

**An Assessment of the Quality of Postabortion Care  
Services in Nepal:  
Training and Service Delivery Perspectives**

**JHP-12**

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## ABBREVIATIONS AND ACRONYMS

ADRA	Adventist Development and Relief Agency International
ANM	Auxiliary nurse-midwife
CSD	Central supply department
D&C	Dilatation and curettage
ER	Emergency room
FHD	Family Health Division
FHI	Family Health International
FP	Family planning
HIV	Human immunodeficiency virus
HLD	High-level disinfection
HMG/N	His Majesty's Government of Nepal
HRDO	Human resource development officer
IP	Infection prevention
IPC	Interpersonal communication
IUD	Intrauterine device
MOH	Ministry of Health
MVA	Manual vacuum aspiration
NHTC	National Health Training Center
NSMP	Nepal Safer Motherhood Project
OJT	On-the-job training
OPD	Outpatient department
OT	Operating theatre
PAC	Postabortion care
RH	Reproductive health
SN	Staff nurse
TT	Tetanus toxoid
TUTH	Tribhuvan University Teaching Hospital
USAID	United States Agency for International Development
WHO	World Health Organization

## EXECUTIVE SUMMARY

It is widely recognized that complications arising from incomplete abortions, both spontaneous and induced, are a major cause of maternal mortality and morbidity in Nepal. In May 1995, the Family Health Division (FHD) in the Ministry of Health of His Majesty's Government of Nepal established postabortion care (PAC) services with technical assistance from JHPIEGO, EngenderHealth (formerly known as AVSC) and Family Health International. The key elements of PAC services are: emergency treatment of any potentially life-threatening complications (e.g., shock, sepsis), pre-procedure counseling and treatment of incomplete abortion using manual vacuum aspiration (MVA), post-procedure family planning (FP) counseling and services, and links between emergency PAC services and other reproductive health (RH) care (PAC Consortium 1995). Tested as a pilot program in Maternity Hospital in Kathmandu, PAC services have been expanded to other hospitals in the Kathmandu valley and surrounding regions. The reach of PAC services continues to grow, but hospitals must fulfill a number of criteria before becoming established PAC sites. Besides Maternity Hospital (currently the only training site for new PAC service providers), eight other hospitals at the time of the study were considered to be established PAC service sites, and six more were in the process of becoming established.

To examine the quality of PAC services in Nepal, a performance evaluation (a level-three training evaluation) was jointly carried out by JHPIEGO and FHD from December 2000 to April 2001. The study had two primary objectives:

- ◆ To assess the ability of trained PAC service providers to provide quality PAC services at their workplace
- ◆ To assess the capacity of the established PAC service sites to provide quality PAC services

The study examined change in job performance and experience of trained PAC service providers and assistants from the nine established PAC sites, and determined whether or not these sites actually met the national criteria for an established PAC site. The research team conducted structured interviews with 9 PAC supervisors, 22 PAC service providers and 19 PAC assistants. Using skills checklists, the research team observed 22 PAC service providers (16 of whom were also interviewed) conducting the MVA procedure with FP counseling sessions, 8 of them with clients and 14 with the ZOE<sup>®</sup> anatomic model. PAC facilities were also assessed.

Competency of PAC service providers was measured in two ways:

- 1) Through a "critical steps competence score"—27 steps from the PAC service provider observation checklist that were considered critical tasks in the delivery of PAC services and for which a total score was tallied
- 2) Through a "component competence score"—created by grouping steps from the PAC service provider observation checklist that pertained to similar PAC skills or areas into components. The number of steps performed correctly within each component (range of 1 to 13 items for different components) was calculated to create 15 separate component scores.

The group mean "critical steps competence score" for the trained PAC nurse providers observed was 20.7, with a range of 14 to 26 out of a possible 27, while for trained PAC physician providers the group mean score was 18.9, with a range of 6 to 25. The group mean for all providers was 19.4. More than 75% of trained PAC providers (nurses and physicians) were competent in 5 of the 15 PAC components: triage, initial infection prevention (IP), MVA

procedure, client comfort ensured and post-procedure IP. Infection prevention practices were very good overall, an encouraging finding.

The evaluation findings demonstrate that PAC services are in place and functioning at nine hospitals (of various levels), providing access to PAC services for women living in and outside the Kathmandu valley. At busy PAC hospitals, the operating theatre (OT) physicians and nurses benefited from a reduction in their workload when PAC providers (especially nurses and auxiliary nurse-midwives) and assistants offered PAC services in the PAC unit or minor OT. There was also anecdotal evidence that PAC services contributed to decreased hospital stays and less use of general anesthesia leading to cost savings for clients, although in some cases PAC clients chose to stay overnight because their homes were far away. Because of the PAC services, clients at participating sites can now receive the MVA procedure (which is safer, faster and less traumatic than dilatation and curettage [D&C]) and FP counseling and referral to other RH services as needed. As a result of the FP counseling, the number of clients with incomplete abortion accepting a contraceptive method immediately following treatment increased (although accurate figures were not available in the logbooks reviewed).

Results indicate that PAC services in Nepal would benefit from improvements in scheduling, staffing and overall case management. PAC service hours were extremely limited, and waiting times were often too long. PAC units typically were not used during out-of-service hours; instead, clients were sent to the OT. The PAC units were generally underutilized, and could be used for other purposes (minor procedures) as well as for out-of-service hours PAC. In addition, many clients eligible for MVA were still getting D&C (in the OT) instead of MVA, and, as a result, they were not receiving FP counseling and methods or RH referral services. Greater clarity is needed with regard to criteria for MVA or D&C and out-of-service hours emergency services (i.e., what constitutes an emergency and how cases are managed).

Relationships between physicians and nurses were sometimes authoritarian in nature, with physicians in control and nurses in a more subservient role and unable to fulfill their duties as PAC providers. In some cases, there were other staff problems that needed to be resolved, such as excessive control over PAC services and equipment by key/senior nursing staff.

Record keeping was generally poor, making it difficult to establish reliable statistics. It was also noted that, in a few situations, IP still needed to be improved. There were also indications that PAC providers were not using pain management appropriately (including use of local anesthesia and analgesics).

Key recommendations for PAC service delivery include the following:

- ◆ Facilitating a 24-hour service
- ◆ Strengthening the role of nurses
- ◆ Reinforcing PAC provider skills through followup and monitoring/supervision visits
- ◆ Improving record keeping

Systems for storing and accessing supplies (e.g., MVA kits, FP supplies) should be reviewed so that supplies are available to providers at all times. More providers should be trained so that sites can offer longer hours of service and ensure that there is always a trained PAC provider on duty. In particular, more nurses need to be trained to become the primary providers for routine PAC cases. PAC training for nurses should be lengthened to include an emphasis on FP counseling, the administration of paracervical block and breast and pelvic examinations. Followup visits should be conducted 3 to 6 months after training to support the newly trained

nurses. Followup visits by a trainer would also improve the overall management of PAC services (e.g., staffing, access to and upkeep of FP supplies, systems for monitoring/feedback). The importance of record keeping should be emphasized through supervisor support and coaching in recording standard information in the logbooks. This record keeping should then be used for regular monitoring of the facility's PAC services as well as for quality assurance reviews and aggregation of data at the national level for PAC services performance.

Additionally, PAC providers at all sites should be supported through followup and monitoring/supervision visits that employ coaching in the PAC service component areas where their performance was inadequate: initial interpersonal communication/counseling, FP history/counseling, physical examination, client informed, examination of evacuation contents, post-procedure care and client discharge.

PAC services in Nepal have demonstrated impressive progress and expansion. Continued expansion of PAC training and services should include: strengthening of current PAC sites through site-based updates and coaching; conducting regular monitoring visits; increasing the number of district-level hospitals that provide PAC services (with priority given to those that are committed to supporting provision of services by nurses); establishing additional training sites outside the Kathmandu valley; and promoting awareness and outreach to facilities and communities in remote areas.

# An Assessment of the Quality of Postabortion Care Services in Nepal: Training and Service Delivery Perspectives

## INTRODUCTION

In May 1995, the Family Health Division (FHD) in the Ministry of Health (MOH) of His Majesty's Government of Nepal (HMG/N) established postabortion care (PAC) services with technical assistance from JHPIEGO, EngenderHealth (formerly known as AVSC) and Family Health International (FHI). Tested as a pilot program in the Maternity Hospital in Kathmandu, PAC services have since been expanded to other hospitals in the Kathmandu valley and surrounding regions. PAC services continue to be established elsewhere, but hospitals must fulfill a number of criteria before becoming PAC sites.<sup>1</sup> Besides Maternity Hospital (currently the only training site for new PAC service providers), eight other hospitals were considered to be established PAC service sites at the time of the study, and six more were becoming established.

This report documents the MOH's PAC services to date, and presents the findings from an evaluation conducted with the following two objectives:

- ◆ To assess the ability of trained PAC service providers to provide quality PAC services at their workplace
- ◆ To assess the capacity of the established PAC service sites to provide quality PAC services

Insight gleaned from this evaluation will help to guide the expansion of PAC services, both in terms of staff training and in the provision and maintenance of physical facilities. The goal of the MOH's PAC strategy is to reduce the number of unwanted pregnancies and decrease maternal mortality and morbidity by bringing quality PAC services, including family planning (FP) counseling within the reach of women throughout Nepal. To achieve these goals, PAC services must be available at the most basic healthcare sites possible, ensuring that PAC services are at least available at the district hospital level, and that they can be provided by nurses.

## BACKGROUND

Complications arising from incomplete abortions, both spontaneous and induced, are a major cause of maternal mortality and morbidity in Nepal. It is estimated that 15–30% of maternal mortality is a result of ineffective treatment of these complications (Pathak et al 1998, Thapa, Thapa and Shrestha 1992). In addition, 40% of women with postabortion complications suffer from morbidity such as infertility and chronic pelvic pain (McIntosh and Tietjen 1995). Thus, there is a clear need for a PAC strategy in Nepal that can manage the immediate physical problems, and provide FP services to ensure that women are able to control their fertility in the future. According to the 1996 *Nepal Family Health Survey*, 31% of women who say they want to space or limit the number of children they have are not using FP (Pradhan et al 1997). This implies that most women are open to FP, but do not have access to adequate FP information or services.

In May 1995, the first PAC service site was established at Maternity Hospital in Kathmandu after extensive planning and negotiations with hospital management and staff, and collaboration

<sup>1</sup> See **Expansion of Postabortion Care Services** under the **BACKGROUND** section for the list of hospitals and the criteria for establishment.

between FHD, JHPIEGO, EngenderHealth, FHI, the United States Agency for International Development (USAID) and other PAC stakeholders. From the outset, it was agreed that strong links should be established between PAC and other reproductive health (RH) services, particularly FP. Cooperation amongst staff in other departments such as emergency admissions, operating theatre (OT) and obstetrics and gynecology wards was also critical because all would play a role in the management of emergencies, particularly outside normal service hours.<sup>2</sup>

## Elements of Postabortion Care

PAC services comprise the following three elements:

- ◆ Treatment of abortion complications, including incomplete abortion and any potentially life-threatening conditions such as shock, heavy bleeding and sepsis, using manual vacuum aspiration (MVA) when possible or dilatation and curettage (D&C)<sup>3</sup> for those clients who do not meet the criteria for a MVA procedure
- ◆ FP counseling and services
- ◆ Links between PAC services and other RH services (PAC Consortium 1995)

In Maternity Hospital a PAC unit was established adjacent to the emergency admissions unit. It functions as an independent unit, operating 24 hours per day (it was open only until 2pm initially, and open until 4pm at the time of the study)<sup>4</sup>, and consists of the following:

- ◆ MVA procedure room
- ◆ Instrument processing area, including facilities for handwashing
- ◆ Pre- and post-procedure waiting and recovery area<sup>5</sup>
- ◆ Toilet

## Training

The PAC site at Maternity Hospital was also established as a training unit, initially for staff at the hospital and later for those from other hospitals. Currently, it is the only PAC training site in the country. At the time of the study, a total of 60 PAC physician providers, 20 PAC nurse providers and 62 PAC assistants had undergone training there. Training is competency-based and involves practice with the ZOE<sup>®</sup> anatomic model and procedures with clients. Trainers and participants jointly manage the client caseload during the training period. Groups of four people are trained together, each group consisting of two teams of one provider and one assistant from a site. In addition to learning the MVA procedure and FP counseling and interpersonal communication (IPC) skills, participants are also taught basic infection prevention (IP) procedures. IP is considered a vital part of PAC services, and its inclusion has the potential to help increase awareness of the importance of IP in other areas of the hospital. The training is six days long for physicians and eight days long for nurses. PAC service assistants attend the

<sup>2</sup> For further details on the establishment of the PAC program in Nepal, refer to JHPIEGO reports, *Establishing Postabortion Care Services in Nepal* by Malla K et al 1996 and *Postabortion Care in Ambulatory Settings: The PAC Program in Nepal* by Hughes R and A MacDonald Peniston 1997.

