

**Evaluation of the Institutionalization of
Family Planning/Reproductive Health Inservice
Training in Bolivia**

JHP-17

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TABLE OF CONTENTS

| | |
|--|------------|
| ABBREVIATIONS AND ACRONYMS..... | ii |
| EXECUTIVE SUMMARY..... | iii |
| INTRODUCTION | 1 |
| BACKGROUND..... | 1 |
| METHODOLOGY..... | 2 |
| Objectives | 2 |
| Field Data Collection..... | 3 |
| Sampling Frame..... | 4 |
| Data Collection Instruments | 8 |
| FINDINGS..... | 11 |
| DISCUSSION AND RECOMMENDATIONS..... | 22 |
| CONCLUSION..... | 26 |
| REFERENCES | 27 |
| APPENDICES | |
| A. Background on JHPIEGO's Work in Bolivia | |
| B. Timeline for the Evaluation | |
| C. Tracking Sheet | |
| D. Distribution of Observations by Department, Cadre, and Skill Area along with Method of Skill Assessment (Client, Simulation with Model) | |
| E. Detailed Facility List: Supplies and Equipment Including Infection Prevention | |

ABBREVIATIONS AND ACRONYMS

| | |
|-----------|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| DFID | Department for International Development |
| FP | Family planning |
| HIV | Human immunodeficiency virus |
| IP | Infection prevention |
| IPC | Interpersonal communication |
| IUD | Intrauterine device |
| MOH | Ministry of Health |
| NGO | Nongovernmental organization |
| NTC | National training center |
| OSCE | Objective Structured Clinical Examination |
| Pap smear | Papanicolaou smear |
| RH | Reproductive health |
| SNIS | Sistema Nacional de Información de Salud |
| STI | Sexually transmitted infection |
| UMSA | Universidad Mayor de San Andrés |

EXECUTIVE SUMMARY

Beginning in 1992, JHPIEGO worked in close collaboration with the Bolivia Ministry of Health (MOH) to develop an integrated family planning/reproductive health (FP/RH) training network throughout the country. The focus of the assistance was the establishment of nine national training centers (NTCs) for inservice training conducted by physician-nurse teams and located at departmental¹ maternity hospitals in departmental capitals. By 2000, the government of Bolivia and other stakeholders had shifted the training emphasis to preservice education efforts. JHPIEGO preservice assistance focused on improving FP/RH education in three medical and nine nursing schools, and the role of the training teams at the NTCs moved toward supporting the preservice education efforts. JHPIEGO and the MOH implemented a Level 3 training evaluation between 2000 and 2001 to determine the retention rate of trained providers in the MOH system, to assess the impact of training on job performance and the institutionalization of the FP/RH inservice training system, and to determine needs for the preservice education initiative.

A mixed method design was used for the evaluation. Finding all those who fit the sampling frame—defined as those providers trained at any 1 of the 9 NTCs in the 5 years prior to the evaluation—was an extensive process. The final number (486 providers [physicians, nurses, auxiliary nurses] out of 2,976 providers who had received training) was arrived at after focusing on 4 study departments and the availability of such providers at the clinic site on the day of the evaluation visit.

In total, 30 NTC trainers were selected to conduct data collection for the evaluation because of their institutional memory and understanding of FP/RH service delivery. Data collection included an assessment of provider knowledge and direct observation of FP/RH skills covered during training (FP counseling, physical examination, IUD insertion, antenatal care), supported by information on training and work experience. A facility assessment was conducted to evaluate the influence of environmental and contextual factors on the delivery of RH services. Document review, MOH collaboration, and key informant interviews provided information for determining the institutionalization of the inservice training system and the linkages with preservice education efforts.

The findings showed that inservice FP/RH training has been institutionalized across the country through the nine NTCs. Physician-nurse training teams, the majority of whom were trained in the early 1990s, were still in place at the NTCs. Notable was that more than 32% of all providers trained, some as long as 6 years prior to this evaluation, were still working in the MOH system. In addition, as part of the institutionalization, the evaluation built capacity among the 30 NTC trainers who served as data collectors and also participated in the development of standardized evaluation forms.

Of the 563 providers identified from the MOH central and regional lists for the 4 regions covered in the evaluation, 323 were available at the clinic site on the day of the team's visit. An additional 163 providers who had been trained at one of the NTCs and who had continued working in the MOH system were identified during the regional checking, making a total sample

¹ In this report, the term “department” is synonymous with “geographic region.”

of 486: 41% physicians, 26% nurses, and 33% auxiliary nurses. The majority (57%) were working in health centers, 24% in large hospitals and 16% at health posts.

Almost three-quarters of the physicians (72%) said they had been trained more than 2 years before the evaluation, as compared to only 64% of nurses and 53% of auxiliary nurses. More than three-quarters of physicians (77%), 86% of nurses, and 87% of auxiliary nurses believed the training prepared them for their work; most said they used what they had learned in training in their work.

All providers took the knowledge assessment, which covered the areas of appropriate counseling for specific FP methods, method provision for specific FP methods, basic IP norms/standards, and appropriate administration of RH services. Overall, knowledge scores were high, with 64% of the providers (physicians, nurses, and auxiliary nurses) scoring 70% or above (the passing standard was 70%).

The evaluation was also designed to observe providers in the work setting—in service provision to clients—supported by designed simulations (use of anatomic models, role plays) for the data collection teams to use when clients were not available. There were up to 271 providers observed during service provision, depending on the skill. Providers were assessed in service provision only if they actually used the skill in their work role. Most were assessed on service provision for a new FP user (n=271), with numbers observed ranging from 145 providers for IUD insertion to 86 providers for antenatal followup.

For each FP/RH clinical skill, provider performance was scored according to the percentage correct of the critical steps from each clinical checklist. Interpersonal communication was quite good across the cadres and in all skills. For FP counseling with followup users, 90% of providers were competent in 70% or more of the critical steps. The next best performance of the group was in the antenatal care followup visit (76%), followed by IUD insertion (68%) and physical examination (62%). Physicians had generally good physical examination and IUD insertion skills with regard to completing the critical steps in each of the components. However, other critical steps in the component areas—such as clinical evaluation and antenatal care warning signs—were less than adequate. Overall, provider knowledge of infection prevention (IP) practices was quite weak, as were IP skills.

The facility assessment examined the adequacy of the physical infrastructure, supplies, materials, and equipment at the 163 facilities visited. More than 70% had sufficient FP supplies. Most examination rooms had the basic equipment needed to provide adequate RH services. Less available were sterile or high-level disinfected gloves (66%). Access to materials for ensuring appropriate IP was generally good, but data collectors observed infrequent handwashing. In addition, handling of sharps, decontamination, and waste disposal were adequate in only approximately half of the facilities.

The findings also documented that strong links exist between inservice training and preservice education in Bolivia. The preservice initiative was built on the solid base of the inservice training system through the NTCs. Many of the NTC trainers are faculty or clinical preceptors at public sector medical or nursing schools affiliated with the departmental maternity hospitals where the NTCs are housed. The NTCs are accustomed to conducting preservice education activities—between 1994 and 1998, many medical interns were trained at the NTCs before to being posted in rural areas for the required year of rural service.

Recommendations from this evaluation focus on key improvements to the inservice training and preservice education systems in Bolivia and are designed to strengthen the solid foundation already in place. The lack of a system for tracking trained providers made it difficult and time-consuming to identify them in the MOH system. This process will be even more of a challenge as the health sector becomes decentralized. A training information system—essential to supervision, monitoring, and evaluation—should be established. To increase retention of trained personnel and further develop the training system, it is important to carefully select training participants from among providers who are likely to provide FP/RH services over an extended period of time.

Despite FP supplies and equipment usually being in place and providers generally having adequate knowledge and confidence about FP service provision overall, client caseload in the 163 health facilities was low. FP skills, with the exception of counseling, and overall IP knowledge and application of standards/practices were not as strong as they should be. One recommendation is to conduct interviews and focus group discussions to determine the reasons for the low use of MOH FP/RH services. The importance of IP should be reinforced during training and it is advisable to conduct an IP update for the NTC trainers. Future preservice education interventions should place greater emphasis on auxiliary nurses who assume many of the FP/RH responsibilities at rural health posts.

The evaluation revealed that 5 years of inservice training system efforts (1994 to 1999²) have contributed to the institutionalization of FP/RH training and the expansion of FP/RH services throughout Bolivia. Moreover, efforts to strengthen preservice education have been enhanced through the solid foundation of the inservice training system, thus establishing an FP/RH training system in Bolivia that is sure to endure.

² The additional teaching done at the departmental level identified providers who had been trained in 1999. Because of this, we also included them in this assessment.

Evaluation of the Institutionalization of Family Planning/ Reproductive Health Inservice Training in Bolivia

INTRODUCTION

Since 1992, JHPIEGO has assisted the Bolivian health sector in building its reproductive health (RH) training capacity by establishing nine inservice national training centers (NTC).³ This assistance ensured training for health professionals in technically sound family planning (FP) service delivery, particularly IUD insertion. Training adhered to international standards for FP services within a context of respectful and humane treatment of clients. Of primary focus was the development of physician-nurse training teams (there were two teams at most sites) at these nine NTCs.

Beginning in late 1997, JHPIEGO provided reduced assistance to the inservice training program, but the physician-nurse training teams remained in place, some for 5 years or more. By 2000, the government of Bolivia and other stakeholders were focusing on preservice education efforts, necessitating examination of the usefulness of existing training resources and rationalizing skills training across both the preservice education and inservice training programs. JHPIEGO assistance was concentrated on improving FP/RH preservice education in three medical and nine nursing schools, and the role of the training teams at the NTCs shifted to support the preservice education efforts. JHPIEGO and the Ministry of Health (MOH) designed a Level 3 training evaluation to assess the impact of training on job performance, as well as to assess the institutionalization of the FP/RH inservice training system and to determine needs for the preservice education initiative. The evaluation was implemented between 2000 and 2001.

BACKGROUND

Since 1992, JHPIEGO has worked in close collaboration with the Bolivia MOH to develop an integrated FP/RH training network in the country. The foci for accomplishing this mission included:

- ◆ Strengthening Bolivia's FP/RH policy environment
- ◆ Reinforcing MOH inservice training capability for physicians and nurses
- ◆ Strengthening the FP/RH education and training at preservice medical and nursing schools

In the area of FP/RH policy, JHPIEGO supported the development, publication, and distribution of two editions of the *Texto de Referencia en Salud Sexual y Reproductiva*, a reference text for RH service providers.

