health services (%)	**(n=163)**	**(n=21)**	**(n=9)**	**(n=193)**	**(n=30)**	**(n=8)**	**(n=231)**
Teaching aids on warning signs during pregnancy[3]	68.1	47.6	55.6	65.3	56.7	100.0	65.4
Teaching aids on warning signs to look for after being discharged from facility[2]	25.2	33.3	33.3	26.4	26.7	37.5	26.8
Teaching aids on breastfeeding[3]	72.4	61.9	66.7	71.0	63.3	87.5	70.6
Brochures/handouts on nutrition[4]	9.8	14.3	11.1	10.4	46.7	25.0	15.6
Brochures/handouts on warning signs during pregnancy[1]	8.0	19.0	11.1	9.3	50.0	37.5	15.6
Brochures/handouts on warning signs during labor/delivery[1]	6.7	14.3	11.1	7.8	6.7	25.0	8.2
Brochures/handouts on breastfeeding[1]	14.1	19.0	11.1	14.5	80.0	50.0	24.2

Sources: FP inventory, and maternal and neonatal health inventory

[1] Data are missing on this item for three facilities, which are retained in the denominator.

[2] Data are missing on this item for one facility, which is retained in the denominator.

[3] Data are missing on this item for two facilities, which are retained in the denominator.

[4] Data are missing on this item for four facilities, which are retained in the denominator.

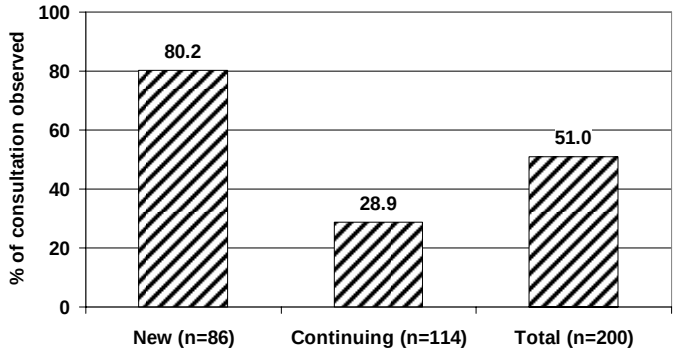
Table 55. Percentage of providers in possession of teaching aids and proportion trained in their use

Measure	Health centers	Network hospitals	Referral hospitals	Subtotal	PROSALUD	CIES	Total
Among providers offering FP services (%)	**(n=311)**	**(n=58)**	**(n=45)**	**(n=414)**	**(n=82)**	**(n=27)**	**(n=523)**
Possess FP teaching aids[1]	96.5	93.1	91.1	95.4	93.9	92.6	95.0
Among those with FP teaching aids (%)	**(n=300)**	**(n=54)**	**(n=41)**	**(n=395)**	**(n=77)**	**(n=25)**	**(n=497)**
Trained in use of these materials[2]	35.7	40.7	63.4	39.2	64.9	64.0	44.5
Among providers offering PAC services (%)	**(n=140)**	**(n=35)**	**(n=27)**	**(n=202)**	**(n=23)**	**(n=6)**	**(n=231)**
Possess PAC teaching aids [2]	33.6	25.7	51.9	34.7	60.9	0.0	36.4
Among those with PAC teaching aids (%)	**(n=47)**	**(n=9)**	**(n=14)**	**(n=70)**	**(n=14)**	**(n=0)**	***(n=84)***
Trained in use of these materials[2]	27.7	33.3	78.6	38.6	78.6	NA	45.2
Among providers offering maternal health services (%)	**(n=290)**	**(n=53)**	**(n=33)**	**(n=376)**	**(n=65)**	**(n=11)**	**(n=452)**
Possess maternal health teaching aids[3]	63.1	56.6	57.6	61.7	76.9	81.8	64.4
Among those with maternal health teaching aids (%)	**(n=183)**	**(n=30)**	**(n=19)**	**(n=232)**	**(n=50)**	**(n=9)**	**(n=291)**
Trained in use of these materials[4]	23.5	33.3	57.9	27.6	52.0	33.3	32.0

Source: Provider interview
[1] Data are missing on this item for four providers, who are retained in the denominator.
[2] Data are missing on this item for one provider, who is retained in the denominator.
[3] Data are missing on this item for three providers, who are retained in the denominator.
[4] Data are missing on this item for two providers, who are retained in the denominator.