<sup>3</sup> Although D&C is the more commonly used term internationally, in Nepal, the term most often used is “D&E.”

<sup>4</sup> Since completion of this study, Maternity Hospital extended its PAC service delivery hours again to provide 24-hour coverage.

<sup>5</sup> Assessment is done in the general admission room.

training for the same duration as the cadre of provider they are accompanying. Using a checklist, trainers assess participants for competence in PAC service provision both with the ZOE anatomic model and with clients prior to completion of the training.

Initially, physicians were trained as PAC service providers, which meant that they administered the MVA procedure, and nurses were trained as assistant providers to provide support to the physician, particularly in the administration of “verbicaine” (verbal anesthesia) and FP counseling and services. In 1999, however, the MOH agreed that staff nurses (SNs) could also be trained as PAC service providers, and in April 1999 the first training of two senior SNs was conducted. Selection criteria for training nurse providers are: 1) only SNs can be trained as providers and 2) the selected nurses should be working in the maternal care emergency unit of the hospital so that they have opportunities for managing emergency life-threatening cases in other contexts.

### Expansion of Postabortion Care Services

PAC services were introduced to Tribhuvan University Teaching Hospital (TUTH) in 1997. Since then, PAC services have been established in 13 more hospitals, for a total of 15. Sites are selected based on their expressed interest, commitment and ability to meet the criteria defined by HMG/N. (See text box.) Of these 15 sites, nine are now considered to be established PAC service sites, although there was previously no formal process for confirming this establishment. The remaining six sites are at different stages in the process, with some regularly providing PAC services. Two or more staff from each of these hospitals have received PAC training. **Table 1** lists the 15 hospitals and their start-up dates. **Figure 1** maps the locations of the nine established sites.

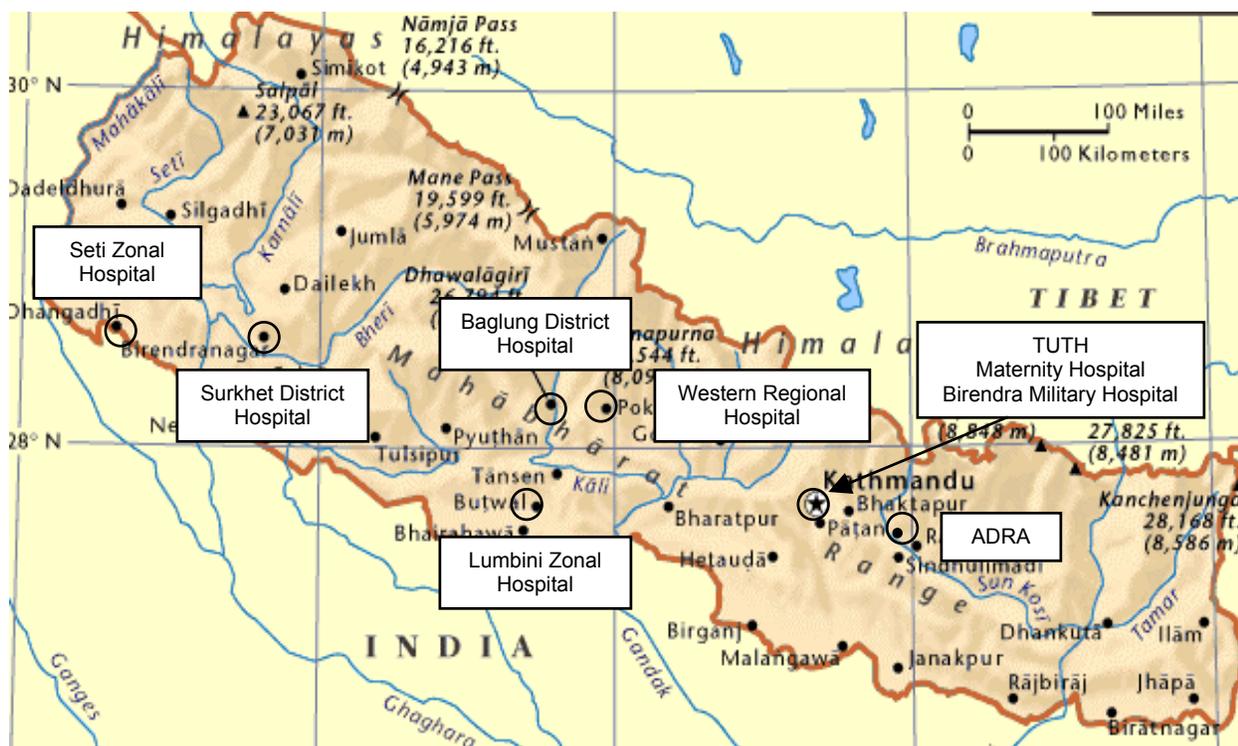
#### Criteria for New Postabortion Care Site Selection

1. Number of incomplete abortion cases admitted to the hospital
2. FP counseling and services provided to the incomplete abortion cases
3. Proper maintenance of IP practices
4. Availability of required infrastructure at the facility

**Table 1. Established and Developing Postabortion Care Service Sites**

PAC Service Site	Year
<b>Established Sites</b>	
1. Maternity Hospital, Kathmandu	1995
2. TUTH, Kathmandu	1997
3. Western Regional Hospital, Pokhara	1997
4. Adventist Development and Relief Agency International (ADRA), Banepa	1998
5. Birendra Military Hospital, Kathmandu	1999
6. Baglung District Hospital	1999
7. Surkhet District Hospital	1999
8. Seti Zonal Hospital, Kailali	1999
9. Lumbini Zonal Hospital, Butwal	2000
<b>Developing Sites</b>	
10. Bheri Zonal Hospital, Nepalgunj	2000
11. Bharatpur District Hospital	2000
12. Dhading District Hospital	2000
13. Hetauda District Hospital	2000
14. Bhaktapur District Hospital	2000
15. Narayani Zonal Hospital, Birgunj	2000

**Figure 1. Locations of the Nine Established Postabortion Care Service Sites**



Following the selection of a new site, its development and establishment as a PAC service site occurs in three stages:

- ◆ Initial site assessment to establish the local needs and potential
- ◆ Training for service providers and assistants at Maternity Hospital
- ◆ Followup visits to provide clinical support and to discuss management and service delivery issues<sup>6</sup>

The PAC team considers a facility an established site if the hospital staff manages the PAC services and provides MVA/FP services on a regular basis. A site is considered a developing site if the needs assessment and training of the staff have taken place and physicians/nurses are providing services, but the PAC team has not yet been able to conduct a supervisory visit or the supervisory visit was not satisfactory.

### **Provision of Equipment and Supplies**

Very little specialized equipment is required for the provision of MVA. Two MVA kits (instrument kits consisting of plastic cannulae and plastic syringes) are supplied to each hospital after staff training in PAC. The Nepal Fertility Care Center recently took responsibility for the provision of kits to trained providers. Each PAC site, through its central pharmacy, is expected to ensure that the PAC unit<sup>7</sup> is properly equipped with general supplies and medications, and that high-level disinfection (HLD) or sterilization procedures are practiced. The site is also expected to ensure the availability of the full range of contraceptive methods, preferably in the PAC unit, and to maintain links with the local FP clinic.

### **Rationale for the Study**

Since PAC services were established at Maternity Hospital in 1995, there have been considerable improvements in services for women presenting with incomplete abortion, including improved access to FP and cost savings for the hospital through a reduction in the bed occupancy rates (Malla et al 1996). On the basis of these initial good results, the expansion of the services to 14 other hospitals both inside and outside the Kathmandu valley was initiated. A study was needed to examine the quality of PAC services provided by the nine established PAC sites both in terms of staff skills and site resources. The information will facilitate the establishment of additional PAC service sites and the training of future PAC staff, as well as improve services at the existing sites. In addition, the results could be used to help identify opportunities for decentralizing PAC training to regional PAC service delivery sites.

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<sup>6</sup> According to the guidelines provided in the JHPIEGO strategy paper *Establishing Postabortion Care Services in Low-Resource Settings* by Ghosh A, ER Lu and N McIntosh 1999, which was written well after the Nepal PAC program was initiated, these visits should be done prior to training providers at the site in PAC service provision. Please request this paper from the JHPIEGO/Baltimore office for more details about how to establish a PAC program.

<sup>7</sup> The "PAC unit" is the area of the hospital designated for the delivery of MVA services, FP counseling and RH referrals for clients suffering from incomplete abortion. It usually consists of a waiting area, a procedure room, a counseling room and a recovery area (which may double as the counseling room). At some sites, the procedure room is only used for MVA, while at others the procedure room also serves as a minor OT for carrying out other procedures. D&Cs are not carried out in the PAC unit, but in the OT and clients are not given FP counseling or RH referrals. The PAC unit is usually located near, or adjacent to, the gynecology or labor wards. At some sites, the PAC unit is called the "MVA unit," but for the sake of consistency, only the term "PAC unit" will be used in this report.

## **METHODOLOGY**

### **Purpose and Objectives**

The purpose of this study was to evaluate the services provided at the nine established PAC service sites throughout Nepal.

The study had the following major objectives:

- ◆ Assess the ability of trained PAC service providers to provide quality PAC services at their workplace
- ◆ Assess the capacity of the established PAC service sites to provide quality PAC services

### **Evaluation Questions**

Based on the objectives listed above, the following evaluation questions were specifically investigated:

1. Are trained PAC service providers and assistants performing to standard?
2. Are PAC service delivery sites equipped with the supplies and equipment required to provide quality services?
3. Is the management of PAC services, including service hours, fees and staffing levels, appropriate and acceptable?
4. Are logbooks and client records regularly and accurately maintained?
5. Are hospital administrators and other hospital personnel supportive of PAC services?
6. Do hospital staff have any recommendations for improving PAC services?

### **Study Design**

JHPIEGO conducted a level-three training evaluation to examine on-the-job performance of trained PAC service providers and assistants at their posts after training. PAC supervisors were also interviewed, and the facilities and record keeping at each site were assessed. The major areas investigated were:

- ◆ Competence of service providers and assistants
- ◆ Adequacy of facilities and supplies
- ◆ Attitudes of the staff toward the provision of PAC services
- ◆ Management of PAC services

### **Sample**

Nine established PAC service sites were included in the evaluation study. All PAC-trained staff members available at the sites at the time of each visit were interviewed (see **Appendix A** for the complete status of the trained PAC providers at the nine sites). On the days the research team was at the site, they observed any PAC clients as they received FP counseling, RH referrals and the MVA procedure. D&C procedures were not observed, and those clients did not receive FP counseling or RH referral services.

## Data Collection Instruments

The research team conducted structured interviews, observations and supply and record audits using a total of three interview guides and three checklists<sup>8</sup> as shown in **Table 2**.

**Table 2. Data Collection Instruments**

Instrument	Topics Covered
Interview guide for the supervisor of PAC services	PAC service provision, staff performance and supervision, community linkages, future plans for PAC services
Interview guide for PAC service providers	PAC client load and flow, PAC clinical procedures, job expectations and performance feedback, counseling and verbal support, client supervision
Interview guide for PAC assistants	Similar to the service provider interview guide with some minor changes to reflect the difference in roles
Observation checklist for PAC providers and assistants	MVA procedure and FP counseling and services
Facility assessment checklist	PAC physical facilities, IP practices, PAC client flow, FP counseling and services available in PAC area, inventory of supplies and equipment
Record keeping and reporting checklist	Monthly PAC admissions, PAC complications, PAC client profile and FP acceptance

The research team adapted the observation checklist from the checklist used in the National Health Training Center (NHTC) PAC training courses. The facility assessment checklist included a rating system that was adapted from the MOH's Quality of Care Management Centre (which has now assumed national oversight and management of PAC services across the country, among several other health initiatives such as the national IP training program).

In addition to using the instruments described above, the research team held unstructured interviews with staff to gain a fuller picture of the local situation through their comments and observations.