National inservice training capabilities were expanded and improved by establishing nine NTCs located within departmental maternity hospitals in departmental capitals. The first three NTCs were established in 1993 in Bolivia's largest cities; the final NTC was added in 1996. Every department of the country, with the exception of sparsely populated Pando in the Bolivian

³ See **Appendix A: Background on JHPIEGO's Work in Bolivia**.

Amazon, has an NTC (healthcare providers from Pando have been trained at the nearest NTC in the department of Beni). There are two NTCs in La Paz. Each NTC has a small auditorium for the classroom component of training and is equipped with anatomic models, audiovisual equipment, and other training materials, including JHPIEGO learning packages, manuals, and the *Texto de Referencia en Salud Sexual y Reproductiva*.

Training teams, consisting of one physician and one nurse (all trainers are Government of Bolivia employees), staffed the NTCs. JHPIEGO trained these teams in the early 1990s, and the majority of the training teams from those original trainings are still in place. The training teams meet once each year for a technical update, including updates on sexually transmitted infections (STIs) and adolescent RH. As of 2001, the NTCs had trained more than 3,000 service providers (physicians, medical residents/interns, nurses, and auxiliary nurses). A more current role of the NTCs was to train recently graduated physicians in selected FP/RH skills before they were posted for 1 year of civil service in rural and other underserved areas (1 year of mandatory service is required in the national health system).

The MOH inservice training system is now well established. Since 1996, when the last NTC was established, JHPIEGO technical assistance to the NTCs has been minimal. The introduction of information technologies was intended to push the NTCs closer to sustainability. The (British) Department for International Development (DFID) provided each NTC with a computer and access to the Internet. JHPIEGO established technology-assisted learning centers at two Bolivian universities to provide ReproNetsm and ReproLine[®] for the training teams and faculty. Trainers and faculty can use these online services to update their FP/RH knowledge and acquire training materials, such as presentation graphics.

After ensuring inservice training capacity, JHPIEGO began to strengthen preservice education for FP/RH at three medical and nine nursing schools in Bolivia, while continuing to support the inservice training program in a reduced way. Preservice education activities included updates of FP/RH knowledge among medical and nursing faculty, courses to strengthen clinical training skills among faculty and clinical preceptors, and efforts to revise FP/RH curricula in medical and nursing schools. Because most of the NTCs are located in hospitals that serve as clinical training sites for medical and nursing students, JHPIEGO also focused on strengthening the linkages between the inservice and preservice training programs.

METHODOLOGY

In mid-2000, JHPIEGO and the MOH conducted a Level 3 training evaluation of the inservice training program to assess the impact of training on job performance (see **Appendix B** for a detailed timeline of the evaluation).

Objectives

- ◆ To assess the extent to which inservice FP/RH training had been institutionalized at the NTCs, including a description of the training system outputs in the 5-year period (numbers trained and the numbers and locations of professionals who were currently providing services in public sector facilities throughout Bolivia)

- ◆ To assess the effect of FP/RH inservice training by examining provider performance and attitude toward training (knowledge, experience, skills, and work routine) as applied in work settings, including training retention since time of training
- ◆ To describe the linkages between the preservice education and inservice training systems, and the evolving role for the NTCs in supporting FP/RH preservice education efforts

This evaluation was designed to answer the following questions:

- ◆ To what extent has FP/RH inservice training been institutionalized in the MOH national training system?
- ◆ What has been the training output from the NTCs (i.e., the proportion of trained healthcare providers by cadre who continue to provide RH services after being trained)?
- ◆ What is the status of the RH knowledge and skills of the healthcare professionals trained at the NTCs?
- ◆ To what extent are trained providers applying the skills learned in training? How have contextual factors (environmental, political, sociocultural) influenced providers' skills application in the work setting, with consideration given to:
 - whether trained providers are providing FP/RH services (access enlarging the pool of providers offering services)?
 - whether trained providers are performing key FP/RH services competently (quality and retention)?
- ◆ How has the strengthened inservice training system been responding to FP/RH preservice education efforts? What should the role of the NTCs and the physician-nurse training teams be in supporting FP/RH preservice education efforts?

To determine provider performance after training and to ensure an appropriate view of performance in the service delivery setting, a mixed method design was used. A key part of the focus of the evaluation was on deployment and retention of trained providers in the public health sector system. Another part was provider performance in FP/RH service delivery, including method provision for oral contraceptives, condoms, and IUDs, and related counseling, antenatal care, and infection prevention (IP). A multi-sectoral team of evaluators from the MOH and JHPIEGO worked together to finalize the methodology and data collection instruments and to conduct the evaluation. Tools and strategies from other JHPIEGO evaluations provided a foundation for this evaluation.

Field Data Collection

The NTC trainers were selected to conduct data collection for the evaluation because of their institutional memory and understanding of FP/RH service delivery.⁴ The team of 30 training

⁴ To reduce any bias related to the observer's knowing the provider being observed, no trainer collected data in her/his own department. All data were collected while protecting the anonymity of the providers under observation.

specialists was trained in performance evaluation methodology through participation in a 2-week intensive evaluation training course prior to field data collection. The course focused on the principles of evaluation, direct observation, and performance assessment, and on conducting an evaluation in a service delivery setting.

The 30 trainers were divided into 10 teams of three (supervisor, interviewer, observer). All were clinicians with at least one physician and one nurse on each team. The role of the supervisor was to introduce the data collection team and manage all data collection logistics, including ensuring that completed assessment forms were submitted to the evaluation coordinator. The interviewer was responsible for the completion of the facility assessment forms and the training and experience self-assessment. The observer conducted direct observations of service provision.

Sampling Frame

The sampling frame was drawn from the providers trained at any one of the nine NTCs in the 5 years before the evaluation. One of the first steps in calculating the sample size was to determine the availability and accessibility of complete data for the almost 3,000 providers trained in FP/RH between 1994 and 1998 who were still active in public sector service delivery. The objective of the first evaluation visit to Bolivia was to determine the availability and completeness of training and deployment records for trained providers and to identify an MOH employee to facilitate accessing such data.

To develop the sampling frame, the evaluation team needed the identification of trained providers (by name and cadre) and the location of their current work site (by facility name and department). Several strategies were used to identify trained providers and their work locations. The evaluation team examined MOH central and departmental records and tried to contact nongovernmental organizations (NGOs) in Bolivia to determine whether trained providers who had left the MOH system were working with an NGO.

MOH Records: During visits made by the evaluation team, it appeared that the provider data were available and accessible, but the sample process took several months. No standardized tracking system was in place in the MOH; therefore, locating providers was complicated and time-consuming, involving lengthy cross referencing of MOH and NTC records.

By March 2000, the MOH had identified 2,976 providers by cadre as having received training in FP/RH at one of the NTCs from 1994 to 1998. **Table 1** shows the distribution of these providers by year trained and by cadre.

Table 1. Providers Trained in Family Planning/Reproductive Health, by Year, at the National Training Centers, 1994–1998

| Cadre | 1994 | 1995 | 1996 | 1997 | 1998 | Total per Cadre |
|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------------|
| Physicians | 397 | 324 | 295 | 253 | 97 | 1,366 |
| Nurses | 189 | 242 | 203 | 145 | 52 | 831 |
| Medical Interns | -- | 106 | 212 | 211 | 160 | 689 |
| Auxiliary Nurses | 65 | -- | -- | 17 | 8 | 90 |
| Total per Year | 651 | 672 | 710 | 626 | 317 | 2,976 |

Provider names and cadres were available for 2,300 on the initial list of 2,976. To identify those working at that time in the MOH system, the 2,300 providers were matched with current MOH payroll records. The evaluation team determined there were approximately 645 still working in the MOH system from the MOH payroll match. These 645 providers were distributed throughout the nine departments of the country.

The 645 providers were mapped to determine geographic distribution, clustering, and accessibility. The mapping showed a concentration of 378 providers within four departments.⁵ These departments were then selected for the evaluation, because more than 80% of the 645 providers still working in the MOH system were located in these areas and the team had fairly complete information on them. The departments were⁶:

- ◆ La Paz (Altiplano)
- ◆ Potosí (Altiplano)
- ◆ Santa Cruz (Subtropical)
- ◆ Beni (Subtropical)

Slightly more than half (54%) of the matched providers worked in the tropical departments of Santa Cruz or Beni. In these two areas, many of the health facilities were located in semi-rural areas that were inaccessible. Approximately 46% of the providers worked in the Altiplano department of the country (in the La Paz and Potosí departments). The health facilities in these two areas were a mix of urban and rural, with some of the largest hospitals in the country located in La Paz.

Once the four study departments were selected, the evaluation team worked with the departmental MOH offices in these departments to verify and update the provider lists. A series of visits was made to the four departmental offices to acquire current provider information and local area maps of health facilities and viable roads. The departmental offices also supplied current MOH payroll information. In addition, the evaluation team researched and discussed logistics, such as accommodations and transportation, with departmental authorities during these visits. Meetings were held with local government agencies and transportation specialists to map out the most efficient routes to clinics where trained providers were working.

⁵ To maximize the number of observations during field data collection, departments with smaller numbers of providers or providers working in difficult to access areas were excluded.

⁶ Each department is also categorized by type of region (Altiplano and Subtropical).

Review of departmental MOH payroll records proved useful for collecting up-to-date provider information, because they are updated regularly (weekly or monthly, depending on the department) and often have more current information than the central MOH database. From the departmental visits and payroll record review, the evaluation team identified an additional 185 providers who were trained in FP/RH between 1994 and 1998 and were active in the MOH system at that time. As a result, 563 providers were identified in the four study departments. **Table 2** outlines the sampling frame after central and departmental matching with the MOH payroll lists.

Table 2. Sampling Frame Matching to Central and Departmental Ministry of Health Payroll Database

| Department | Initial Matching to Central MOH Payroll Database | | Final Sampling Frame after Departmental Matching and Mapping | |
|--------------|--|----------------------|--|----------------------|
| | Number Matched | Percentage of Sample | Number Matched | Percentage of Sample |
| La Paz | 118 | 31% | 164 | 29% |
| Potosí | 55 | 15% | 195 | 35% |
| Santa Cruz | 76 | 20% | 90 | 16% |
| Beni | 129 | 34% | 114 | 20% |
| Total | 378 | 100% | 563 | 100% |

NGO Records: To help identify and track providers trained in FP/RH by the NTCs, 10 NGOs were contacted during the planning phase. These NGOs were sent a packet that included:

- ◆ A cover letter describing the evaluation and specifying what information was needed;
- ◆ A blank tracking sheet for listing the names and cadres of all trained providers working with the NGO; and
- ◆ A short survey to be completed by each trained provider working with the NGO.