Finally, Figure 10 shows data derived from the observations of FP consultations. As can be seen in the figure, use of a visual aid or model depended most on whether the client was new or continuing. Visual aids or models were used in 80% of consultations with new clients and in 29% of consultations with continuing clients.

Figure 10. Percentage of observed FP provider-client consultations in which provider used visual aids or models, by type of client



Conclusions

Summary of Key Findings

IR1: Increased Access to Quality RH/FP Services

Availability of services and key infrastructure, equipment, and supplies

The vast majority of facilities surveyed offer contraceptive methods. However, the study revealed significant gaps in the supply of short- and long-acting methods (male condoms, the pill, injectables, and IUDs), both on the day of the survey and in the six months preceding the survey.

The availability of long-acting and permanent methods varies. For example, interval IUD insertions were reported offered at 81% of facilities surveyed, while postpartum IUD insertions were reported offered at 62%, and transcesarean and postabortion IUD insertions were offered much less frequently. There was a wide range in the availability of tubal ligation, depending on the level of the site. Fifteen percent of health centers offered the procedure, compared with 62% of network hospitals and 100% of referral hospitals. Fewer than one-half of the facilities offering tubal ligation reported offering tubal ligation via minilap. A very small proportion of facilities reported providing vasectomy services.

In this study, as a proxy to integration of FP into maternal health services, we examined antenatal client exposure to FP messages. Only one-third of the antenatal care clients interviewed reported hearing or seeing a message about FP or contraceptive methods at the facility on the day of their visit. Of these, the greatest proportion reported having seen a FP poster, followed by the proportions having heard about FP during a health talk and having discussed FP during the antenatal consultation.

The data revealed important limitations in the provision of EmOC services. Nine out of 10 health centers surveyed, and virtually all of the NGO sites, did not meet the parameters necessary to qualify as either basic or comprehensive EmOC facilities according to international and MSD standards. Almost one-half of network hospitals fit into neither category, and the referral hospitals were split largely between comprehensive and "comprehensive minus 1." Overall, the gaps were largely the result of not having performed the procedures of assisted delivery, manual extraction of the placenta, administration of parenteral anticonvulsants, and removal of retained products (through D&C and/or MVA) in the past three months.

In relation to PAC, the health centers and network hospitals surveyed were more likely to offer D&C than they were to offer MVA services, while these likelihoods were flipped at the NGO sites. Neither procedure was available at some of the health centers and PROSALUD sites that reported offering PAC.

Availability of infection prevention systems

All of the referral hospitals, and more than one-half of the network hospitals and PROSALUD sites surveyed, reported having an infection prevention committee in place. Equipment and supplies related to infection prevention were most frequently available at the referral hospitals. The majority of sites had at least one puncture-resistant container for sharps, as well as trash containers with covers for solid waste, though some facility types were deficient in this regard. Considerably higher proportions of sites possessed dry heat sterilizers than autoclaves. Gaps in sterilization equipment and supplies were most apparent at the health centers.

Lack of compliance with infection prevention standards was seen during the observations of FP consultations. The most frequently observed deficits in infection prevention procedures were related to handwashing practices.

Availability of private and confidential services

More than one in three FP consultations observed lacked auditory and visual privacy. Approximately two-thirds of FP and antenatal care clients felt that the information they shared with the provider would be kept private and confidential.