## Data Collection

The research team for the study was largely drawn from the existing pool of qualified PAC trainers at hospitals in Kathmandu. Other members came from the JHPIEGO/Nepal office, the FHD of the MOH and the JHPIEGO/Baltimore office.<sup>9</sup> First, the research team met to review and revise the checklist for observing PAC skills, including FP counseling and the MVA procedure. The team then operationalized the original list of criteria for an established PAC site (listed in the text box below), developed by PAC stakeholders in Nepal prior to the evaluation, to create indicators for the evaluation study. (See **Appendix B** for the list of indicators developed by the research team for each criterion.) Next, the team developed and jointly reviewed a range of data collection instruments for use with supervisors, providers and assistants at the nine established PAC sites.

<sup>8</sup> Copies of these forms can be obtained from the JHPIEGO/Nepal or JHPIEGO/Baltimore office on request.

<sup>9</sup> The clinical evaluators on the research team were Dr. Kamlesh Giri (JHPIEGO/Nepal), Dr. Sabitri Kishore (consultant), Dr. Mita Singh (TUTH), Dr. Rajshree Jha (TUTH), Dr. Neeva Ojha (Maternity Hospital), Dr. Mukunda Sharma (Maternity Hospital), Ms. Maiya Manandhar (Maternity Hospital) and Ms. Shanta Pokhrel (FHD). Other members of the team were Dr. Sue Brechin and Ms. Barbara Rawlins from JHPIEGO/Baltimore and Ms. Cherry Bird, consultant to JHPIEGO/Nepal. Parmanand Bhatta, a local consultant, provided data entry support.

All data collection instruments were pre-tested at one of the developing PAC service delivery sites, Bheri Zonal Hospital in Nepalgunj. As part of the pre-test, several PAC providers and assistants were interviewed, supplies and equipment were inventoried, and one physician and one SN were observed providing PAC services with the ZOE anatomic model. Revisions to the data collection instruments were subsequently made.

The research team was divided into smaller teams of two or three evaluators that visited each of the nine established PAC service delivery sites. The PAC services coordinator from FHD, a nurse, accompanied the team on some of the visits. The visits were carried out from late December 2000 to early March 2001. During the visits, which lasted two to three days, hospital staff were interviewed and clinical procedures were observed with clients or with the ZOE model if there were no clients. Records and facilities were also assessed.

## Data Analysis

The research team constructed two different measures of provider competence using results from the observation checklist. First, from the PAC service provider observation checklist used in the evaluation, 27 steps were designated as “critical steps” by the research team. (See **Appendix C** for a list of the critical steps.) Each step was assigned a value of “1” if performed correctly. If not, it was assigned a value of “0.” The total number of critical steps performed correctly for each provider was tallied to create a “critical steps competence score.” Thus, the total possible score a provider could achieve was 27 if s/he performed every critical step competently. Mean scores were calculated for all providers and separately by cadre. Providers were considered “competent” if they performed at least 90% of the steps correctly.

The research team created a second measure of provider competence by grouping steps from the observation checklist that pertained to similar PAC skills or areas into components (See text box for components.). Every step from the checklist was assigned to one of these 15 components. The number of steps within in each component ranged from 1 to 13. (See **Appendix D** for a listing of the 15 components and their steps.) Each step was assigned a value of “1” if performed correctly. If not, it was assigned a value of “0.” For each provider, the number of steps performed correctly within each component were summed to create an aggregate “component competence score” for each component. The mean scores for each component area were then computed for the entire group of providers and separately by cadre. Providers were

### Criteria for Established PAC Service Sites

- The site receives at least 5 to 8 cases of incomplete abortion per month.
- The physicians as well as the nurses are trained and qualified providers of MVA.
- The procedure room is clean, and standard practices of IP are carried out.
- MVA instrument processing is performed following the principals of the instrument processing technique.
- Discussion about FP and choosing a method is held with the client prior to and during the procedure. The client receives the FP method of her choice.
- The MVA and FP record keeping system is accurate and specific.
- The client receives MVA service immediately or the next day if she is not in emergency condition.
- The hospital staff manages the entire PAC program and provides PAC services on a regular basis with some assistance from the government.

### Fifteen Components of PAC Services

- Initial IPC/counseling
- Triage
- Initial history
- FP history/counseling
- Initial IP
- Physical examination
- Client informed
- MVA preparations
- MVA procedure
- Evacuation examined
- Comfort ensured
- Post-procedure care
- Post-procedure IP
- Record keeping/reporting
- Client discharge

considered “competent” in a component if they performed at least 80% of the steps in a component correctly.<sup>10</sup> Other findings were analyzed by calculating simple frequencies.

### **Limitations of the Study**

Given the low PAC caseload at most of the sites visited and the short duration of time the research team was present at each site, many MVA procedures and FP counseling sessions were observed with the ZOE model. This use of the ZOE model made it more difficult to assess accurately how PAC providers and assistants communicate with PAC clients and perform certain skills and record keeping tasks. Moreover, in some cases key providers or other staff were on leave and unavailable to participate in the study.

In addition, abortion can be a sensitive topic in Nepal because it is an illegal procedure. It is possible that when evaluators were interviewing PAC providers and assistants about their attitudes toward women who seek out illegal, unsafe abortions, the providers and assistants simply reported what they thought was “correct” or the evaluator wished to hear.

The poor quality of the record keeping meant that the research team was unable to establish accurately the percentage of PAC clients who accepted FP methods or if PAC services were being provided appropriately to all clients who met the MVA criteria during normal service hours. It was clear that many clients who met the MVA criteria during out-of-service hours were given D&Cs, but once again the record keeping for this procedure was also very poor.

Lastly, this study did not interview PAC clients and thus lacks their perspective on the quality of the services received and their overall level of satisfaction, important for having a complete understanding of how well the services were functioning.

## **FINDINGS**

### **Characteristics of the Study Sample**

The nine established PAC service delivery sites included in the study consisted of 4 national-level hospitals in the Kathmandu valley, 2 zonal hospitals, 2 district hospitals and 1 regional hospital. Four out of the 9 sites had trained nurses working as PAC providers. One site had no trained PAC assistants working in the PAC unit because the two former PAC nurse assistants had been trained to be providers. One site had no trained PAC physicians because there was only one physician at the facility and it would have been difficult for him to be away from the hospital the 5 to 6 days required for training. Also, the low rate of per diem does not encourage physicians to come into Kathmandu for an extended period. This physician was very supportive of PAC, however, and was happy to allow the nurse provider to do MVA with routine cases. Generally, he only took the cases where there were complications, and he always performed D&C.

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<sup>10</sup> A higher standard, or cutoff point (90%) was used for the “critical steps competence score” because failure to perform these steps could compromise the safety of the procedure and the client’s health.

The study sample from the nine sites included:

- ◆ Nine PAC supervisors<sup>11</sup> interviewed: 4 were trained PAC service providers and 5 were not
- ◆ Twenty-two PAC service providers interviewed: 14 trained physicians, 2 untrained medical students and 6 trained staff nurses (SNs) interviewed (Sixteen of these providers were also observed providing PAC services with the ZOE model or clients – 11 trained physicians, 4 trained staff nurses and 1 untrained medical student.)
- ◆ Twenty-two PAC service providers observed with the ZOE model or clients (Five of these providers were not interviewed – 3 ANMs, 1 untrained physician and 1 trained physician.)
- ◆ Nineteen trained PAC assistants (1 assistant matron, 7 SNs and 11 auxiliary nurse-midwives [ANMs]) interviewed

The trained PAC physician providers included in the study were trained at different times between April 1997 and September 2000. PAC nurse providers did not begin to be trained until March 1999, after the FHD expressed their support to NHTC for allowing nurses to perform MVA. The nurse providers included in the sample were trained in different groups from April 1999 through June 1999. The PAC assistants who participated in the study were trained between November 1997 and July 2000. **Table 3** below presents details of the study sample.

**Table 3. Summary of Postabortion Care Staff Included in the Sample**

Staff Interviews				Provider Observations	
Hospital Name and Location	PAC Supervisors	PAC Providers	PAC Assistants	Client	ZOE Model
Maternity Hospital, Kathmandu	1 physician	6 physicians 2 medical students 1 SN	1 assistant matron 1 SN** 1 ANM	3 physicians 1 SN	4 physicians 1 medical student
TUTH, Kathmandu	1 physician*	3 physicians	1 SN		2 physicians
Western Regional Hospital, Pokhara	1 physician	2 physicians	3 SNs	1 physician*	
ADRA, Banepa	1 physician*	1 SN	1 SN**		1 SN
Birendra Military Hospital, Kathmandu	1 physician	1 physician	1 SN		1 physician
Baglung District Hospital, Baglung	1 physician*	1 SN***	5 ANMs	1 ANM****	1 SN 2 ANMs****
Surkhet District Hospital, Surkhet	1 physician*	1 SN	1 ANM	1 SN	
Seti Zonal Hospital, Kailali	1 physician*	1 physician 2 SNs	2 ANMs		2 SNs
Lumbini Zonal Hospital, Butwal	1 physician	1 physician	2 ANMs	1 physician	
TOTAL	9	22	19	8	14

\*Physician who did not attend a PAC training course at Maternity Hospital.

<sup>11</sup> “PAC supervisor” is not an official position but rather an informal position usually held by a relatively senior physician at the PAC site who agreed to take on management responsibilities with respect to PAC service delivery.

<sup>12</sup> “PAC supervisor” is not an official position but rather an informal position usually held by a relatively senior physician at the PAC site who agreed to take on management responsibilities with respect to PAC service delivery.

\*\*SN who was trained as a provider, but was interviewed as an assistant because she performed both roles.

\*\*\*This SN was transferred to a different ward and no longer had the opportunity to provide services.

\*\*\*\*ANM who worked as a PAC service provider but was trained as a PAC assistant.

Twenty-two MVA procedures and FP counseling sessions were observed at the nine sites, 8 of them with clients and 14 with the ZOE model. PAC assistants, providers or both conducted FP counseling. Twelve physicians, 6 SNs, 3 ANMs and 1 medical student performed the MVA procedures observed. All of the providers observed, with the exception of one trained physician, were female.

Detailed findings about the PAC services provided are summarized below under the six research questions from the **Methodology** section.

## 1) Are Trained Postabortion Care Service Providers and Assistants Performing to Standard?

The following sections discuss the relevant evaluation findings:

- ◆ Providers' Attitudes and Approach Toward Clients
- ◆ Triage, Treatment Regimens and Waiting Times
- ◆ Privacy and Informed Consent
- ◆ Pain Management and Post-Procedure Steps
- ◆ Counseling Services
- ◆ Observed Competence in PAC Service Provision
- ◆ Referral Practices
- ◆ Incomplete Abortion Caseload and Implications for Competence
- ◆ Reported FP Acceptance Among PAC Clients
- ◆ Performance Expectations
- ◆ Training Effectiveness

### ***Providers' Attitudes and Approach Toward Clients***

Several open-ended questions pertaining to providers' perceptions of PAC clients' concerns and motivations as well as unsafe abortion in general were asked to gain a better understanding of providers' attitudes toward women suffering from incomplete abortion.

PAC service providers and assistants raised a number of issues regarding the needs of clients coming for PAC services (5 providers did not respond). Most frequently mentioned were:

- ◆ The need for FP counseling/services and information (11 providers, 6 assistants)
- ◆ A fast, 24-hour service (6 providers, 9 assistants)
- ◆ Safe abortion (4 providers)
- ◆ More trained PAC service providers (3 providers)
- ◆ Health education (2 providers)

When asked how they were trying to meet PAC clients' needs, PAC staff most frequently mentioned the provision of FP counseling and services (9/22 providers, 17/19 assistants) and the MVA procedure (4 providers, 4 assistants). Also mentioned were information about abortion (2 providers), a 24-hour service (1 provider, 5 assistants) and "post PAC service" (2 providers). And, one each mentioned providing "quality service," emergency treatment, fast discharge,

services in the OT and health education. Four providers also mentioned increasing the number of trained staff, although this suggestion seemed to be a recommendation rather than something that was currently happening. Five providers did not respond.