Table 3 shows the response rate and the number of providers identified.

The trained providers working at NGOs said they were trained in FP/RH (FP counseling [new users and followup], IUD insertion, injectables, oral contraceptives, condoms, voluntary surgical contraception), general gynecology care (pelvic examination, Papanicolaou [Pap] smear, breast examination), maternal and neonatal care, STI/HIV/AIDS prevention and transmission, and IP.

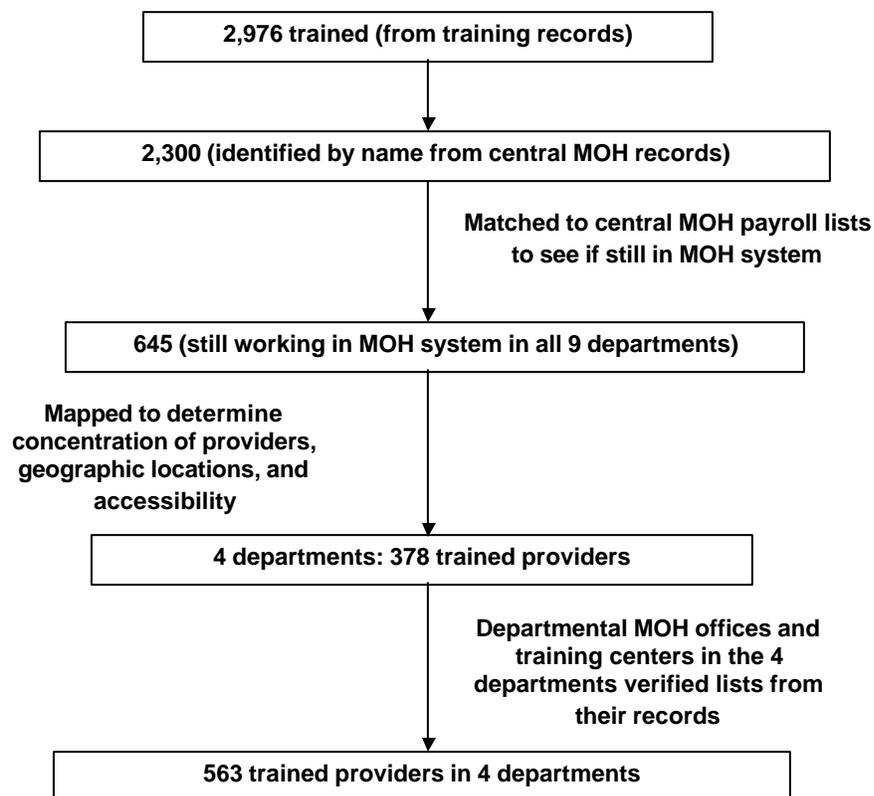
Table 3. Response to a Mailing by Staff Trained in Family Planning/Reproductive Health at Nongovernmental Organizations

| NGO | Responded | | Staff Trained in FP/RH | | Trained and Working for NGO by Cadre | |
|----------------|-----------|----|------------------------|----|--------------------------------------|-------|
| | Yes | No | Yes | No | Physician | Nurse |
| A | | x | | | | |
| B | | x | | | | |
| C | | x | | | | |
| D | | x | | | | |
| E | x | | | x | | |
| F | x | | | x | | |
| G | x | | x | | 1 | 0 |
| H ^a | x | | x | | 5 | 9 |
| I | x | | x | | 4 | 6 |
| J | x | | x | | 1 | 0 |
| Total | 6 | 4 | 4 | 2 | 11 | 15 |

^a Only 7 providers completed the surveys at this NGO.

Figure 1 illustrates how the evaluation team defined and developed the sampling frame.

Figure 1. Derivation of the Sample for the Evaluation



Of the 563 providers identified from the central lists, 323 were present and available at the clinic site on the day of each data collection team's visit.⁷ During field data collection, if the data collection team encountered a provider whose name did not appear on the list, they verified that s/he had been trained in FP/RH (the team supervisor asked if s/he had received "the 5-day course in RH and FP"). If the provider responded affirmatively, the supervisor enrolled and evaluated the provider. The final sample in the four departments was 486 providers; 163 additional providers were identified during the departmental checking as having been trained at one of the NTCs and continuing to work in the MOH system.

Data Collection Instruments

Data collection included an assessment of provider knowledge and direct observation of skills in each of the FP/RH areas,⁸ supported by information on training and work experience. A facility assessment was conducted to evaluate the influence of environmental and contextual factors on the delivery of RH services. Document review, MOH collaboration, and key informant interviews provided information for determining the institutionalization of the inservice training system and the linkages with preservice education efforts.

The data collection instruments are shown in **Table 4**. FP/RH service delivery standards and RH policies of the Bolivia MOH, as well as training materials and course content from the nine NTCs, were used to develop the knowledge assessment and checklists.

⁷ On the central lists, 240 providers were not evaluated for reasons including: out sick or out of office for conference/meeting; immunization campaign or vacation; refused; transferred to another facility or changed position or job responsibilities to administrative; unknown; retired; or data collection team did not make it to the facility.

⁸ Specific aspects of RH services that were covered in training were: FP counseling, physical examination, IUD insertion, and antenatal care.

Table 4. Data Collection Instruments

| Instrument | | Content |
|---|---|---|
| Knowledge Assessment | | Self-administered examination to assess method-specific FP counseling, FP method provision, IP norms/standards, administration of RH services |
| Training and Experience Self-Assessment | | Combination interview and self-administered questionnaire to assess attitudes toward training and training course content (usefulness and relevance to providers' work role and responsibilities), as well as confidence |
| Observation Checklists to Assess Performance ^a | FP Counseling—New User | Evaluates providers' interpersonal skills, including private and confidential counseling, provision of general FP information, method-specific counseling (danger signs, contraindications, and side effects) |
| | FP Counseling—Followup User | Assesses the providers' interpersonal skills, including private and confidential counseling, review of appropriateness of current FP method |
| | Physical Examination | Evaluates the providers' interpersonal skills, privacy, clinical evaluation, and pelvic examination, including preparation for a vaginal examination, bimanual examination, post-vaginal examination, and related IP |
| | IUD Insertion | Assesses IUD insertion, including preparations for IUD insertion, vaginal examination, bimanual examination, instrument preparation, IUD insertion, post-IUD insertion counseling, and related IP |
| | Antenatal Care—Initial Visit | Observes the providers' interpersonal skills, privacy and confidentiality, warning signs, pregnancy examination, post-examination counseling, and IP as they relate to the initial antenatal visit |
| | Antenatal Care—Followup Visit | Observes the providers' interpersonal skills, privacy and confidentiality, pregnancy assessment, post-examination counseling, and IP as they relate to the followup antenatal visit |
| Facility Assessment | Services | Combination assessment checklist and interview of clinic manager: services identified, FP/RH services offered and available (scheduling), service statistics as available (number of providers per facility and number of FP clients over the 3-month period prior to the evaluation) |
| | Adequacy of Clinical Supplies/Equipment | Review of clinic physical condition: adequacy of common waiting areas and examination rooms, record keeping practices, adequacy and availability of FP, and basic pharmaceutical supplies and medical instruments |
| | IP Practices | Assessment of the extent to which norms and standards of IP practices are followed |

^a Observation of IP practices was included in all checklists.

Upon arrival at a health facility, the data collection team met with the clinic manager and the director to introduce the team and explain the purpose of the visit. First, the key informant for the facility assessment was identified (clinic manager, for the most part), and then data collection of the services and equipment information began. IP information was collected in interviews and by direct observation. The knowledge assessment was administered initially when the team arrived at the provider's work site. The data collection team conducted observations of provider performance at the work site during a full workday. Every effort was made to observe providers with clients. If no clients were available, providers were asked to work with anatomic models to perform the skill in a simulation setting. Providers were assessed only on the clinical skills they said they provided regularly.⁹

A data collection tracking sheet¹⁰ was developed to assist in data management and also to help teams assess which FP/RH services providers considered part of their work role. The data collection team supervisor was responsible for tracking the data collection activities. Providers trained between 1994 and 1999 at an NTC were included on the tracking sheets before the team's visit. If a data collection team encountered a provider who said she/he had been trained in FP/RH within the years of interest (up to 1999) but was not on the list, the team enrolled the provider in the evaluation and assigned her/him a unique identification number before proceeding with the assessment.

An instructional guide provided the data collection teams with guidance on how to prepare for observations, what to do upon arrival at an evaluation site, and how to organize the data once collected.

Scoring Performance: To determine how to score provider competence in each clinical skill, key RH experts identified the critical steps on each clinical checklist and reviewed them with the data collection teams before data collection began. Provider performance was then scored according to the percentage correct of the critical steps. **Table 5** shows the total number of steps and the number of critical steps for each checklist.

Table 5. Performance Observation Checklists: Total Number of Steps and Critical Steps

| Checklist for RH Skill Area | Total Number of Steps on Checklist | Total Number of Critical Steps |
|-------------------------------|------------------------------------|--------------------------------|
| FP Counseling—New User | 66 | 44 |
| FP Counseling—Followup User | 9 | 3 |
| Physical Examination | 29 | 8 |
| IUD Insertion | 29 | 7 |
| Antenatal Care—Initial Visit | 34 | 14 |
| Antenatal Care—Followup Visit | 31 | 17 |

⁹ This was determined when providers answered “yes” to the question: “Is FP counseling/physical examination/IUD insertion/antenatal care part of your regular functions?”

¹⁰ See **Appendix C: Tracking Sheet**.

FINDINGS

The findings will be discussed according to the three objectives of the evaluation.