Restrictive eligibility criteria

Almost half of providers reported that they would offer the pill and injectables only to clients who had a particular minimum number of children; this proportion was almost one-third for vasectomy and tubal ligation. Most surprising was that though the Bolivia national norms for FP have no requirement for partner consent for any method, more than half of providers reported soliciting partner consent before offering the pill, the IUD, injectables, vasectomy, and tubal ligation. Almost half of providers reported that they solicit partner consent before offering condoms.

Male participation in sexual and reproductive health services

Though most facilities reported offering male RH services, a very small proportion reported providing vasectomy services

Although a partner's presence during the consultation was uncommon in general among the FP and antenatal care clients interviewed, it was more common for the antenatal care clients. Fewer than one-half of the antenatal care clients interviewed reported that the provider discussed partner participation in pregnancy care, and even fewer reported discussing partner participation during delivery. Wide variation was seen between facility types in policies on partner participation during delivery, with the primary-level facilities being most likely to allow it and the referral hospitals and CIES sites being least likely to allow it.

Community outreach

Almost all of the health centers and network hospitals surveyed reported that their providers visit communities on a regular basis to deliver health services. (NGO providers visit communities much less frequently, and referral hospital providers do not do so at all.) FP counseling is an almost universal component of these visits, as are immunization, antenatal care consultations, and postpartum care. Provision of short-acting FP methods and referrals for long-acting and permanent methods were reported somewhat less frequently as a component of community visits, but were still mentioned by more than one-half of the sites surveyed. Therefore, it does appear that many clients who are not availing themselves of services at the facilities may be receiving services during community visits.

IR2: Improved Performance of Service-Delivery Providers

Supervision systems and QI tools

Providers surveyed at the health centers were less likely than providers at the higher-level facilities to report having an on-site supervisor; however, health center providers also reported more frequent supervision by external supervisors. The proportion of providers who reported receiving performance evaluations was higher at the NGO facilities than at the public-sector facilities. Very few providers were able to show the interviewer their job description, and fewer than one-third had received recognition for their work in the past three months.

Only roughly one-third of facilities surveyed had a manual of staff functions available for observation on the day of the survey. Large proportions of the NGO sites reported having implemented COPE® tools, while much smaller proportions of public-sector sites had done so. The referral and network hospitals were more likely to have implemented facilitative supervision than to have used COPE®.

Provider training and knowledge

Across all of the services of interest, ob/gyns were more likely to have received training in the past three years than were general doctors, nurses, or auxiliary nurses. Only around one-third of the PAC and maternal health service providers had received some training in the delivery of these services in the past three years. Only 15% of providers had received training in the past three years in emergency obstetric and neonatal care.

A training gap exists in the delivery of long-acting and permanent FP methods, in that significant proportions of providers have not received training in the methods in the past three years but do offer them. This was particularly salient for interval and postpartum IUD provision. Moreover, smaller but still noteworthy proportions of providers (particularly of ob/gyns) reported being trained recently in methods such as postpartum and transcesarean IUD, NSV, and interval minilap, but *not* currently offering them, signaling potential problems with the implementation of skills learned in training. This was reinforced in data showing that providers were less likely to report being able to implement the knowledge they acquired in surgical FP methods than in other FP topics.

Provider knowledge on FP and obstetric warning signs varied greatly. Certain warning signs were mentioned very frequently, while others that may be of equal importance were mentioned much less frequently. Fewer than one in five providers accurately described the function of a dual-protection method as preventing pregnancy and STI/HIV/AIDS, and more than one in three said that they did not know what function a dual-protection method serves. Also of note was that even though there is not yet a formal recommendation by the MSD, one-fifth of providers interviewed named three to five years as the recommended interval for birth spacing.

Counseling

On average, fewer than three contraceptive methods were discussed with clients during their FP consultations, though for new clients this number was higher (3.6). The method most frequently discussed and accepted by clients was Depo-Provera, followed by the IUD and the pill. Vasectomy and tubal ligation were discussed by only 3% and 12% of clients, respectively, despite their desire for limiting births articulated during the exit interviews. Almost one-third of clients left their consultations without having received or been referred any contraceptive method at all.