Asked why women attempt unsafe abortion, many providers and assistants exhibited empathy for the women's circumstances (5 providers did not respond). Answers given, in descending order of frequency include illiteracy, poor education, ignorance, the low cost of consulting illegal procurers, lack of knowledge about FP methods and a need for privacy. The responses around unwanted pregnancies were divided into:

- ◆ "Illegal relationship"/unmarried (4 providers, 4 assistants)
- ◆ Poor socio-economic conditions (3 providers, 3 assistants)
- ◆ "Unwanted pregnancy" (4 providers)
- ◆ Lack of physicians and hospital services in rural areas (3 providers)
- ◆ Abortion being illegal (2 providers)
- ◆ Son preference/girl children not wanted (2 providers)
- ◆ "Too many children" (1 provider)

When asked how they felt about unsafe abortion, providers and assistants expressed a range of feelings, indicating their sensitivity to the problems of clients and a desire to see an improvement in their situations (7 providers did not respond). Again, while the number of respondents is small, their answers are instructive. Three providers and 4 assistants said they "feel bad" about their clients' situations, 2 providers said illegal abortion was dangerous and 1 that it was "preventable but not prevented." Three providers and 4 assistants thought that abortion should be legalized, and 2 providers defended the right of a woman to terminate pregnancy and have control over her body. No one sounded judgmental, but they could have been hesitant to voice negative sentiments to the study interviewers.

### ***Triage, Treatment Regimens and Waiting Times***

Supervisors (n=9) and providers (n=22) were asked how the triage and treatment of PAC clients varied according to the condition in which the client presents (emergency or non-emergency) and the time of day at which the client presents (during normal service hours or out-of-service hours).

When asked about PAC cases arriving during the night, all supervisors who responded said that it depended on the condition of the client. Three mentioned calling the physician to assess, and 3 said the nurse carried out an initial assessment before calling a physician if necessary. If the case was serious, 4 said MVA or D&C would be done immediately after stabilizing the client. Three said that if the case was not serious, it would be left until the next day. One said the hospital was closed at night so clients went to the nearby district hospital.

During normal service hours at most sites, emergency PAC clients were first received, assessed and admitted in the emergency room (ER), although in some cases they might be seen in the outpatient department (OPD) or labor room admissions. They would then be sent to the gynecology or maternity ward or directly to the PAC unit. The physician on call would then be contacted at the first or second stage to assess the client, designate her as an emergency if necessary and determine eligibility for a MVA. The hemoglobin level would be determined, and the client would then be sent to the PAC room or to the OT for either MVA or D&C.

During out-of-service hours, the emergency PAC treatment regimen and client movement were reported to be basically the same, but with the greater likelihood that clients would receive a

D&C in the OT rather than a MVA procedure. One site said that if a PAC-trained physician was on call, services would be provided within three hours. Otherwise, a D&C was provided in the OT in four to five hours.

When asked to define an emergency, 14 of 22 providers and 11 of 19 assistants said excessive bleeding, 9 providers and 8 assistants said low blood pressure, 11 providers said shock and 4 assistants said fever. Most often, a physician was involved in assessing clients for complications, sometimes alone (according to 8 providers and 4 assistants) and sometimes with a SN (reported by 5 providers and 2 assistants). Four assistants said the nurse would assess the client.

When asked about the treatment regimen for emergencies, PAC staff gave the following responses:

- ◆ Insert an intravenous line/open the vein (5 providers and 9 assistants)
- ◆ Carry out the procedure, either MVA or D&C depending on the clinical condition and criteria, as quickly as possible (9 providers)
- ◆ Check vital signs (6 assistants)
- ◆ Assess client (physician performs assessment) (3 providers)
- ◆ Stabilize the client through emergency management (2 providers)
- ◆ Take a detailed history (2 providers)

**Table 4** below shows the average waiting times for attention and treatment of emergency PAC cases as reported by providers and assistants at the different sites. It shows that, in the majority of cases, emergency clients were seen within an hour and received treatment at least within three hours.

**Table 4. Waiting Times for Emergency Cases**

Waiting Time Until First Contact with PAC Staff	Number of Responses		Waiting Time for Treatment	Number of Responses	
	Providers (n=22)	Assistants (n=19)*		Providers (n=22)**	Assistants (n=19)
< 1 hour	19	16	< 1 hour	14	8
1 to 2 hours	1	2	1 to 2 hours	2	3
2 to 3 hours	--	1	2 to 3 hours	2	1
4 to 6 hours	--	--	4 to 6 hours	--	3
10 to 12 hours	1	--	10 to 12 hours	--	--
More than 12 hours	--	--	More than 12 hours	2	1
Total Respondents	21	19	Total Respondents	20	16
Missing	1	0	Missing	2	3

\*One PAC assistant who reported that emergency PAC clients usually wait less than one hour to be seen by PAC staff, also reported that if a client comes in after normal service hours she usually has to wait four to five hours.

\*\*Two PAC providers who reported that PAC clients usually wait for treatment less than one hour also reported that a PAC client could be held overnight and receive treatment the next day.

During normal service hours, non-emergency PAC clients were usually first seen in the OPD or ER, but may also have been received in the labor room or other ward admission area. At this first stage, they were assessed (by a physician or nurse) and admitted, and then sent to the maternity or gynecology ward to be seen by the physician or nurse on duty. They were

examined and admitted (if not already done), and the hemoglobin level was determined. They were then sent to the PAC room<sup>13</sup> where they received the MVA procedure usually on the same day, but some may have been held over until the next day. One hospital reported that if a PAC-trained physician was on duty, services were given within three hours. If not, the client was held overnight and received the MVA procedure the next day.

During out-of-service hours, non-emergency PAC clients were more likely to be received in the ER for assessment and admission, and they were then sent to the gynecology or maternity ward where they were admitted (if not already done) and usually spent the night. The next day they were taken to the PAC procedure room or OT for a MVA (usually) or D&C. One site specifically pointed out that the physician on call made emergency and non-emergency case decisions; non-emergency cases were kept overnight for MVA the next day.

**Table 5** below shows the “usual” waiting times for non-emergency PAC cases to receive attention and treatment as reported by providers and assistants. The majority of clients were reportedly seen by a PAC-trained staff member quickly, but others may have been kept waiting overnight for treatment if they presented outside of normal service hours.

**Table 5. Waiting Times for Non-Emergency Cases**

Waiting Time Until First Contact with PAC Staff	Number of Responses		Waiting Time for Treatment	Number of Responses	
	Providers (n=22)*	Assistants (n=19)**		Providers (n=22)***	Assistants (n=19)****
< 1 hour	16	15	< 1 hour	8	6
1 to 2 hours	2	3	1 to 2 hours	3	5
2 to 3 hours	1	1	2 to 3 hours	3	2
4 to 6 hours	2	--	4 to 6 hours	2	1
7 to 8 hours	--	--	7 to 8 hours	--	1
More than 12 hours	--	--	More than 12 hours	4	3
Total Respondents	21	19	Total Respondents	20	18
Missing	1	0	Missing	2	1

\*Three PAC providers reported that if a PAC client came in after service hours, they were held until the next day—12 or more hours.

\*\*Four PAC assistants reported that if a PAC client came in after service hours, they were held until the next day 12— or more hours.

\*\*\*Five PAC providers who reported that PAC clients usually waited for treatment from less than one to two hours also reported that if a PAC client came in after service hours, they were held until the next day—12 or more hours.

\*\*\*\*Two PAC assistants who reported that PAC clients usually waited for treatment less than one hour also reported that if a PAC client came in after service hours, they were held until the next day—12 or more hours.

When asked about the maximum waiting time for non-emergencies assuming they arrive out-of-service hours, providers gave a wide range of responses with 6 providers saying less than 4 hours, 7 saying more than 10 hours and only 1 between that range. Ten assistants said that the maximum waiting time was 18 to 20 hours, and 1 even said 48 hours. Overall, 7 providers said that non-emergency clients would wait until the next day if they arrived outside normal service hours.

**Table 6** presents maximum waiting times for PAC clients by site. Maximum waiting time is the maximum number of hours a client ever has to wait for PAC services based on discussions with

<sup>13</sup> In some cases, this area is the same as the minor OT.

PAC providers and assistants, observation data, client record review and PAC unit and OT logbook review.

**Table 6. Maximum Waiting Times for Postabortion Care Services**

Hospital	Waiting Time
Maternity	6 to 16 hours, outside normal service hours, after 4pm
TUTH	Two hours between 9am and 5pm; PAC eligible clients arriving after 5pm are given D&C
Pokhara	Six to 48 hours outside normal service hours
ADRA	Less than one hour, but 9am to 5pm service only; PAC eligible clients arriving after 5pm are given D&C
Military	Less than one hour during service hours, Monday to Friday, 8am to 2pm; clients arriving outside normal service hours may receive MVA or D&C
Baglung	Less than one hour
Surkhet	Up to 16 or 18 hours, outside normal service hours
Kailali	Up to 20 hours, outside normal service hours
Butwal	Up to 19 hours, outside normal service hours

### ***Privacy and Informed Consent***

The degree of privacy afforded to clients in the PAC service delivery area during screening, FP counseling and RH referrals and the MVA procedure was assessed. At seven sites, evaluators determined that no one other than the provider(s) could hear or see the clients, while at two other sites no one other than the provider(s) could see the clients, but it was possible to hear conversation. All but 1 of the 22 providers said that clients were always given privacy during the MVA procedure. Among the assistants, however, 15 said privacy was “always” provided, 2 said “frequently,” 1 said “sometimes” and 1 said “rarely.”

Observations of procedures showed that 7 of the trained physicians (with clients and ZOE model, with 2 missing) and all 6 of the trained nurses (with clients and ZOE model) did ensure privacy as far as possible within the facilities available. Prior to performing the procedure, 4 trained physicians and 5 trained nurses were observed obtaining verbal or written consent from the client.

### ***Pain Management and Post-Procedure Steps***

When providers were asked about the administration of medication and pain management, the following responses were given:

- ◆ Sedative (such as diazepam) given prior to or during MVA (2 providers)
- ◆ Analgesia given during MVA (6 providers)
- ◆ Local anesthesia given during MVA (4 providers)
- ◆ Verbicaine only administered during MVA (16 providers)
- ◆ Painkiller given after MVA (9 providers)
- ◆ Antibiotics given (14 providers)

Providers were divided in their opinions as to whether or not verbicaine alone was sufficient for pain management. The general response was that, in some cases, it was but not for all clients.

When asked for more detail on post-procedure medication, 8 said administration was need-based, in particular mentioning the attention given to those cases with some sepsis.

When asked if vital signs were checked after the procedure, 8 assistants said this process was done immediately while 3 said only that vital signs were checked before discharge. Checking of vital signs was generally done either by the assistant (5), the SN (4) or the service provider (2). According to the national PAC training protocols, vital signs should be checked every 15 minutes for the first hour after the procedure and every half hour after that up to 2 hours post-procedure.

Ten providers and 6 assistants said followup should be done at less than two weeks, 3 providers and 6 assistants said two to four weeks and 9 providers said at over five weeks. The followup schedule recommended by the national PAC training protocols is that clients should return preferably after one week and before two weeks after the procedure (or sooner if any complications arise). One week is more desirable because the same provider will probably still be on duty and will be familiar with the case.

### ***Counseling Services***

All 22 providers and 18 of the assistants interviewed said that information and verbal support were always given to clients prior to the MVA procedure, and 14 of a total of 40 said a PAC-trained person gave this service. When asked for more detail, 8 providers said that nurses and physicians gave information and verbal support, while 3 providers and 4 assistants said this service was mainly given by the nurses and 3 providers and 3 assistants said it was given by physicians. Following the procedure, it was again reported that a PAC-trained person (10 providers), a physician or nurse (7 providers) or a nurse only (5 providers) always gave verbal support. And sometimes, a non PAC-trained person gave verbal support (3 providers).

In the majority of cases, these physicians or nurses reportedly gave counseling at some stage prior to discharge (18 providers and 17 assistants said “always,” 4 providers said “frequently”). When asked for details on exactly when counseling was provided, the following responses were given:

- ◆ Immediately upon admission (14 providers, 12 assistants)
- ◆ Prior to procedure (17 providers, 16 assistants)
- ◆ Immediately post-procedure (14 providers, 12 assistants)
- ◆ Prior to discharge (20 providers, 16 assistants)

Thus, the majority of providers and assistants reported that they gave counseling to clients on more than one occasion during the PAC service.

When asked where the counseling was given, 21 providers and 13 assistants said it was given in the PAC unit, 9 providers and 11 assistants in the FP clinic and 10 providers and 13 assistants in the obstetrics/gynecology/maternity ward. Therefore, in addition to being counseled at different times, clients also may have received counseling in more than one place.

**Table 7** lists the range of staff available for counseling at most of the sites as reported by the providers and assistants. A few providers (7) also reported that counselors not trained in PAC also provided FP counseling.