Objective 1: To assess the extent to which inservice FP/RH training has been institutionalized at the NTCs, including a description of the training system outputs in the 5-year period (numbers trained and the numbers and locations of professionals who were currently providing services in public-sector facilities throughout Bolivia)

Inservice FP/RH training has been institutionalized throughout the country through the nine NTCs located within departmental maternity hospitals in departmental capitals. Inservice training continues to be conducted at the NTCs by physician-nurse training teams, the majority of whom were originally trained in 1992 and who are still in place and have continued to train at the NTCs. Notable is that from 1997 to the time of the evaluation, the NTCs operated with very little external technical assistance. As part of the institutionalization, the evaluation built capacity among the 30 NTC trainers who served as data collectors. The process of developing standardized evaluation forms gave the trainers the opportunity to recognize variations in training among the different NTCs. In addition, the process illustrated to them the need to ensure a standardized training approach in all of the NTCs. Capacity-building efforts among the 30 participating NTC trainers also ensured their ability to provide evaluation assistance for a variety of training interventions in the future.

Table 1 shows the distribution, by year and cadre, of the 2,976 providers trained from 1994 to 1998. Following that table is a detailed review of the evaluation team’s efforts to track the providers and determine whether they were still in the MOH system. Retention of trained staff is important and data for retention are often not available or analyzed systematically.

Retention after Training: Because this evaluation provided a retrospective examination of 6 years of training system outputs (1994 to 1999), it is useful to look at retention of trained providers in the MOH system. From the initial total of 2,976 trained in FP/RH through 1998, the team identified 645 providers in nine departments (from the central lists) and 378 providers from the four departments surveyed. The team found an additional 185 providers during the field data collection (from checking at the departmental level), making a total of 563 providers in the four departments. Using the same proportion, a potential total of 961 providers (by extrapolation) in all nine departments could be expected if the team had been able to do the same departmental level checking on MOH records and lists (**Table 6**). This means that more than 32% of all providers trained, some as long as 6 years before this evaluation, were still working in the MOH system.

Table 6. Extrapolation of Number of Trained Providers Still Working in the Ministry of Health System

| Number of Departments | Number of Providers Found from Central List | Number of Providers Found from Central and Departmental Lists |
|-----------------------|---|---|
| 4 | 378 | 563 |
| 9 | 645 | 961 (by extrapolation) |

Objective 2: To assess the effect of FP/RH inservice training by examining provider performance and attitude toward training (knowledge, experience, skills, and work routine) as applied in work settings, including training retention since time of training

In total, 30 NTC trainers were trained as data collectors, building evaluation capacity in Bolivia. The data collectors then visited 163 health facilities in four departments of the country (La Paz, Potosí, Santa Cruz, and Beni) and assessed 486 providers (physicians, nurses, and auxiliary nurses).

Distribution of Providers Assessed: Of the 563 providers identified from the central and departmental lists, 323 were present and available at the clinic site on the day of each data collection team's visit. In addition, 163 providers who had been trained at an NTC and who had continued working in the MOH system were identified during the departmental checking, making a total sample of 486: 41% physicians, 26% nurses, and 33% auxiliary nurses (see **Table 7**).

Table 7. Distribution of Final Sample by Cadre

| Cadre | n | Percentage |
|-----------------|-----|------------|
| Physician | 198 | 41% |
| Nurse | 126 | 26% |
| Auxiliary Nurse | 162 | 33% |
| Total | 486 | 100% |

Clinic Environment Where Trained Providers Work: Almost all (158) of the 163 clinics assessed were public sector facilities. Of the 486 providers who worked at these 163 facilities, the majority (57%) worked in health centers—24% in large hospitals and 16% providing services at the most rural of facilities, health posts (**Table 8**).

To determine scheduling and availability of FP services at the facilities, key informants were asked when FP/RH services were available to clients (daily/continuous hours of operation, only on specific days, or only specific hours). More than three-quarters of the facilities (77%) reported all day or continuous hours of operation (**Table 8**).

Table 8. Facility Type and Schedule of Family Planning Services

| Facility Type | n | Percentage of All Facilities | FP Services Offered | |
|---------------|-----|------------------------------|----------------------|-------------------------|
| | | | All Day (Continuous) | Morning/ Afternoon Only |
| Hospital | 40 | 24% | 29 (72%) | 8 (20%) |
| Health Center | 93 | 57% | 74 (79.5%) | 19 (20%) |
| Health Post | 26 | 16% | 20 (77%) | 6 (23%) |
| Other | 4 | 3.0% | 3 (75%) | 1 (25%) |
| Total | 163 | 100% | | |

The evaluation team assessed the facilities' profile of provider type as detailed in **Table 9**. Most surprising is the fact that 6 of the 40 hospitals said they have no physicians working in RH, and 7 hospitals have no nurses working in RH. Moreover, 8 hospitals reported no auxiliary nurses providing RH services.¹¹

Table 9. Profile of Provider Type at Each Facility

| Facility Type | n=163 | Physicians | | | Nurses | | | Auxiliary Nurses | | |
|---------------|-------|------------|-----|----|--------|-----|----|------------------|-----|----|
| | | 0 | 1-2 | =3 | 0 | 1-2 | =3 | 0 | 1-2 | =3 |
| Hospital | 40 | 6 | 10 | 24 | 7 | 19 | 14 | 8 | 15 | 17 |
| Health Center | 93 | 4 | 68 | 21 | 29 | 63 | 1 | 10 | 41 | 42 |
| Health Post | 26 | 10 | 16 | 0 | 19 | 7 | 0 | 3 | 23 | 0 |
| Other | 4 | 1 | 2 | 1 | 2 | 2 | | | | |

Of the 163 health facilities that were visited and assessed during the evaluation, 84% (137) had at least 1 physician, nurse, and auxiliary nurse. Of the 40 hospitals, 10 had 1 to 2 physicians and 24 had more than 3; 19 had 1 to 2 nurses; and 14 had more than 3. In addition, coverage was good in the rural health posts. In general, health posts in Bolivia did not have full-time physicians, but some had access to physicians periodically—16 rural health posts reported access to at least 1 physician providing RH services.

Services Offered: Almost all facilities (95%, n=155) reported offering general FP services, 94% offered antenatal and postpartum care, and 93% offered STI services. Only 61% offered postabortion care, and 59% of facilities stated they offered obstetric labor and delivery care.

The evaluation team used service statistics (from clinic records or the National Health Information System¹²) for the previous 3 months to also look at services.¹³ **Table 10** shows the range of numbers of users by FP method from the facility perspective. Thus, of the 163 clinics, 115 reported less than 25 oral contraceptive users during the previous trimester; 22 had 26 to 50 oral contraceptive users; 14 clinics had 51 to 100 oral contraceptive users; and 12 had more than 100 oral contraceptive users during the previous 3 months.

¹¹ These responses from the eight hospitals are not surprising, because in Bolivia, urban auxiliary nurses have a reduced role as compared to their rural counterparts. Auxiliary nurses working in urban settings are more involved in cleaning and maintenance of the clinic areas, whereas those who work in rural areas are more involved in service delivery.

¹² Sistema Nacional de Información de Salud [SNIS]

¹³ FP user data were gathered by reviewing clinic records and logbooks for the trimester prior to data collection (April, May, June, 2000). In Bolivia, all health facilities are required to complete SNIS forms, a standardized MOH document designed to track client flow (number of users) and general clinic activity. The MOH mandates the use and maintenance of the SNIS, and all clinics are required to submit a copy to the central MOH office on a regular basis.

Table 10. Quantity of Family Planning Users in Trimester Period by Number of Facilities and by Family Planning Method

| Services | Number of Facilities, by Quantity of FP Users in Trimester Period | | | |
|-------------------------------|---|-------|--------|------|
| | =25 | 26–50 | 51–100 | >100 |
| Oral contraceptives | 115 | 22 | 14 | 12 |
| Condoms | 118 | 19 | 12 | 14 |
| IUD | 135 | 21 | 6 | 1 |
| Progesterone only injectables | 128 | 18 | 15 | 1 |
| Combined injectables | 160 | 3 | 0 | 0 |
| Vasectomy | 0 | 0 | 0 | 0 |
| Minilaparotomy | 163 | 0 | 0 | 0 |
| Laparoscopic tubal ligation | 0 | 0 | 0 | 0 |
| Natural FP | 125 | 16 | 8 | 14 |
| FP counseling | 53 | 33 | 27 | 50 |

When examined by facility type, the service user counts still remain low. All of the 40 hospitals provided oral contraceptives, but 78% (31) reported less than 24 oral contraceptive users during the previous trimester. Less than 25 users had received condoms at approximately 80% of hospitals, 72% of health centers, and 62% of the health posts. IUD users were also low—73% of hospitals and 82% of health centers had less than 25 users, and all of the health posts had less than 25 IUD users in the previous 3-month period.

Overall, the FP usage in the 163 health facilities was low. The evaluation could not examine causes for the low caseload to determine whether it was due to underreporting at the facilities, barriers to care and access, or other reasons.

Provider Knowledge: The knowledge assessment covered the areas of appropriate counseling for specific FP methods, method provision for specific FP methods, basic IP norms/standards, and appropriate administration of RH services. The passing standard was 70%. Overall, knowledge scores were high, with 64% of the providers scoring 70% or above (**Table 11**). The mean score for physicians was 74% (with a range of 35–97%); the average score for nurses was close to that at 71% (with a range of 11–93%). The average score for auxiliary nurses was 66% (with a range of 10–93%). Of the 198 physicians in the sample, 75% scored 70% or above, 65% of the 126 nurses passed, and only 51% of the 162 auxiliary nurses scored 70% or above.

Table 11. Knowledge Assessment Scores

| Cadre | | Overall Score | | Percentage of Cadre Passing (Scoring 70% or Higher) |
|-----------------|------------|---------------|---------------|---|
| | | Mean | Range | |
| Physician | 198 | 74% | 35–97% | 75% |
| Nurse | 126 | 71% | 11–93% | 65% |
| Auxiliary Nurse | 162 | 66% | 10–93% | 51% |
| Total | 486 | 70% | 10–97% | 64% |

The evaluation team examined the groups who had received a passing score by their year of training to determine if there was a retention effect. **Table 12** outlines, by year, the number of trained providers who received a passing score. The percentage shown is the percentage of providers who received a passing score out of the total number of providers trained for that year in the sample.¹⁴ There does not appear to be a retention effect in any of the three cadres across the years.