The elements of FP counseling least frequently mentioned during consultations were discussions of barriers to returning for follow-up and/or resupply and the partner's opposition to method use. Most of the key elements of antenatal care counseling, except being told when to return to the facility and the baby's approximate due date, were reported inconsistently.

Client satisfaction

Roughly three-quarters of the FP clients and two-thirds of the antenatal care clients interviewed reported being very satisfied with the services they received. Approximately four out of five of the clients interviewed reported feeling that the provider's explanations were easy to understand and felt comfortable asking questions. Waiting time was felt to be reasonable by large proportions of clients at the health centers, but unreasonable by large proportions of clients at the hospitals.

IR3: Strengthened Environment for RH/FP Service Delivery

Written norms, guidelines, and protocols and IEC materials

While almost three-fourths of facilities had the SUMI protocol available on the day of the survey, only about one-half had FP manuals and protocols, and a similar proportion had the maternal and neonatal care manual. The least frequently observed norms, guidelines, and protocols were those related to PAC and infection prevention. Under half of facilities reported offering refresher training to their staff on standards, norms, guidelines, and protocols in FP, maternal health, and PAC.

Teaching aids on contraceptive methods were observed at almost all of the facilities surveyed. Teaching aids on maternal health topics were generally observed much less frequently, though 71% of facilities did have teaching aids related to breastfeeding. Similarly, brochures and/or pamphlets on FP were observed at almost one-half of facilities, while brochures related to maternal health topics were markedly less frequently available. Similar trends were seen in provider reports of the IEC materials they had available for use during counseling: Higher proportions of providers reported having IEC materials in FP services than in maternal health and PAC services.

Use of the Baseline Data for Decision Making

The data collected during the baseline survey have dual functions. The ultimate function is for comparison with endline data to measure the extent to which ACQUIRE program activities in Bolivia have affected the availability and quality of services at the facilities it supports. The second function is to inform programming and planning of technical assistance for the period 2005–2008.

To this latter end, selected findings from the baseline survey have already been used in a performance needs assessment (PNA) among the partners participating in USAID's health strategy. A major result of this process was the joint development of a plan of action.

The key findings from the baseline study will also be used to:

- Describe the current status of RH services in Bolivia
- Adjust ACQUIRE Bolivia's institutional strategy
- Guide ACQUIRE Bolivia's annual work planning to achieve the objectives and results of the project
- Guide the planning and prioritization of activities in each of the technical areas for which the project is responsible: family planning, maternal health, and PAC

The current baseline report will be disseminated widely in Bolivia to program partners, the MSD, and USAID/Bolivia for their planning purposes and as a reference document.

References

Aday, LA. 1996. *Designing and conducting health surveys: a comprehensive guide.* San Francisco: Jossey-Bass Publishers.

Gutiérrez Sardán, M., Ochoa, L.H., and Castillo Guerra, W. 2004. *Encuesta nacional de demografía y salud—ENDSA 2003.* La Paz: Instituto Nacional de Estadística (INE), and Calverton, MD, USA: ORC Macro/MEASURE *DHS+*.

Instituto Nacional de Estadística (INE). 2001. *Bolivia: Mapa de pobreza 2001*. La Paz: INE.

Turner, A., et al. 2001. *Sampling manual for facility surveys for population, maternal health, child health and STD programs in developing countries*. MEASURE Evaluation Manual Series, No. 3. University of North Carolina, Chapel Hill: Carolina Population Center.

UNICEF, WHO, and UNFPA. 1997. *Guidelines for monitoring the availability and use of obstetric services.* Geneva: WHO.

United Nations. 1994. *Report of the International Conference on Population and Development*, Document A/Conf. 171/13, New York.

Williams, T., Schutt-Aine, J., and Cuca, Y. 2000. Measuring family planning service quality through client satisfaction exit interviews. *International Family Planning Perspectives* 26(2):63–71.