**Table 7. Staff Available for Counseling**

<b>Staff</b>	<b>Provider (n=22)</b>	<b>Assistant (n=19)</b>
Trained physicians	18	16
Trained nurse providers	22	15
Trained nurse assistants	20	18
Trained ANM assistants	13	14
Trained counselors	3	7

RH information, education and communication materials were present at 8 of the 9 sites visited, but at 4 of these the range was limited to two types of materials or fewer. The other 4 sites had three or more types of materials. Two sites reported that they did not use real objects or visual aids during counseling and did not appear to have any. Two sites used these items only sometimes, and 5 sites asserted they used them all the time for all clients. In assessing the quality of counseling services at the 9 sites, the research team rated 2 sites as having complete and proper counseling for all clients and 3 sites as having partial counseling or counseling provided only to some clients, with 4 undetermined.

### ***Observed Competence in PAC Service Provision***

The “critical steps competence score” analyzed 27 steps from the PAC service provider observation checklist that were considered to be essential in the delivery of quality PAC services. The group mean score for all the providers observed was 19.4, the median was 20.5 and the mode was 21 out of a total possible score of 27. The scores ranged from 6 to 26. Two physicians achieved the lowest scores (6 and 9, respectively). Although no provider completed all 27 critical steps competently, a SN and an ANM both completed 26 of the 27 critical steps. Because many of the observations (13/21) were done in a simulation using a ZOE anatomic model, the team also analyzed competence on critical steps by removing the two critical steps for record keeping and reporting (these steps may often be forgotten in a simulation). The scores did not change, however, and the score distributions were identical whether the two record keeping and reporting critical steps were removed or kept in the critical steps competence score. When competence is considered as 90% or more on the critical steps competence score, then 5 providers (2 physicians, 2 SNs and 1 ANM) were competent overall (23%). **Table 8** presents the results for trained providers by cadre and for the entire group.

**Table 8. Critical Step Competence Scores for Postabortion Care Providers**

Cadre	Number and Percentage Competent		Mean	Median	Range
	#	%			
PAC-trained nurses (n=6)	2	33.3%	20.7 (77%)	21.5 (80%)	14.0–26.0
PAC-trained physicians (n=11)	2	18.2%	18.9 (70%)	20.0 (74%)	6.0–25.0
ANMs (n=3)*	1	33.3%	19.0 (70%)	21.0 (78%)	10.0–26.0
All providers (n=22)	5	22.7%	19.4 (72%)	20.5 (76%)	6.0–26.0

Note: competent means a score of 90% or more (24 of 27 critical steps)

\*These ANMs were trained as PAC assistants not providers, but were working as providers.

The scores above examine overall competence of providers in providing PAC services and cover 15 different components of PAC, as described in the **Data Analysis** section. It is useful as well to examine provider performance on the various components of PAC services to highlight where providers were giving quality services and identify areas that need strengthening. The research team did this procedure by examining mean performance scores for each component of PAC services. Competence (percentage of providers competent on all steps in a component [100%]), and those competent on 80% or more of the component steps are presented in **Tables 9, 11, 13** and **14** along with the mean scores for the 15 components presented in **Figures 2** to **4**. These results exclude providers who were observed during the evaluation visits but who were not nurses or physicians who attended a PAC-provider training course (3 ANMs, 1 medical student, and 1 untrained physician)<sup>14</sup>. The sample of trained providers for which findings are reported include:

- ◆ Eleven physicians (4 observed with clients and 7 with the ZOE model)
- ◆ Six nurses (2 observed with clients and 4 with the ZOE model)

To view PAC service component competence mean scores for trained nurses and physicians separately, see **Appendix E**.

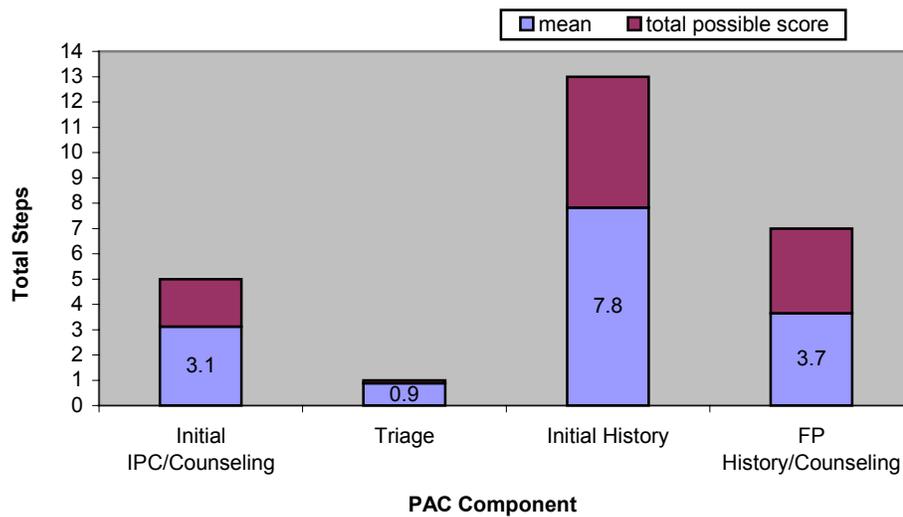
**Table 9** and **Figure 2** show the scores for competence on pre-procedure counseling.

**Table 9. Trained Postabortion Care Provider Competence on Pre-Procedure Counseling**

PAC Component (1–4)	# Steps in Component		Component Score				n
	Total # steps (100%)	# steps ≥ 80%	Providers competent on all steps		Providers competent on 80% or more steps		
			n	%	n	%	17
1) Initial IPC/Counseling	5	4	3	18%	7	41%	17
2) Triage	1	1	15	88%	15	88%	17
3) Initial History	13	10	0	0	9	53%	17
4) FP History/Counseling	7	6	0	0	4	24%	17

<sup>14</sup> A “trained PAC service provider” is a service provider who attended a NHTC PAC training course at Maternity Hospital where s/he learned the MVA procedure, FP counseling skills and RH referral skills.

**Figure 2. Postabortion Care Observation Components: Mean Scores, Pre-Procedure Counseling**



- 1) *Initial IPC/Counseling*: Eighteen percent (n=3) competently completed all five steps in this component and 7 providers (41%) scored 80% or higher (4 or 5 of the 5 steps). Ten out of the 11 physician providers were seen to greet clients respectfully, but only 3 introduced themselves. Two of the 6 nurse providers greeted clients and introduced themselves. All 6 nurse providers ensured client privacy, while 7 physicians did so. Eight physicians and all nurses treated clients politely. Five of the physicians and 5 of the nurses used 2-way communication when speaking with clients.
- 2) *Triage*: Fifteen providers (88%, or 9 physicians and 6 nurses) competently triaged clients, determining whether the client needed immediate treatment.
- 3) and 4) *Initial History and FP History/Counseling*: The majority of providers took a comprehensive history from clients. Nine physicians and 4 nurses (53% of providers) competently covered client reproductive history, pregnancy history, menstrual history, date of last menstrual period and any incomplete abortion symptoms including bleeding (**Tables 9 and 10**). Providers were less likely to discuss preventive measures such as tetanus toxoid (TT) vaccination and previous and future FP use, although nurses were more likely to do these steps than physicians. Only 4 physicians and nurses overall, however, adequately addressed FP history and counseling.

**Table 9. Key Points Discussed From Comprehensive History**

Point	Physician (n=11)	Nurse (n=6)
Reproductive history	9	4
Pregnancy history	9	5
<b>Menstrual history, date of last menstrual period</b>	10	4
<b>Any incomplete abortion symptoms</b>	9	4
Incomplete abortion symptoms including bleeding	9	4
Incomplete abortion symptoms including pain	10	2
<b>Symptoms of fever, chills, malaise</b>	4	1
Vaginal discharge	7	3
Medication allergies	2	0
TT status	1	1
Previous use of FP methods	8	4
<b>Desire to prevent pregnancy</b>	4	4
Informed clients that return of fertility could occur within two weeks and discussed FP methods available	5	2
Provided FP counseling (if appropriate)	7	5

Note: Critical steps are in bold.

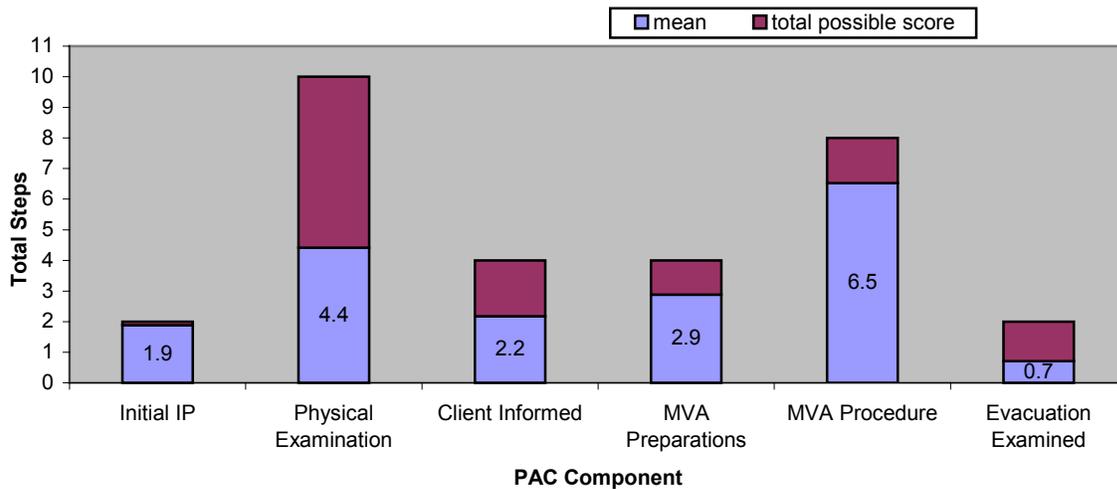
The research teams' impressions during many of the observations were that some of the counseling they observed, while technically correct, was rather stilted, as if the service provider was not familiar with the process. This finding was in contrast with others who clearly provided counseling on a regular basis. Consequently, the perception of the team is that at some sites counseling may be either rushed or skipped altogether.

**Table 11** and **Figure 3** show the scores for competence on treatment of incomplete abortion.

**Table 11. Trained Postabortion Care Provider Competence on Treatment of Incomplete Abortion**

PAC Component (5–10)	# Steps in Component		Component Score				n
	Total # steps (100%)	# steps ≥ 80%	Providers competent on all steps		Providers competent on 80% or more steps		
			n	%	n	%	
5) Initial IP	2	2	15	88%	15	88%	17
6) Physical Examination	10	8	0	0	1	6%	17
7) Client Informed	4	3	2	12%	5	29%	17
8) MVA Preparations	4	3	9	53%	11	65%	17
9) MVA Procedure	8	6	0	0	16	94%	17
10) Evacuation Examined	2	2	4	24%	4	24%	17

**Figure 3. Postabortion Care Observation Components: Mean Scores, Treatment of Incomplete Abortion**



- 5) *Initial IP*: Eighty-eight percent of providers (n=15) were competent on both IP tasks (washing hands prior to performing MVA, processing instruments appropriately). In particular, prior to performing MVA, all 11 physicians and 5 nurses were observed washing their hands thoroughly with soap and water and drying them with a clean towel.
- 7) *Client Informed*: Only 2 providers (12%) were competent on all 4 steps of informing the client about treatment options, and 5 providers (29%) completed either 3 or all 4 steps. After the examination, findings were discussed: 10 physicians and 5 nurses explained the MVA procedure to clients. Eight physicians and 2 nurses discussed the risks and benefits of MVA, but only 2 physicians and 1 nurse asked if the clients had any questions or concerns prior to beginning the MVA procedure. Physicians were less likely than nurses to obtain client consent: 4 physicians and 5 nurses obtained written or verbal consent from clients to perform the MVA procedure.
- 6, 8, 9, 10) *Physical Examination, MVA Preparations, MVA Procedure and Evacuation Examined*: No provider completed all 10 steps of the physical examination, and only 1 (6%) completed 80% of the steps (8 steps). Fifty-three percent (n=9) of the providers performed all 4 steps of the MVA preparations component, while 11 were competent (65%) completing 3 steps or more. No provider competently performed all 8 steps of the MVA procedure, however, all but one provider (94%, 11 physicians and 5 nurses) completed 80% of the MVA procedure component steps (6 or more of the 8 steps) and can be considered competent. Only 4 providers (24%) examined the evacuation contents competently.

In preparing for and carrying out the MVA procedure, physicians were less likely than nurses to: confirm hemoglobin levels, perform an abdominal examination, verify verbal consent, verify that the client had emptied her bladder, examine tissue after the procedure or check to see if the tissue was consistent with gestational age. **Table 12** below shows how many providers were observed performing these and other key steps prior to and during the MVA procedure. Neither physicians nor nurses were likely to administer analgesia.