Table 12. Knowledge Assessment: Providers Receiving Passing Score, by Year Trained

| Cadre | n | 1994 | | 1995 | | 1996 | | 1997 | | 1998 | | 1999 | |
|-----------------|------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|
| | | n | % | n | % | n | % | n | % | n | % | n | % |
| Physician | 125 | 35 | 74 | 13 | 77 | 17 | 81 | 12 | 92 | 26 | 81 | 22 | 77 |
| Nurse | 73 | 10 | 67 | 14 | 64 | 7 | 78 | 8 | 50 | 14 | 78 | 20 | 71 |
| Auxiliary Nurse | 77 | 13 | 38 | 4 | 20 | 2 | 64 | 3 | 27 | 18 | 64 | 37 | 72 |
| Total | 275 | 58 | 21 | 31 | 11 | 26 | 9 | 23 | 8 | 58 | 21 | 79 | 29 |

Training/Experience: Almost three-quarters of physicians (72%) said they had been trained more than 2 years prior to the evaluation, as compared to only 64% of nurses and 53% of auxiliary nurses. More than three-quarters of physicians (77%), 86% of nurses, and 87% of auxiliary nurses felt the training prepared them for their work and validated that they had received both practical and theoretical information in training (more than 80% for each cadre). When asked if they used what they had learned in their work, most said that they did. Many of the providers told the data collection teams they had not received any other inservice training but the inservice FP/RH training at the NTCs.

Provider Clinical Skills: As discussed above, for the evaluation, RH experts identified critical steps, then providers were observed and scored on the percentage of critical steps they completed correctly. The evaluation was designed to observe providers in the work setting—in service provision to clients—but the evaluation team did anticipate the possibility that the appropriate clients might not be available and designed simulations (use of anatomic models, role plays) for the data collection teams to use.

Table 13 shows the total number of steps and the number of critical steps for each skill assessed, as well as the results for each. For FP counseling with followup users, 90% of

¹⁴ There were, however, missing data for “year trained” for 211 providers.

providers were competent in 70%¹⁵ or more of the critical steps. The next best performance of the group was in the antenatal care followup visit (76%), followed by IUD insertion (68%) and physical examination (62%).

Table 13. Observation of Sentinel Skills

| Checklist for RH Skill Area | Total Number of Steps on Checklist | Total Number of Critical Steps | Percentage of Providers Competent in 70% or More of Critical Steps |
|-------------------------------|------------------------------------|--------------------------------|--|
| FP Counseling—New User | 66 | 44 | 36% |
| FP Counseling—Followup User | 9 | 3 | 90% |
| Physical Examination | 29 | 8 | 62% |
| IUD Insertion | 29 | 7 | 68% |
| Antenatal Care—Initial Visit | 34 | 14 | 58% |
| Antenatal Care—Followup Visit | 31 | 17 | 76% |

There were as many as 271 providers observed during service provision, depending on the skill. **Table 14** shows the distribution of providers assessed by type of observation, by skill assessed, and by cadre. All providers were assessed on FP counseling of new users, 142 providers were assessed on IUD insertion skills, 119 on initial antenatal care visit, 113 on physical examination, and 108 on FP counseling with followup users. Only 86 providers were assessed on antenatal care followup visit.

Table 14. Distribution of Providers Assessed by Type of Observation, by Skill Assessed, and by Cadre

| Cadre | FP/New User n=271 ^a | | FP/ Followup n=108 | | Physical Examination n=113 | | IUD Insertion n=142 | | Antenatal Initial n=119 | | Antenatal Followup n=86 | |
|-----------------|-----------------------------------|-----|--------------------------|-----|----------------------------------|-----|---------------------------|-----|-------------------------------|-----|-------------------------------|-----|
| | Cli | Mod | Cli | Mod | Cli | Mod | Cli | Mod | Cli | Mod | Cli | Mod |
| Physician | 27 | 22 | 21 | 0 | 77 | 9 | 32 | 103 | 72 | 21 | 78 | 1 |
| Nurse | 37 | 59 | 28 | 5 | 2 | 8 | 0 | 6 | 2 | 9 | 1 | 1 |
| Auxiliary Nurse | 66 | 56 | 48 | 6 | 3 | 14 | 0 | 1 | 3 | 12 | 2 | 3 |
| Total | 130 | 137 | 97 | 11 | 82 | 31 | 32 | 110 | 77 | 42 | 81 | 5 |

Notes: Cli=Client; Mod=Model

^a Data for FP/New User are incomplete.

Most observations for FP counseling with followup users, physical examination, and antenatal care were carried out with clients. Fewer clients were available for IUD insertions, therefore the observations were done primarily using a simulation with an anatomic model. For FP counseling of new users, almost an equal number of observations were carried out with clients as with a simulation (in this case, a role play).¹⁶ It was not surprising that relatively few physicians were observed in FP counseling of new users, because they generally do not provide services to new FP users unless they need an IUD. Physicians are also unlikely to provide FP services to clients

¹⁵ The competency level agreed to by the stakeholders and evaluation team was 70%.

¹⁶ The table in **Appendix D** shows the distribution of observations by department, cadre, and skill area, along with method of skill assessment (client, simulation with model).

coming for a followup visit. On the contrary, physicians were the majority of those observed for the other skills—physical examination, IUD insertion, and the two antenatal care skills.

The evaluation team examined performance by looking at the components composing each skill area, considering both the total number of steps and the number of critical steps in each component. This system allowed the team to look at which steps were consistently performed correctly, while highlighting others in need of attention.

In some components of the skills, many more providers successfully completed all critical steps than were able to complete the total number of steps on the observation checklist. The results for *FP Counseling of New Users* were analyzed by the mean number of total steps completed for each component as a measure of how close the group was to performing the entire skill. For more than half of the components, the mean was at least 50% for total completion of the steps. Moreover, the entire group assessed and each cadre individually did very well in interpersonal communication (IPC)—more than 80% completed the critical steps (with the exception of nurses [78%]). Additionally, more than half of the group completed all critical steps in general information on condoms and on side effects of the IUD.

Performance of *FP Counseling With Followup Users* was quite good for those assessed (n=108). More than 90% of the group and 89% or more of the assessed physicians, nurses, and auxiliary nurses did the critical steps. The mean number of total steps completed was 84% or more for every component.

Results for the *physical examination* are discussed for physicians only, because very few nurses or auxiliary nurses were assessed performing a physical examination (not a service they usually provide). Once again, the group and the physicians did very well (91% and 95%, respectively) in the completion of the IPC critical step. For the group assessed, the mean number of total steps completed for IPC was 6.1 of 8. As shown in **Table 15**, the physicians assessed completed all critical steps well—81% or more for all components, with the exception of the clinical evaluation and the post-vaginal examination.

Table 15. Physical Examination: Physician Results

| Component | # of Critical Steps | # of Total Steps | Physicians n=86 | | | |
|---------------------------------|---------------------|------------------|------------------------------|-------|---------------------------|-------|
| | | | All Critical Steps Completed | | All Total Steps Completed | |
| | | | n | % | n | % |
| IPC | 1 | 8 | 82 | 95.3% | 25 | 29.1% |
| Clinical evaluation | 2 | 6 | 31 | 36.0% | 23 | 26.7% |
| Vaginal examination preparation | 1 | 3 | 78 | 90.7% | 26 | 30.2% |
| Vaginal examination | 2 | 4 | 70 | 81.4% | 62 | 72.1% |
| Bimanual examination | 1 | 1 | 70 | 81.4% | 70 | 81.4% |
| Post-vaginal examination | 1 | 7 | 43 | 50.0% | 27 | 31.4% |

Nearly the entire group assessed on *IUD Insertion* comprised physicians (135/142 or 95%). Of this group, 91% did the critical step in the preparations for IUD insertion, and 65%, 70%, and 71% did the critical step for vaginal examination, bimanual examination, and post-insertion counseling, respectively. For the actual IUD insertion component, 57% did the critical steps and 44% of physicians competently completed all the steps for this component (**Table 16**).

Table 16. IUD Insertion: Physician Results

| Component | # of Critical Steps | # of Total Steps | Physicians n=135 | | | |
|----------------------------|---------------------|------------------|------------------------------|-------|---------------------------|-------|
| | | | All Critical Steps Completed | | All Total Steps Completed | |
| | | | n | % | n | % |
| IUD preparations | 1 | 4 | 123 | 91.1% | 26 | 19.3% |
| Vaginal examination | 1 | 2 | 88 | 65.2% | 46 | 34.1% |
| Bimanual examination | 1 | 1 | 94 | 69.6% | 94 | 69.6% |
| IUD instrument preparation | 1 | 4 | 73 | 54.1% | 21 | 15.6% |
| IUD insertion | 2 | 9 | 77 | 57.0% | 60 | 44.4% |
| Post-insertion | 0 | 4 | -- | -- | 45 | 33.3% |
| Post-insertion counseling | 1 | 5 | 96 | 71.1% | 64 | 47.4% |

Of the 119 providers assessed on the *Initial Antenatal Care Visit*, 78% were physicians whose results are discussed here. They did well again on IPC, 89% completing the IPC critical step. On the general pregnancy examination, 97% completed the critical step and 56% did the total steps for that component. However, they did not do well on warning signs, IP, or post-examination services (**Table 17**).

Table 17. Initial Antenatal Care: Physician Results

| Component | # of Critical Steps | # of Total Steps | Physicians n=93 | | | |
|-------------------------------|---------------------|------------------|------------------------------|-------|---------------------------|-------|
| | | | All Critical Steps Completed | | All Total Steps Completed | |
| | | | n | % | n | % |
| IPC | 1 | 7 | 83 | 89.2% | 15 | 16.1% |
| Warning signs | 5 | 7 | 28 | 30.1% | 18 | 19.4% |
| IP | 1 | 2 | 26 | 28.0% | 18 | 19.4% |
| General pregnancy examination | 1 | 5 | 90 | 96.8% | 52 | 55.9% |
| Pregnancy examination | 0 | 4 | -- | -- | 38 | 40.9% |
| Post examination | 6 | 9 | 32 | 34.4% | 23 | 24.7% |

Of the mere 86 providers assessed for the *Antenatal Care Followup Visit*, 92% (n=79) were physicians. It is notable that again 89% completed the IPC critical step and 95% completed the

critical step in assessing a pregnancy, with 54% completing all the total steps of this component (**Table 18**). Handwashing was abysmal though—only 15% completed both the 2 critical steps and all steps. Antenatal symptomatology was poor, with only 33% completing the critical steps, as was post-examination counseling, with only 32% completing the critical steps (**Table 18**).