**Table 12. Providers Performing Key Steps Prior to and During the Manual Vacuum Aspiration Procedure**

Clinical Step	Physician (n=11)	Nurse (n=6)
<b>Key Steps Prior to MVA Procedure</b>		
Checked vital signs	8	3
Confirmed hemoglobin level	3	2
Performed abdominal examination	4	4
<b>Performed speculum examination to check for tearing and localized trauma</b>	8	6
<b>Performed bimanual abdominal examination</b>	9	6
Ruled in pregnancy by examination or pregnancy test	1	1
Verified verbal consent from client	7	5
Verified that client emptied her bladder	6	4
Administers painkillers in the form of analgesia or paracervical block	1	1
<b>Key Steps of MVA Procedure</b>		
Inserted the vaginal speculum correctly	11	5
<b>Used the no-touch technique with the cannula</b>	11	6
<b>Maintained a sterile field throughout the procedure</b>	11	6
Examined the tissue after the procedure	4	3
Checked to see that the tissue was consistent with gestational age	5	3

Note: Critical steps are in bold.

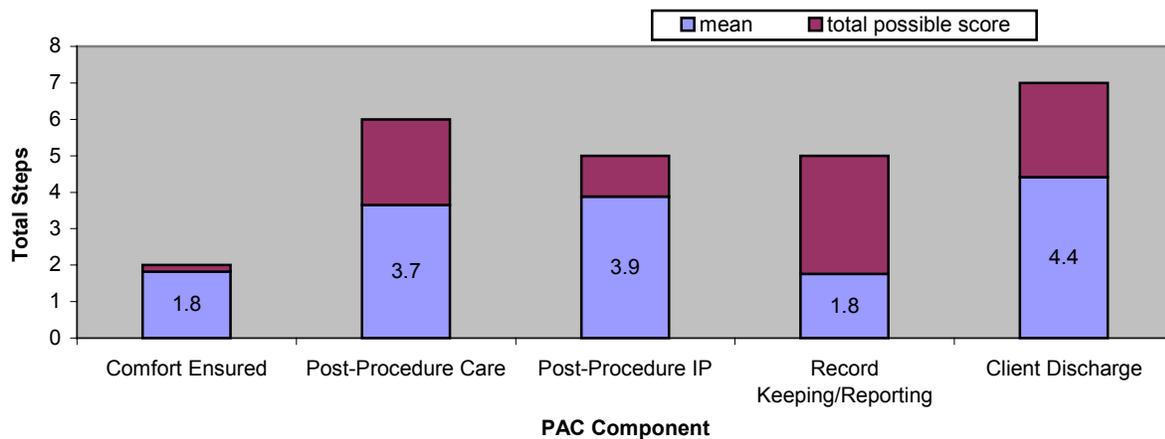
There is little difference between physicians and nurses with respect to their performance of the MVA procedure (first three steps of the MVA procedure in **Table 12** above), and all but one was competent (one nurse did not insert the speculum correctly). Both cadres were quite deficient in examination of the evacuation contents.

**Table 13** and **Figure 4** present provider competence on post-procedure services.

**Table 13. Trained Postabortion Care Provider Competence on Post-Procedure Services**

PAC Component (11–15)	# Steps in Component		Component Score				n
	Total # steps (100%)	# steps ≥ 80%	Providers competent on all steps		Providers competent on 80% or more steps		
			n	%	n	%	
11) Comfort Ensured	2	2	15	88%	15	88%	17
12) Post-Procedure Care	6	5	4	24%	5	30%	17
13) Post-Procedure IP	5	4	4	24%	13	77%	17
14) Record Keeping/ Reporting	5	4	3	18%	6	35%	17
15) Client Discharge	7	6	4	24%	8	47%	17

**Figure 4. Postabortion Care Observation Components: Mean Scores, Post-Procedure Services**



11) *Comfort Ensured*: Almost all (88%, n=15) of the providers competently ensured client comfort. Throughout the procedure, a clear majority of providers were observed paying careful attention to the client (10 physicians, 6 nurses) and giving continuous verbal reassurance, or verbicaine (9 physicians, 6 nurses). Verbicaine was generally excellent. Throughout the different stages of the MVA procedure, providers continued to treat clients politely.

12) *Post-Procedure Care*: Only 4 providers (24%) were competent on all 6 tasks in this component, and only 5 (30%) completed 6 or more of the 8 steps competently. Post-procedure care of clients was excellent among nurses. FP advice and referral, however, were not as strong as desired for either cadre. Specifically:

- ◆ Seven physicians and 6 nurses monitored the client and checked for bleeding, vital signs and general comfort immediately after the procedure.
- ◆ Only 3 physicians and 3 nurses gave a FP method after the procedure to clients who chose a FP method that was available in the PAC unit.
- ◆ Three physicians and 3 nurses gave detailed information on referral to a suitable site for those wanting a FP method not available immediately.

13) *Post-Procedure IP*: Seventy-seven percent of providers completed 4 or more of the steps competently, while close to one-quarter (n=4, 24%) were competent on all 5 post-procedure IP steps. After performing the procedure, all 11 physicians and 5 nurses were observed placing the instruments in 0.5% chlorine solution to soak for 10 minutes and immersing gloved hands in chlorine solution. Nine of the physicians and 3 of the nurses then washed their hands thoroughly. Ten physicians and 5 nurses ensured waste was properly disposed. Only 4 physicians and 3 nurses ensured that the couch and equipment surfaces in the procedure room were wiped down, usually by the ward attendant.

14) *Record Keeping/Reporting*: Only 3 providers (18%) completed all 5 of the steps in this component competently, and only 6 (35%) completed 4 or more steps. Two physicians and 3 nurses recorded the client's name and information in the logbook. Four physicians and 4 nurses completed the client's chart immediately after the procedure. Three physicians and 3 nurses recorded the FP method provided to the client on the chart. Two physicians and 2 nurses noted on the chart that the client was referred to other services. Although these scores are not good, they could have been affected by the fact that 7 physicians and 4 nurses were, out of necessity, observed with the ZOE model rather than with clients.

15) *Client Discharge*: About one-quarter of providers (n=4) completed all 7 of the discharge steps, and about half of the providers (n=8) completed 6 or all 7 of the steps. Before discharge, instructions and a review of warning signs were given as follows:

- ◆ Instructions were reviewed with the client (6 physicians, 4 nurses).
- ◆ Clients were informed about activities to avoid (7 physicians, 3 nurses).
- ◆ Warning signs, including the need to return in case of fever, foul-smelling discharge and abdominal pain, were reviewed with the client (8 physicians, 4 nurses).
- ◆ Heavy bleeding as a warning sign was mentioned (only 4 physicians, 3 nurses).
- ◆ Clients were informed about the need to return for a followup visit (7 physicians, 5 nurses).

In summary, one way to review provider competence is to examine the percentage of providers who competently performed 100% of the steps in each component. As shown in the summary table below (**Table 14**), more than 75% of providers competently performed all steps in the following components: triage, initial IP and ensuring client comfort.

**Table 14. Summary of Trained Postabortion Care Provider Competence Scores on 15 Components of Postabortion Care Services**

PAC Component	# Steps in Component		Component Score				n
	Total # steps (100%)	# steps ≥ 80%	Providers competent on all steps		Providers competent on 80% or more steps		
			n	%	n	%	17
Initial IPC/Counseling	5	4	3	18%	7	41%	17
Triage	1	1	15	88%	15	88%	17
Initial History	13	10	0	0	9	53%	17
FP History/Counseling	7	6	0	0	4	24%	17
Initial IP	2	2	15	88%	15	88%	17
Physical Examination	10	8	0	0	1	6%	17
Client Informed	4	3	2	12%	5	29%	17
MVA Preparations	4	3	9	53%	11	65%	17
MVA Procedure	8	6	0	0	16	94%	17
Evacuation Examined	2	2	4	24%	4	24%	17
Comfort Ensured	2	2	15	88%	15	88%	17
Post-Procedure Care	6	5	4	24%	5	30%	17
Post-Procedure IP	5	4	4	24%	13	77%	17
Record Keeping/Reporting	5	4	3	18%	6	35%	17
Client Discharge	7	6	4	24%	8	47%	17

A second way to determine provider competence, and the way preferred in this study, is to examine the percentage of providers who competently performed at least 80% of the steps in each component. More than 50% of providers were competent on 80% or more of the steps in the following seven components:

- ◆ Triage (88%)
- ◆ Initial History (53%)

- ◆ Initial IP (88%)
- ◆ MVA Preparations (65%)
- ◆ MVA Procedure (94%)
- ◆ Comfort Ensured (88%)
- ◆ Post-Procedure IP (77%)

In addition to the very high level of competence in the MVA procedure (94%), it is encouraging that both IP components had high scores along with ensuring client comfort and appropriate triage (75% or more of providers).

***Referral Practices***

Supervisors reported very few referrals of cases from other health facilities, with 4 saying this happened in less than 20% of cases and only 1 saying between 41–60% of cases were referrals. Records were not available to confirm these statements.

When asked if clients were referred to other RH services, 8 providers and 9 assistants said “sometimes,” 6 providers and 6 assistants said “always” and 4 providers said “rarely.” At 7 sites, PAC staff members reported that if PAC clients were in need of additional services not available in the PAC service delivery area, they were always referred. At one site it was found that the clients were only sometimes referred.

***Incomplete Abortion Caseload and Implications for Competence***

At 7 of the sites, supervisors reported less than 1 case of incomplete abortion per day. Of the remaining two, one reported 2 cases per day and one reported 3 per day. **Table 15** shows the reported monthly caseload.

**Table 15. Reported Monthly Incomplete Abortion Caseload**

Number of Reported Cases	Number of Sites
5 cases or less	1
6–10 cases	2
11–20 cases	4
51–60 cases	1
More than 60 cases	1

Thus, the majority of PAC sites (6 out of 9) treated 6 to 20 cases per month. This information was crosschecked with entries in the logbooks. By comparison, the caseload in the logbooks was lower, leading to the assumption that either the caseload is being over-estimated by the staff, under-recorded in the logbooks or both. See the section ***MVA and D&C Caseload*** for more information about caseloads recorded in the logbooks.

Seven of the supervisors said they thought the caseload at their unit was sufficient for providers to remain competent while 2 said it was not, indicating that the cutoff for retaining competency lies somewhere between 5 and 10 cases per month.

**Table 16** below summarizes the personal average monthly and total caseloads reported by the PAC providers interviewed. Total PAC cases treated since completion of training varied and

was obviously affected by the dates the providers were trained (physicians were trained between April 1997 and September 2000 and nurses were trained between April and June 1999).

**Table 16. Caseloads Reported by Providers Interviewed**

MVA Cases per Month		D&C Cases per Month		Total MVA Cases Since Training	
Caseload	Number of Providers	Caseload	Number of Providers	Caseload	Number of Providers
1 to 5	11	1 to 5	4	≤ 10	8
6 to 10	4	6 to 10	4	11 to 20	2
11 to 15	3	11 to 15	5	21 to 30	2
16 to 20	1	16 to 20	2	31 to 40	2
26 to 30	1	> 30	2	41 to 60	6
				> 60	1
Total	20		17		21
Missing	2		5		1

Only 13 of the 22 providers reported they had carried out more than 10 MVA procedures since training. The research team categorized trained PAC providers (data were available for 13 of 17 trained providers) by reported total caseload (number of cases done since completion of training: 10 or less, 11 to 40, more than 40) and by time since training (less than 12 months, 12 to 23 months, greater than or equal to 24 months). As expected, the reported caseload was highly correlated with the amount of time since training (Spearman's rho = .894). The 4 trained PAC providers who had completed PAC training in the past year reported 10 cases or less while the 4 who had completed training more than 2 years ago reported doing more than 40 cases.

The research team also examined time since training and caseload by provider competence scores. The team found no relationship between competency and time since training or competency and total caseload since completing training.

When PAC providers were asked if their caseloads were high enough to remain competent, 14 said yes and 8 said no. When asked if they currently felt comfortable and confident providing MVA, 19 out of the 22 providers said yes and only 3 said no.

When PAC assistants were asked about the number of cases with which they assisted per month, they reported as follows (with one no response):

- ◆ One case per month (12 assistants)
- ◆ Three cases per month (2 assistants)
- ◆ Four cases per month (3 assistants)
- ◆ Seven cases per month (1 assistant)

When asked if their caseload was sufficient to retain their skills, 12 assistants said it was and 7 said it was not. All 19 assistants, however, said they currently felt comfortable assisting with MVA procedures.