Table 18. Followup Antenatal Care: Physician Results

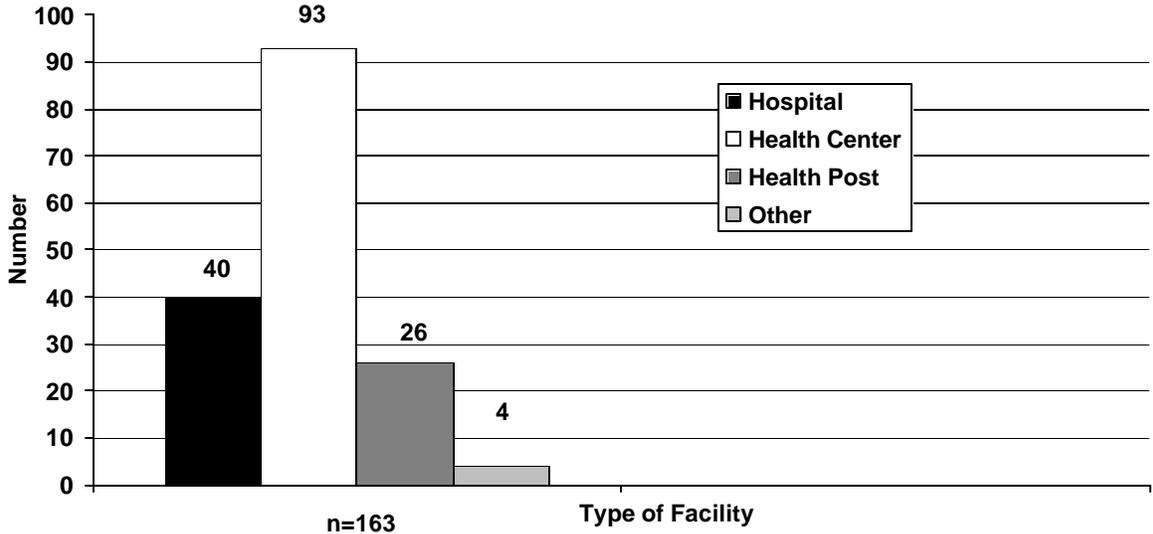
| Component | # of Critical Steps | # of Total Steps | Physicians n=79 | | | |
|-----------------------------|---------------------|------------------|------------------------------|-------|---------------------------|-------|
| | | | All Critical Steps Completed | | All Total Steps Completed | |
| | | | n | % | n | % |
| IPC | 1 | 5 | 70 | 88.6% | 22 | 27.8% |
| Antenatal symptomatology | 5 | 8 | 26 | 32.9% | 20 | 25.3% |
| Handwashing | 2 | 2 | 12 | 15.2% | 12 | 15.2% |
| Pregnancy assessment | 1 | 6 | 75 | 94.9% | 43 | 54.4% |
| Post-examination counseling | 8 | 10 | 25 | 31.6% | 22 | 27.8% |

Generally, IPC was quite good across the cadres and in all the skills, notable because the evaluation team was told that physicians often do not do counseling-related tasks. Physicians performed generally good physical examinations and had good IUD insertion skills with regard to completing the critical steps in the components for each.

Of significance is the fact that many of the facilities visited had out-of-date copies of the *Texto de Referencia en Salud Sexual y Reproductiva*. In addition, many providers said they had not received additional training on the skills assessed. This is apparent in the less than adequate performance of critical steps in the component areas in the six different skills assessed. Overall, provider knowledge of IP practices and IP skills were quite weak. When providers were performing skills such as IUD insertion, they often skipped handwashing at the necessary point during the clinical procedure. Waste disposal and instrument processing were also weak.

Facility Assessment: More than half of the facilities where trained providers were providing services were health centers (n=93), as shown in **Figure 2**. Almost all were MOH facilities.

Figure 2. Facility by Type (n=163)



The facility assessment examined the adequacy of the physical infrastructure, supplies and materials, and equipment.¹⁷ Nearly all of the clinics had sufficient space in the waiting area. Two-thirds (65%) had an adequate and private area available for counseling, and 76% had chairs for providers and clients. In most clinics, medical archives/records were stored in a locked cabinet or file (93%), but they were also available to clinic staff (92%). Seventy-eight percent had the standard clinic forms available.

Most examination rooms had the basic equipment needed to provide adequate RH services: examination table (96%), light source (86%), instrument cart (75%), a place to wash hands in or close to the examination room (82%), table or storage cabinet for materials and supplies (74%), receptacle for decontamination solution (70%), and a receptacle for waste (83%). Fewer, but still the majority (63%), had curtains or something similar for privacy. Most had the basic instruments/clinical equipment needed in the examination room. Less available were sterile or high-level disinfected gloves (66%).

Access to materials for ensuring appropriate IP practices was generally good. Most clinics had running water (90%). Almost all the examination rooms had a way for providers to wash hands (86%), as did 89% of the bathrooms. Of concern, however, was the fact that only 71% of the immunization rooms had a way for staff to wash hands. Access to soap and towels was very good (96% and 90%, respectively), but data collectors observed infrequent handwashing (as documented in the results discussed above) despite access to water, soap, and towels.

More than 70% had FP supplies: IUDs (88%), condoms (86%), oral contraceptives (89%), and injectables (71%). Materials available for client education included brochures (65%), informational fact sheets (72%), audiovisual materials (66%), and samples of FP methods on display (67%).

¹⁷ See **Appendix E** for a detailed list of all results on the facility assessment.

Table 19 shows the assessment of the adequacy of equipment and supplies of various areas in the facilities. Common areas and consulting areas were well supplied, but only 18% of facilities had adequate equipment and supplies in the surgery area.

Table 19. Adequacy of Equipment and Supplies in Facilities

| Facility Area | Percentage of Facilities |
|-------------------------|--------------------------|
| Common areas | 79% |
| Consulting area | 84% |
| Overnight stay areas | 52% |
| Labor and delivery area | 50% |
| Surgery area | 18% |

IP in other areas was of more concern. For example, 65% of the cleaning/processing areas had a way for staff to wash hands, although 83% of clinics had housekeeping staff who used cleaning gloves.

Handling of sharps was adequate in approximately half of the facilities. There were puncture-proof containers for needle disposal in 54%, and in 60% needles were disposed of immediately after use in the puncture-proof containers.

A similar gap existed in decontamination and waste disposal. The person in charge of decontaminating instruments knew the correct concentration to make the decontamination solution at 57% of the facilities, but the standard formula for this solution was used in only 49% of the facilities. Only 50% of the facilities disposed of contaminated waste separately from noncontaminated waste, and only 64% buried or burned contaminated waste.

Objective 3: To describe the linkages between the preservice education and inservice training systems and the evolving role for the integrated centers in supporting FP/RH preservice education efforts

The third objective of this evaluation examined the linkages between the preservice education and inservice training systems and the evolving role of the NTCs in preservice education. Strong links between inservice training and preservice education exist in Bolivia. The preservice initiative, launched in 1998, was built on the solid base of the inservice training system described above. Because the NTCs are located in teaching hospitals (departmental maternity hospitals) affiliated with medical or nursing schools, they have provided a physical link between inservice training and preservice education. Many of the NTC trainers are faculty or clinical preceptors at public sector medical or nursing schools affiliated with the departmental maternity hospitals where the NTCs are housed.

For example, several of the NTC trainers from La Paz also worked as faculty or clinical preceptors at the Universidad Mayor de San Andrés (UMSA) medical and nursing schools. This critical mass of clinical trainers familiar with the competency-based training approach (anatomic models, development of learning objectives, objective assessment of clinical skills) greatly facilitated the introduction of preservice activities at UMSA. This was true to a lesser extent in other cities (such as Trinidad, Cochabamba, and Sucre) where those NTC trainers also became

key contributors to the curriculum revision process. In some cases, NTC trainers have assisted in evaluating the FP/RH skills of medical and nursing students prior to graduation.

The NTCs were also used to conduct certain preservice education activities. For example, in 1999 the UMSA medical school adopted the Objective Structured Clinical Examination (OSCE) for the intern year.¹⁸ The NTC trainers (physicians and nurses) conducted the first OSCE examinations in the NTCs using many of the skills checklists developed for inservice training. The ability of UMSA to implement the OSCE quickly was due in large part to the participation of the NTC trainers in the process.

Between 1994 and 1998, many interns were trained at the NTCs prior to being posted in rural areas for their required year of rural service.¹⁹ Although this strategy ensured that the physicians performing their year of rural service would be able to provide FP/RH counseling and services (assuming that commodities were available), it also meant that a large number of trained providers may only have provided FP/RH for 1 year before beginning a residency in a specialty unrelated to FP/RH. All of the data collection teams commented that this made it difficult to track [down] providers currently practicing FP/RH, because many interns trained during that period were no longer in practice where they would be providing FP/RH services.

When discussing provision of services at rural health posts, a frequent comment from MOH staff in rural areas was that auxiliary nurses were the most stable healthcare provider, providing a variety of primary health services in settings where there were no physicians or nurses, or there was limited coverage. Many auxiliary nurses, however, had limited training in FP/RH counseling and service provision.

DISCUSSION AND RECOMMENDATIONS

Inservice training system efforts spanning 5 years (from 1994 to 1999) contributed to the expansion of FP/RH services in Bolivia. Training investments made in the system were still in place and functioning a few years later. National inservice training capabilities were expanded and improved by establishing nine NTCs within departmental maternity hospitals in departmental capitals. NTCs were established in every departmental capital except Pando, a sparsely populated department in the Bolivian Amazon. Healthcare providers from Pando have been trained at the NTC in neighboring Beni. There are two NTCs in La Paz.

To what extent has FP/RH inservice training been institutionalized in the MOH national training system?

Inservice FP/RH training has been institutionalized all over the country. The nine NTCs have continued to train. A primary role of the NTCs was to train recently graduated physicians in selected FP/RH skills before they were posted for 1 year of civil service in rural and other underserved areas.

¹⁸ OSCE consists of a simulated clinical examination in which, in Bolivia, interns were required to rotate through a series of stations where they had to demonstrate competence on certain skills (e.g., IUD insertion, breast examination) with anatomic models, role plays, or case studies.

¹⁹ One year of rural service used to be a requirement for physicians prior to specializing in a residency program.

Training physician-nurse teams conduct the inservice training at the NTCs—usually two teams at each center. The majority of these teams were originally trained in the early 1990s and they were still in place at the NTCs at the time of the evaluation. The training teams meet approximately once per year for a technical update on topics such as STIs and adolescent RH. From 1997 to the time of the evaluation, the NTCs operated with very little external technical assistance.

Training Implementation: From 1994 to 1998, the NTCs trained mostly physicians, nurses, and medical interns. In 1999, they began to include more auxiliary nurses. In addition, the training curriculum changed in 1998 when the MOH developed an “integrated” training course.²⁰ Due to funding issues, very few “integrated” training courses were implemented, which had an impact on FP/RH training.

Training efforts have been reduced since 1998. For the 2 years prior to the evaluation, the training centers were not operating at full capacity and had done very little training, primarily due to a lack of funding and changes in MOH policies related to training.

As part of the institutionalization, the evaluation built capacity among the 30 NTC trainers who served as data collectors for the evaluation. The process of developing standardized evaluation forms gave the trainers the opportunity to recognize variations in training among the different NTCs. In addition, the process illustrated to them the need to ensure a standardized approach to training in all of the NTCs. Capacity-building efforts among the 30 participating NTC trainers also ensured their ability to provide evaluation assistance for a variety of training interventions in the future.

Assessing Training Output and Tracking Trained Providers: Early on, the need for a system for tracking trained providers was not recognized. Neither central level MOH nor NTC data were maintained in a systematic way, making it difficult to obtain training information beyond the number of providers trained. The lack of a tracking system for trained providers also made it very difficult and time-consuming to identify and locate trained providers working in the MOH system. This is even more of a challenge now that the health sector is in the process of decentralization, and payroll records have been moved from the central to the departmental level. Eventually, responsibility for payroll will be devolved to the municipal level.

The role and responsibilities for data management need to be defined for the training program. Development and dissemination of quarterly training reports to the MOH, the departmental level health authorities (Servicios Departamentales de Salud [SEDES]), NTCs, and donor and implementing agencies involved in training efforts in Bolivia would provide the information needed to make data driven programmatic decisions and changes. Data management would also provide the foundation for a training network and would facilitate data sharing.

- ◆ **Recommendation:** A training information system—at a minimum, a database maintained in a systemized way—is critical for supervision, monitoring, and evaluation.

²⁰ The 5-day FP/RH training course was replaced with a 15-day course focusing on child health (Integrated Management of Childhood Illness [IMCI]) issues and including FP/RH.

What has been the training output from the NTCs (i.e., the proportion of trained healthcare providers by cadre who continue to provide RH services after being trained)?

Retention of Trained Personnel: Almost 3,000 (2,976) providers received training in FP/RH at an NTC from 1994 to 1998. According to the records available, it is significant that more than 32% of all providers trained—some as long as 6 years before this evaluation—were still working in the MOH system.

The list compiled from MOH records indicated that many providers were still providing services in the public sector, but some of the providers had moved into administrative positions and were no longer working in direct FP/RH service delivery. In some cases, the provider trained was a medical intern who went on to specialize in an area other than RH and thus did not provide FP/RH services after training.

- ◆ **Recommendation:** Although Bolivia no longer has a mandatory year of rural service, it is important to carefully select training participants from among providers who are likely to continue providing FP/RH services over an extended period of time.

- What is the status of the RH knowledge and skills of the healthcare professionals trained at the NTCs?
- To what extent are trained providers applying the skills learned in training? How have contextual factors (environmental, political, socio-cultural) influenced providers' skills application in the work setting, with consideration given to:
 - whether trained providers are providing FP/RH services (access: enlarging the pool of providers offering services)?
 - whether trained providers are performing key FP/RH services competently (quality and retention)?

Overall, there were sufficient human resources²¹ for the provision of adequate and high-quality RH services given the number of FP users. Of the 163 health facilities assessed during the evaluation, 84% (137) had at least 1 physician, 1 nurse, and 1 auxiliary nurse. Of the 40 hospitals, 10 had 1 to 2 physicians and 24 had more than 3. In addition, 19 had 1 to 2 nurses and 14 had more than 3. Moreover, coverage was good in the rural health posts. For the most part, health posts in Bolivia did not have full time physicians, but some had access to physicians periodically—16 rural health posts reported access to at least 1 physician providing RH services.

In general, client caseload in the 163 health facilities in the sample was low. It was unclear what factors—under-reporting of FP visits at the facilities, transportation or other logistical barriers to care, or linguistic or cultural barriers to care—may have caused the lack of FP clients. Low caseload can often result from lack of supplies and equipment in the clinical environment or lack of service provision skills. However, in this evaluation, FP supplies and equipment were usually in place and providers generally had adequate knowledge and were confident about FP service

²¹ Only a few clinics had an insufficient number of providers working at the clinic.

provision (among the group available to be assessed during service delivery²²). Skills, on the other hand, were not as strong as they should have been, although counseling skills were good in all cadres (physicians, nurses, and auxiliary nurses). The lack of FP clients—and resulting infrequent application of FP skills—surely influenced the lack of clinical skill proficiency. In addition, providers were not incorporating IP standards in service delivery. Overall, IP knowledge and application of standards and practices were poor despite essential IP supplies (e.g., bleach) being available.

It is worth noting that many of the facilities visited had out-of-date copies of the *Texto de Referencia en Salud Sexual y Reproductiva*; therefore, it is perhaps not surprising that the guidelines and standards were not well known or applied among the providers assessed.

- ◆ **Recommendation:** Interviews and focus group discussions with current and potential clients living near selected health facilities should be conducted to assess the reasons for low use of MOH FP/RH services. These fora should be used to determine whether potential clients are nonusers of FP services or whether they are accessing contraceptive methods via other sources, such as pharmacies, NGOs, or the private sector. Also unknown is the number who are natural FP users.
- ◆ **Recommendation:** The importance of IP should be reinforced during training. It would be advisable to conduct an IP update for the NTC trainers.
- ◆ **Recommendation:** Copies of the second edition of the *Texto de Referencia en Salud Sexual y Reproductiva* need to be distributed to public sector health facilities.

How has the strengthened inservice training system been responding to FP/RH preservice education efforts? What should the role of the NTCs and the physician-nurse training teams be in supporting FP/RH preservice education efforts?

The inservice training system provided a solid base for the development of the preservice initiative launched in 1998. Because of their location in teaching hospitals affiliated with medical or nursing schools, the NTCs have provided a physical link between inservice training and preservice education. In addition, many of the NTC trainers are faculty or clinical preceptors. For example, several of the NTC trainers from La Paz also worked as faculty or clinical preceptors at the UMSA medical and nursing schools. This critical mass of clinical trainers familiar with the competency-based training approach (anatomic models, development of learning objectives, objective assessment of clinical skills) greatly facilitated the introduction of preservice activities at UMSA. This was true to a lesser extent in other cities (such as Trinidad, Cochabamba, and Sucre) where those NTC trainers also became key contributors to the curriculum revision process.

- ◆ **Recommendation:** More targeted training may have a stronger impact on the provision of FP/RH services. Instead of training all medical interns or all types of physicians, training should focus only on those providers who will provide FP/RH services.

²² Sixty-seven percent (or 486 out of 726 providers) who had been trained at one of the NTCs and who had continued working in the MOH system

- ◆ **Recommendation:** Training should focus on auxiliary nurses, especially in rural areas, because they are less likely to transfer and they assume many of the FP/RH responsibilities at the health posts. Preservice education interventions should place greater emphasis on auxiliary nurses.

CONCLUSION

An evaluation of 5 years of inservice training system efforts (from 1994 to 1999) in Bolivia demonstrated that inservice FP/RH training has been institutionalized throughout the country. JHPIEGO assisted the Bolivian health sector in establishing nine inservice NTCs, all of which are still functioning with almost all of the original physician-nurse training teams still in place. The inservice training system efforts have contributed to the expansion of FP/RH services throughout Bolivia. Building on the well established inservice training capacity have been efforts to strengthen preservice education and training for FP/RH at medical and nursing schools in Bolivia.

Recommendations from the evaluation emphasize the need for changes that would enhance the training system, including a training information system to assess training output and track trained providers. The evaluation also revealed the need for more targeted training to have a stronger impact on the provision of FP/RH services, as well as the importance of reinforcing IP during training. These recommendations, coupled with the solid training system already in place, should provide Bolivia with the necessary tools to continue to train providers in FP/RH effectively, as well as enable Bolivia to offer adequate FP/RH services to its population for years to come.

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APPENDIX A

Background on JHPIEGO's Work in Bolivia

In 1992, JHPIEGO began providing technical assistance to the Bolivia MOH to strengthen Bolivia's inservice FP/RH training system. JHPIEGO initially worked with the Pan American Health Organization and the MOH to strengthen five NTCs. As demand for training in FP/RH increased, the MOH asked JHPIEGO to support the development of four more NTCs. JHPIEGO collaborated with Pathfinder International in the development of two of the newer NTCs. The NTCs are located in the departmental maternity hospital of each departmental capital, with the exception of Pando in the Bolivian Amazon, which is sparsely populated (Pando's healthcare providers have been trained at the neighboring NTC in Beni). There are two centers in La Paz. The NTCs are staffed by 44 JHPIEGO-trained trainers who work in physician-nurse teams to provide competency-based clinical training in FP/RH. The training has been conducted for FP/RH service providers (including physicians, nurses, and auxiliary nurses) from both public sector health services and NGOs.

The NTC in the Hospital de la Mujer was established in 1995 to provide inservice FP/RH training to providers in the La Paz department. The Hospital de la Mujer is a reference and teaching hospital that trains medical and nursing students, interns, and residents from the UMSA. It has 70 obstetrics/gynecology beds and 16 neonatal incubators and attends approximately 5,000 births annually. The hospital also offers FP/RH services, including postpartum and postabortion FP. In total, 22 obstetricians/gynecologists staff the Hospital de la Mujer, 11 of whom are also professors at the UMSA medical school. Seven JHPIEGO-trained trainers make up the staff at the NTC in the Hospital de la Mujer, providing clinical FP/RH training to healthcare providers using a humanistic and competency-based training methodology. Participants use learning guides and checklists to standardize newly acquired clinical skills, working with anatomic models before coming into contact with clients. Training emphasizes other key elements of high-quality of care such as IP and IPC and counseling.

All of the NTCs utilize anatomic models and training manuals donated by JHPIEGO. In addition, JHPIEGO has supported the development of a standardized, national curriculum for the NTCs. DFID has provided support to the centers in the form of computers, other equipment, and funds for supervision activities. The NTC trainers supervise participants in their workplace at least once each year using instruments developed in collaboration with MotherCare and Pathfinder International.