### Reported FP Acceptance Among PAC Clients

PAC providers and assistants were asked to estimate from their experience among PAC clients who had received MVA, what percentage had accepted a FP method. They were also asked what were the most commonly accepted FP methods. **Table 17** presents their responses.

**Table 17. Provider/Assistant Recall About Client Acceptance of a Family Planning Method and Most Commonly Accepted Family Planning Methods**

FP Acceptance	Provider (n=22)	Assistant (n=19)
<b>Percentage of PAC Clients Accepting a FP Method</b>		
81–100%	9	5
61–80%	3	6
41–60%	6	4
21–40%	--	--
Less than 20%	1	2
Total Respondents	19	17
Missing	3	2
<b>Most Commonly Accepted FP Methods (multiple responses)</b>		
Depo-Provera	11	12
Pills	10	--
Condoms	5	8
Norplant®	2	4
IUD	1	1
Spermicide	--	--
Diaphragm	--	1
Voluntary surgical contraception (minilaparotomy, laparotomy or vasectomy)	--	1
Total Respondents	14	18
Missing	8	1

Because only 9 PAC providers observed by the research team were observed with clients (only 6 trained providers) and logbook FP acceptance rate records were deficient, the high reported FP acceptance rates among PAC clients shown in **Table 17** could not be independently verified.

None of the providers interviewed said that any of the permanent FP methods were the most commonly accepted, and only one assistant did. While 9 providers and 15 assistants said that clients “usually return” for a re-supply of FP methods, 7 providers and 4 assistants said they did not. The percentage of all PAC clients that providers and assistants reported accepted any FP method was not validated by a review of the logbooks by the teams: logbook figures were much lower. (See section **FP Acceptance in the Logbooks** for more information.)

When asked for the reasons why clients did not accept a FP method, the most common reason cited by PAC staff was “wanting more children” (10 providers, 6 assistants). Other reasons include:

- ◆ Husband away (4 providers, 5 assistants)

- ◆ Fear of side effects (2 providers, 4 assistants)
- ◆ Need to ask the family (3 providers, 1 assistant)
- ◆ Husband refuses (2 providers)
- ◆ “Ignorance” (2 providers)

### ***Performance Expectations***

When supervisors were asked about the levels of motivation of PAC providers, almost all said that levels were high, and they cited the shortness of the hospital stay, reduced need to use the OT and increased training opportunities for staff as the reasons. There was only one negative comment, which was that the level of motivation among physicians was low because they were busy with their own private practices.

Supervisors were also asked whether there were any incentives for staff at their site. Only one said extra money was given to staff for doing the night shift, and another said that a small percentage (10% for nurses and 15% for physicians) of the PAC fee was given to staff in the PAC unit.

Twenty-one of the 22 providers reported that protocols or standards that included delivery of PAC services were used in their hospital. The majority (9) reported they were using NHTC/JHPIEGO’s PAC training materials (which include the global PAC Consortium reference manual), 2 the World Health Organization (WHO)/Maternity Hospital protocols<sup>15</sup> and 1 their own hospital’s protocols (TUTH). The remaining 9 did not specify what was used. These responses corresponded with those of the assistants: 10 said NHTC/JHPIEGO’s PAC training materials were used (including the global PAC Consortium reference manual), 5 said the WHO/Maternity Hospital protocols and 2 said yes but did not specify which protocols. Two assistants were not aware of protocols being used in their hospital. Seven of the supervisors said there were protocols for the provision of PAC services, but only 4 said they were actually used.

When asked how PAC staff knew what was expected of them, supervisors primarily responded that their observation of a “smooth running service” was the main indicator, with only 1 mentioning monthly meetings and 1 saying there was “verbal communication.” Two indicated that staff knew from their training what they had to do. It seems at the majority of PAC sites that there was no formal mechanism for communicating expectations around the provision of services nor was there any opportunity for staff to gain feedback on their experiences. Written job descriptions are not generally used in health facilities in Nepal, and this issue was reflected by the fact that 20 of the 22 providers and all 19 of the assistants said they had no written job description for their positions. The supervisors confirmed this lack of job descriptions. National RH protocols, however, exist for every cadre of health worker in Nepal. These protocols broadly outline the health workers’ respective roles in providing RH services including PAC, but some supervisors may be unaware of this fact.

Seven supervisors said that newly trained PAC providers and assistants were given support in the form of: “guidance,” “initial supervision” and “moral support.” In addition, when specifically asked whether they met with and discussed the performance of providers under their supervision, 7 said they did. One supervisor said they spoke during morning hours, 1 said once a week and 1 said every case was supervised. Only 1 supervisor said that client complications were discussed.

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<sup>15</sup> Staff at Maternity Hospital adapted the guidelines on PAC in the WHO protocols for use in Nepal.

There also appeared to be no formal mechanism for assessing the services in any of the PAC units. Only 2 supervisors indicated that positive feedback from satisfied clients was noted as an indicator. Four supervisors said there was a mechanism for obtaining staff feedback on PAC services but they did not say what it was.

When asked if they felt they were successful in meeting the needs of clients, 15 of the 22 providers said they felt they were successful, with only 1 saying s/he did not feel successful and the remaining 6 reporting partial success. Positive comments included: clients not returning for repeated abortions, no complications, a good service for clients and education given to clients. On the negative side, comments included: PAC not being given a high priority, physicians still doing too many D&Cs, not enough time being spent with the client and staff shortages. Among the assistants, 7 said they felt they were successful “to some extent.” Comments included clients being comfortable or relaxed with the procedure and no complications. One assistant said that verbicaine was not enough and that the procedure was “very painful.”

When assistants were asked who their supervisors were, they gave a range of responses: 3 said the physician or medical advisor, 5 said the sister or nurse in charge, 1 said the matron and 1 said the trained service provider without specifying whether this person was a nurse or a physician.

### ***Training Effectiveness***

When asked the question *Do you feel comfortable providing MVA?*, 19 providers said yes and 3 said no. When asked, however, if they needed any refresher training or further support, 15 said yes and 7 said no. Among the assistants, the majority (18) also said they felt the training was adequate, but 16 still said they would like refresher training.

Eight of the supervisors said they felt all the PAC providers in their unit were comfortable and confident in providing MVA services, although this response was qualified in two cases by some reservations about the assistants whom they said needed refresher training. One supervisor expressed doubts about the SN providers, saying that s/he was “not confident about the staff nurse [MVA] services.”

The supervisors all said the training received by providers was sufficient, although again 1 mentioned the need for refresher training for assistants. One supervisor also said the nurse providers needed more time, and 1 said that more nurse providers should be trained. In addition, 3 supervisors mentioned the need for more FP training for staff, both counseling and provision of IUD and Norplant.

## **2) Are Postabortion Care Service Delivery Sites Equipped with the Supplies and Equipment Required to Provide Quality Services?**

PAC units at the sites generally were appropriately furnished for client comfort (e.g., privacy, waiting areas). Although most of the equipment required for providing MVA was available and IP practices were good, supply shortages in the PAC unit for various drugs and FP methods along with emergency equipment were documented. Thus, PAC service delivery sites were often not fully equipped with the supplies and equipment required to provide quality services.

### ***MVA-Specific Supplies and Equipment***

In the MVA procedure room within the PAC unit the important supplies and equipment needed for provision of quality MVA services were reviewed. Eight sites had an examination table with

stirrups and a stool for the clinician, while all 9 had an instrument tray or table. All 9 sites had a strong light source that was suitable for examining the cervix and inspecting tissue. Eight sites had a stethoscope, and 6 had a thermometer. Seven sites were found to have access to a blood pressure machine, while only 3 had blood collection equipment including vials and 2- to 3-milliliter disposable syringes. All 9 MVA procedure rooms had the following required instruments for performing the MVA procedure:

- ◆ Bivalve speculum
- ◆ Uterine tenaculum or vulsellum forceps
- ◆ Sponge or ring forceps
- ◆ MVA vacuum syringes
- ◆ Flexible cannulae of different sizes
- ◆ Adapters (if double-valve syringe used)
- ◆ Silicone for lubricating the MVA syringe O-ring

The MVA procedure rooms at 8 sites were observed to have a clear container or basin for inspecting tissue, and 7 had a strainer or sieve while 2 did not. Only 2 sites had a magnifying glass; however, this item is not a required piece of equipment. Only 3 sites had 10- to 20-milliliter syringes and 22-gauge needles. All 9 sites had swabs or gauze and antiseptic solution (usually Betadine®). Sterile gloves were present at 8 sites. All 9 sites had local anesthesia.

An inventory of drugs available in the MVA procedure room revealed that:

- ◆ Analgesics were present at only 4 sites (2 using paracetamol and 2 using fortwin, diclofenac, sodium and pethidene).
- ◆ Antibiotics were present at only 2 sites.
- ◆ None of the sites had the TT vaccine.

According to PAC staff at sites where these drugs were not available in the MVA procedure room, they were either purchased by clients or brought from another part of the hospital when needed. It was more often mentioned that clients must purchase antibiotics, whereas analgesics or TT vaccine were more likely to be brought from another ward or clinic.

Emergency supplies were available in some MVA procedure rooms but not all:

- ◆ Eight sites had airway equipment and a suction machine with cannulae.
- ◆ Seven sites had hydrocortisone, adrenaline, atropine, intravenous infusion equipment and fluid (saline, Ringer's lactate or dextrose) and breathing equipment (including an ambu bag with oxygen tank and flow meter).
- ◆ Six sites had oxytocin, and only 2 sites had spirits of ammonia.

Overall, findings revealed that 6 sites had 2 or more complete MVA kits available, while 3 had 1 set available. Six sites had 2 sets of MVA syringes and cannulae available, and 3 sites had 1 set.

### Availability of FP Methods

When asked about the availability of FP methods in the PAC unit (in the MVA procedure room, counseling room, recovery area or storage area), providers and assistants said the following methods were available as listed in **Table 18**.

**Table 18. Availability of Family Planning Methods**

FP Method	Number of Sites With Method Available
<b>Temporary FP Methods</b>	
Pills	7
Condoms	7
Diaphragm or spermicides	1
IUD	4
Norplant	2
Injectables	7
<b>Permanent FP Methods</b>	
Both male and female sterilization (minilaparotomy or laparotomy) regularly available	7
Only one male or female sterilization regularly available	2

Observations during the site visits confirmed that condoms, pills and injectables were most frequently present (7 sites) in the PAC unit, while IUDs were available at 4 sites and Norplant at 2 sites. At 7 of the 9 sites, there was also a storage cabinet available for storing these contraceptives.

Seven of the sites were seen to have three or more temporary FP methods available in the MVA procedure room or an adjacent room. Specifically:

- ◆ Five or more methods (2 sites)
- ◆ Four methods (2 sites)
- ◆ Three methods (3 sites)
- ◆ Temporary methods only available in the OPD (2 sites)

FP methods were not available in the OTs (which are separate from the PAC unit and are where the D&Cs are performed) at any of the sites.

Most providers and assistants said that clients usually received their first supply of contraceptives from the PAC unit, 3 providers said the FP clinic and 1 each said the admission room and observation room. When asked if any FP methods were not offered or used for PAC clients, 5 of the assistants said Norplant was not available, 3 said IUD and all 19 said the permanent methods.

Permanent methods—male and female sterilization—were available on a regular basis through referral to another area of the hospital, such as the FP clinic, OPD or the Voluntary Surgical Contraception Center at 7 sites. At 2 sites, only one form of sterilization was available regularly (it was not specified which one). One site reported that both forms of sterilization were available

daily, while 1 site said they were available 2 days a week and at 1 site only 1 day a week. The other 4 sites with regular services for the permanent methods did not specify which days services were offered.

### ***General Supplies and Equipment (PAC-Related)***

Other equipment and facilities relevant to the delivery of PAC services were audited in the PAC service delivery areas at each of the 9 sites. Eight of the 9 sites were equipped with at least one consultation area. And, at all 9 sites, the PAC area was sufficiently lit.

The PAC waiting room and recovery area at each site was visited and described. Six of the 9 sites had a waiting area for PAC clients separate from but nearby or adjacent to the MVA procedure room. Most of the separate waiting areas (5 areas) had 1 to 3 beds. In one case, only a bench was available. The 3 other sites did not have a separate waiting area for clients in the PAC service delivery area. Two of these sites reported that PAC clients wait in the maternity ward, and the other site said clients wait in a bed or in the counseling room. For post-operative recovery, five sites placed clients in a separate area in the PAC service delivery area (often adjacent to the procedure room and the same as the waiting area). Two sites sent post-operative PAC clients to the gynecology/maternity ward. One site reported there was no recovery area for PAC clients. The other site placed clients in a bed or in the counseling area (as they did with waiting clients).