NGOs that want to have their providers trained at one of the centers pay a small matriculation fee that is used for maintenance and improvements. The NTC at the Hospital de la Mujer recently used resources generated in this manner to establish a counseling room and to renovate the waiting room. The counseling room is staffed by a JHPIEGO-trained trainer and is used both to counsel FP/RH clients and to train providers in IPC and counseling. To improve quality of care throughout the hospital, the center's trainers worked with hospital authorities to develop and implement norms of nosocomial IP. The NTC at the Hospital de la Mujer also plays an important role in the training and evaluation of medical interns. In addition to a written examination, the interns rotate through a series of stations where they are evaluated by the NTC trainers on the following clinical skills: breast examination, pelvic examination, Pap smear, IUD insertion and removal, prenatal care, and postpartum care. Some stations have anatomic models for certain clinical skills evaluations (e.g., IUD insertion) while other stations have actual patients for the evaluations (e.g., prenatal care).

APPENDIX B

Timeline for the Evaluation

A multi-sectoral team of evaluators from the MOH and JHPIEGO worked together to finalize the methodology and data collection instruments and to conduct the evaluation. Tools and strategies from other JHPIEGO evaluations provided the base for this evaluation.

JHPIEGO staff and an evaluation consultant visited Bolivia in November 1999 to develop consensus for the evaluation and to determine training record availability for the sampling frame. The evaluation team also worked on development of the sampling frame and detailed methodology. During followup visits, the team worked with the MOH in identifying and locating trained providers.

In February 2000, JHPIEGO evaluation consultants (including a clinical training consultant) returned to Bolivia to define the sampling frame and begin logistics planning. The central MOH and departmental offices participated in logistics planning. Due to lack of complete lists and a registry of trained providers, determining the locations of trained providers was more problematic than anticipated. This phase of the evaluation took several months longer than expected, but was critical to the evaluation in terms of locating providers and assessing the institutionalization of training. In total, 563 trained providers were located and identified in the four study departments. The Sampling Frame section of this report provides a detailed description of this process.

Development of data collection instruments began in March 2000. Instrument content was based on training curricula and RH service delivery standards and was a collaborative effort among the Bolivia MOH, JHPIEGO/Bolivia, and an RH specialist from JHPIEGO/Baltimore.

During April 2000, the evaluation team worked with the MOH and JHPIEGO/Bolivia staff in the refinement of data collection instruments. The instruments were pretested in health facilities in the La Paz area and necessary revisions were made. A meeting with key stakeholders to review the evaluation design was held in La Paz. Departmental MOH authorities and training center staff assisted in identification and confirmation of provider contact information, and in notification of service providers who were to be evaluated.

Final data collection preparations were completed in May 2000. This consisted of completing preparations (including scopes of work for data collection team members and logistical preparations) and edits to the data collection instrument.

The list of data collection team members who were to carry out the data collection was finalized and approved in June 2000, as were all logistical aspects for conducting the 2-week evaluation course for the 30 data collectors.

A 2-week training course in evaluation methods was conducted in July 2000. The course focused on conducting performance evaluations and included a practical field component. Participants in the course included 30 data collectors and 10 departmental MOH representatives. Part of the course was devoted to group consensus on the content and wording of each data collection instrument. Edits and revisions were made during the 2-week period and the instruments were finalized by the end of the course. Data collection began immediately after the training course.

Field data collection took place over a 4week period in July and August 2000. Ten data collection teams were formed to gather data in the four study departments. Each team had a team supervisor, an interviewer, and an observer. The teams visited a sample of NCT-trained providers at their present service delivery sites to observe their work performance. During the 4 weeks, the evaluation coordinator visited each team to troubleshoot and provide technical support.

The data collection team members presented preliminary results to key stakeholders at the end of the field data collection period. Data review and followup quality control took place in Bolivia and at the JHPIEGO/Baltimore office.

Data entry, cleaning, synthesis, and analysis took place in Baltimore from September 2000 to January 2001. The data entry and cleaning phase was lengthy due to the large quantity of data collected on each provider and health facility.

In February 2001, a preliminary summary presentation highlighting the results of training effect, knowledge retention, and provider competency was prepared. In March 2001, the JHPIEGO Director of Research and Evaluation, Latin America and Caribbean Program Officer, and the evaluation consultant presented the results to the MOH, United States Agency for International Development, and JHPIEGO/Bolivia staff. A copy of these results was circulated for discussion and recommendations.

APPENDIX D

Distribution of Observations by Department, Cadre, and Skill Area along with Method of Skill Assessment (Client, Simulation with Model)

Table D1. Distribution of Observations by Department, Cadre, and Skill Area along with Method of Skill Assessment (Client, Simulation with Model)

| Departments by Cadre | FP/New User n=271 ^a | | FP/Followup n=108 | | Physical Examination n=113 | | IUD Insertion n=142 | | Antenatal Initial n=119 | | Antenatal Followup n=86 | |
|------------------------------|-----------------------------------|--------------|----------------------|-------------|-------------------------------|-------------|------------------------|--------------|----------------------------|-------------|----------------------------|------------|
| | Cli n=130 | Mod n=130 | Cli n=97 | Mod n=11 | Cli n=82 | Mod n=31 | Cli n=32 | Mod n=110 | Cli n=77 | Mod n=42 | Cli n=81 | Mod n=5 |
| La Paz | | | | | | | | | | | | |
| Physician | 19 | 15 | 17 | 0 | 43 | 6 | 18 | 41 | 41 | 16 | 44 | 1 |
| Nurse | 6 | 11 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 |
| Auxiliary Nurse | 28 | 24 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Potosí | | | | | | | | | | | | |
| Physician | 2 | 4 | 3 | 0 | 5 | 3 | 5 | 25 | 5 | 3 | 7 | 0 |
| Nurse | 12 | 20 | 6 | 3 | 2 | 8 | 0 | 5 | 1 | 7 | 1 | 1 |
| Auxiliary Nurse | 10 | 17 | 1 | 4 | 2 | 14 | 0 | 1 | 3 | 12 | 0 | 3 |
| Santa Cruz | | | | | | | | | | | | |
| Physician | 2 | 3 | 1 | 0 | 13 | 0 | 7 | 20 | 14 | 2 | 9 | 0 |
| Nurse | 10 | 25 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Auxiliary Nurse | 7 | 2 | 13 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beni | | | | | | | | | | | | |
| Physician | 4 | 0 | 0 | 0 | 16 | 0 | 2 | 17 | 12 | 0 | 18 | 0 |
| Nurse | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Auxiliary Nurse | 21 | 6 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Notes: Cli=Client; Mod=Model | | | | | | | | | | | | |

^a Data for FP/New User are incomplete.

APPENDIX E

Detailed Facility List: Supplies and Equipment Including Infection Prevention

Table F-1. Facility: Supplies and Equipment

| |
|--|
| Adequacy of Supplies and Equipment |
| Common areas 79% Consulting area 84% Overnight stay areas 52% Labor and delivery area 50% Surgery area 18% |
| Space and Physical Areas: Is There Sufficient Space in the Waiting Area |
| Seats 94% Is there a separate waiting area 86% |
| Adequacy of Counseling Area |
| Is there an adequate and private area available for counseling 65% Chairs for providers and clients 76% Audiovisual materials 66% Samples of FP methods displayed 67% Brochures, flyers, other printed materials 66% |
| Record Keeping |
| Medical archives/records are stored in a locked cabinet or file 93% Are these archives/records available to clinic staff 92% |
| Adequacy of Basic Instruments/Clinical Equipment |
| Stethoscope 96% Prongs 92% Stethoscope 95% Measuring tape 96% Speculum 96% Uterine Sound 84% Tenaculum 89% Ring forceps 87% Scissors 92% Curtains or equivalent 68% Sterile or high-level disinfected gloves 66% Cleaning gloves (housekeeping) 83% Cotton/gauze 93% Antiseptic solution 89% 70% alcohol solution (disinfectant) 84% Ayre spatulas 86% Instrument holder/container 89% Side cart/instrument table 89% |
| Does the Examination Room Have Basic Equipment Needed to Provide Adequate RH Services |
| Examination table 96% Light source 86% Instrument cart 75% A place to wash hands in or close to the examination room 82% A table or storage cabinet for materials and supplies 74% A receptacle for decontamination solution 70% A receptacle for waste 83% Curtains or something similar for privacy 63% |

| |
|---|
| Does the Facility Have Basic Medicines and FP Supplies (Methods) |
| Analgesics 95% Diuretics 94% Iron 96% Metronidazole 87% Antibiotics 95% |
| FP Supplies IUDs 88% Condoms 86% Oral contraceptives 89% Injectables 71% |
| Printed Educational Materials |
| Brochures 65% Informational fact sheets 72% Standard clinic forms 78% |

Table F-2. Facility: Infection Prevention Standards and Practices

| |
|---|
| Water Supply |
| Running water 90% Other sources of water 26% |
| Handwashing: Is There a Sink or a Way to Wash Hands in the Following Areas |
| Examination room 86% Treatment room 80% Immunization room 71% Bathrooms 89% Cleaning area/processing area 65% Is there: <ul style="list-style-type: none"> • Soap 96% • Towels 90% (but infrequent handwashing) Housekeeping staff uses cleaning gloves 83% |
| Needle Disposal |
| Are there puncture-proof containers 54% Are needles disposed of immediately after use in the puncture-proof containers 60% |
| Decontamination or Sterilization of Instruments |
| The person in charge of decontaminating instruments knows the correct concentration to make the decontamination solution 57% The adequate and standard formula for decontamination solution is used 49% |
| Use of IP Standard for Cleaning Used Instruments before Autoclaving: Are They Washed with |
| Water 94% Soap or detergent 98% Scrub brush 96% Cleaning gloves 89% |
| Is the Autoclave Used Correctly (According to Bolivia MOH Standard) |
| Cleaned items are soaked and boiled for 20 minutes 39% Items are left to soak in the appropriate chemical formula of sterilization solution 30% Articles are sterilized at appropriate temperature and length of time (listed on form) 65% Items are placed in the autoclave for appropriate length of time, temperature, and pressure 42% |
| Waste Disposal |
| Contaminated waste is disposed of/is separated from noncontaminated waste 50% Contaminated waste is buried or burned 64% |