### ***IP Supplies and Practices***

General cleaning and decontamination supplies and HLD supplies and equipment required for proper IP were inventoried in the PAC service delivery area at each site. All nine sites had access to a sink and a reliable source of clean tap water, which often included a connection to a reserve tank. Plastic containers for decontamination solution were present at all 9 sites, and chlorinated solution was freshly made every day at each site if needed (i.e., if clients were present). Detergent for cleaning instruments was available at 8 sites. All sites had bleach, either Virex (8) or chlorine (1). Utility gloves for cleaning were available at 8 sites.

HLD practices were discussed in-depth and observed whenever possible. All 9 sites had at least one autoclave and either a pot for steaming the cannulae (8 out of 9 had a momo cooker) or Cidex<sup>®</sup>. All sites used autoclaving for HLD processing and were observed to be using it correctly. Six sites used chemical disinfectants (usually Cidex but also chlorine at one site). Two sites mentioned that autoclaving was used in the central supply department (CSD). No site had a convection oven or a working boiler, although 2 sites reported that boiling was used for HLD (one of these said only sometimes). Only 1 site reported the use of dry heat (which was only used in the CSD). When asked what other methods of sterilization were used, 1 site reported steaming and 2 sites mentioned Betadine. All 9 sites had HLD/sterilized gloves available, and they were used correctly at all of the sites.

In the MVA procedure room, all 9 sites had a container for sharps disposal, but 1 site did not have a plastic container with fresh decontamination solution and 1 did not have a leak-proof container for infectious waste disposal. Two sites had eye protection (goggles) available for providers.

The research team observed pre-operative preparation and disposal of sharps and waste products during and after the MVA procedure in the MVA procedure room and adjacent preparation area as follows:

- ◆ Handwashing was performed correctly at 8 sites with 1 site not observed.
- ◆ Betadine was used to prepare clients for the MVA procedure at all 9 sites.
- ◆ At all 9 sites, sharps were correctly disposed of immediately after use in a puncture-proof container.
- ◆ Disposal of other waste products, including biological waste or products of conception, was carried out according to national guidelines at 7 sites. Two sites disposed of the biological waste incorrectly, i.e. waste was carried outdoors and thrown into an open air pit.

Regarding general cleaning and decontamination procedures, findings revealed that the clinic helper always used utility gloves when cleaning soiled items at 4 sites, sometimes used them at another 4 sites and did not use them at 1 site. It was also determined that blood spills were not properly handled at 1 of the sites, i.e., flooded with disinfectant and then wiped up. At 8 sites, instruments were always decontaminated in 0.5% chlorine immediately after use and cleaned and rinsed prior to sterilization or HLD; at 1 site this procedure was done only sometimes. The team found that all equipment was always cleaned with soap and water after use.

Evaluators visited the outdoor waste disposal area at each site, which handled waste for the entire facility. Eight of the 9 sites burned at least some of the waste generated on the premises: 4 used an incinerator, 3 used a drum and 1 a pit. One site had no facilities for burning or any other waste disposal and sent all its waste to another hospital on a weekly basis. Workers were found to be using various protective articles of clothing at 6 of the 8 hospitals that carried out waste processing on-site. Protective clothing included: gloves (surgical in one case) at 4 sites, boots at 3 sites, masks at 2 sites and aprons at 1 site. The use of protective equipment among workers was not determined at 2 sites, in one case because the process had already been completed and no one was present to comment. Materials not burned were alternately disposed of in the municipality's container, other disposal area or pit. Biological products, including products of conception/placentas, were reported to be disposed of in pits at 3 sites and in a toilet in the admission area at another.

The research team was asked to rate the overall cleanliness and orderliness of the PAC service delivery area at each site. Five sites were judged to be clean and orderly, 3 were found to be clean but not orderly and 1 was not judged on these criteria. These findings correspond with the high percentage of providers competent in IP components (initial and post-procedure) as described above.

### ***Supply Availability and Access***

Eight out of the 9 supervisors said that supply shortages did not affect PAC services. Fifteen of 22 providers said they did not feel that supply shortages affected PAC services, but 6 said they did with 1 not responding. Only 4 gave explanations as to how services were affected. These explanations were not clear, indicating only that supplies were insufficient or that it was a problem when the sister in charge was not there because supplies were locked away, and only the sister in charge had the key, an issue of "supply access" rather than supply "shortage." None of the assistants felt that supply shortages were a problem.

None of the sites reported PAC services were interrupted because of supply shortages or access problems. At one site, a provider noted that a shortage of Norplant supplies meant that they were unable to offer this method in the PAC service delivery area. Another site reported that the quality of PAC services was affected by a shortage of chlorine.

### 3) Is the Management of Postabortion Care Services, including Service Hours, Fees and Staffing Levels, Appropriate and Acceptable?

#### ***PAC Unit Hours and Staffing***

When asked about service hours, 5 of the supervisors said that PAC services were available 24 hours a day, 7 days a week. This schedule was not observed, however, when the sites were visited. In fact, only 1 site appeared to operate a 24-hour PAC service. At other sites, PAC clients were attended to at all hours, but did not receive the full PAC service, including MVA and FP counseling linked to other RH services or D&C and FP counseling linked to other RH services, as appropriate. When asked about the availability of PAC-trained physicians when the PAC unit was closed, 3 supervisors said 1 physician was available and 2 supervisors said 2 physicians were available. It was not clear whether these PAC-trained physicians were always available. Even if PAC-trained physicians were available outside normal service hours, the MVA kits were often not available according to providers and assistants. Because of the time and effort required to provide the full PAC service, including counseling, physicians reportedly routinely performed D&C surgical procedures without any FP counseling/advice and service when the PAC unit was closed.

During discussions with the research team after the site visits, the following information about normal service hours and out-of-service hours for the different sites was revealed, as shown in **Table 19**.

**Table 19. Postabortion Care Service Hours by Hospital**

<b>Hospital</b>	<b>Service Arrangements/Times</b>
Maternity	PAC services provided 24 hours. <sup>16</sup>
TUTH	PAC services provided from 9am to 5pm. At other times, clients go to the emergency ward minor OT room for D&C.
Pokhara	PAC services provided from 11am to 2pm (after ward rounds). Clients arriving after hours wait until the next day for MVA. At other times, clients go to the OT for D&C.
ADRA	Hospital is only open from 9am to 5pm; PAC services by nurse providers are provided during these hours. After hours, clients go to the district hospital for D&C.
Military	PAC services provided from 8am to 2pm 4 days per week. At other times, clients go to the OT for either MVA or D&C.
Baglung	Twenty-four-hour service for MVA provided by nurse and ANM providers. If there is a complication, no PAC-trained physician is available so physician does D&C in the OT.
Surkhet	PAC services provided from 9am to 5pm by nurse provider. At other times, clients wait until the next day or the physician does D&C in the OT.
Kailali	PAC services provided from 9am to 2pm by nurse providers.
Butwal	PAC services provided from 9am to 2pm. For out-of-service hours, non-urgent clients wait until the next day for MVA. Urgent cases are given D&C in the OT.

PAC services were available 24 hours at only two (Baglung and Maternity hospitals) of the nine sites, even though 24-hour service is a criterion of an “established” PAC site. At all other sites, services were available only during the day, generally from 9am to 2pm (or 9am to 5pm in a few instances). Clients who came outside these service hours either had to wait until the next day for MVA or were given D&C in the OT, which meant they received no FP counseling and

<sup>16</sup> At the time of the study, Maternity Hospital's hours were from 9am to 4pm. They were extended to a 24-hour service later.

services or referral to other RH services if desired. Because the PAC unit was closed on Saturday, waiting times for non-urgent cases were 20 hours or more if they came late on a Friday afternoon.

At all sites, supervisors reported that nurses managed (admitted and monitored) PAC clients, and in 8 out of the 9 sites physicians also managed PAC clients. Four supervisors said ANMs were involved, 4 said ward attendants and 2 said counselors. At all sites, nurses worked on three duty shifts to cover the 24 hours. Physicians, however, normally worked mornings only, from 8am or 9am to 2pm or 3pm. For the remainder of the day and night, they operated an on-call system. Some physicians also had their own private practice.

When asked if there was a fixed schedule for MVA, 20 providers and 10 assistants said there was no fixed schedule and MVA could be done at any time. Three of the assistants said that there was a fixed schedule, and 2 providers said that procedures would be done after the ward rounds.

Six of the supervisors said that PAC services had not been interrupted for any reason, but 3 said they had, citing service providers on leave as the reason. Only 2 providers said they recalled services being interrupted, giving the reason that not all gynecologists were trained to do MVA and that clients coming during out-of-service hours had to wait until the next day. None of the assistants recalled PAC services being interrupted for any reason.

### ***Staff Turnover***

The majority of the supervisors (6 out of 9) said that staff turnover did not affect PAC services, but 3 said it did. More specifically, one said they needed more trained assistants, and another mentioned the high turnover rate of physicians. Three indicated, however, that other staff were available to fill the gaps. When asked how turnover among PAC providers could be reduced, 6 mentioned training more staff and 1 specifically suggested ensuring more local staff are trained, particularly nurses because they are less likely to move. Out of the 18 providers who responded to this question, 11 said they felt that staff turnover affected PAC services, while 7 said they felt it did not. When asked how services were affected, they gave a variety of reasons including lack of training, staff shortages and high workload. In particular, they said that medical officers changed every six months, but the turnover rate for nurses was much less. The need for good role models and consistency in personnel was mentioned as well as the importance of a 24-hour service. It was also said that clients were sometimes taken to the OT for treatment because there were no staff in the PAC unit.

On the other hand, 15 of the assistants said they did not think staff turnover affected services, and only 4 said it did. In explanation, some said that all staff were trained to assist PAC procedures, trained staff were always available or that there was no staff turnover. It seems likely that this difference in perception between providers and assistants is because turnover is more common among physicians and higher-level staff and would, therefore, be more noticeable among service providers. In contrast, ANMs are usually local and do not move around as much. It is also easier for other staff to step into the role of assistant if the regular PAC assistant is not available.

## ***Fees and Length of Stay for MVA versus D&C***

When asked about the costs of MVA and D&C, supervisors responded as shown in **Table 20** below. Costs for the two procedures are very similar.

**Table 20. Costs of Manual Vacuum Aspiration and Dilatation and Curettage**

<b>Costs of MVA</b>		<b>Costs of D&amp;C</b>	
<b>Cost</b>	<b>Number of Sites</b>	<b>Cost</b>	<b>Number of Sites</b>
Free	1	Free	1
NRs* 300	2	NRs 300	1
NRs 500	4	NRs 500	4
NRs 700	1	NRs 700	1
		NRs 850	1
Total	8		8
Missing	1		1

\*NRs=Nepal Rupees (US\$1.00=NRs 75.00)

Five supervisors said that both MVA and D&C were affordable for clients, while only 1 said they were not and 3 gave no response. When asked to comment, 6 said that if clients were unable to pay they were given the services free of charge, and 1 said the cost could be reduced to 300 Rupees. It was not clear whether the D&C charges included the cost of the overnight stay, and for clients who wait until the next day for MVA, the extra charge for the bed was not determined. At one site (ADRA), all services were completely free.

When asked about the usual length of stay in the hospital for PAC cases, providers and assistants gave the following responses:

- ◆ Five hours (10 providers)
- ◆ Four hours (3 providers, 7 assistants)
- ◆ Six hours (3 providers, 2 assistants)
- ◆ Seven hours (3 providers, 2 assistants)
- ◆ Less than two hours (8 assistants)

These responses do not take into account the overnight stay required of clients who arrive at the hospital during out-of-service hours and must wait to have MVA during service hours the next day.

## ***Daily Supervision of PAC Services***

All 9 PAC supervisors interviewed were physicians, 6 of whom were specialists in obstetrics/gynecology and 3 were medical directors/superintendents of the hospital. Only four of the nine supervisors had received PAC training. In general, when the supervisor was a PAC-trained physician, the supervision and day-to-day involvement with the services appeared to be closer, based on their comments and those of the providers and assistants. The obstetrics/gynecology supervisors were also quite closely involved. At the minority of sites (3 sites) where the supervisor was the medical director or hospital superintendent, however, it was clear that the supervisor was not closely involved on a day-to-day basis.

At most sites, the supplies and day-to-day running of the PAC unit were in the hands of the sister or nurse in charge. In some cases, this management was so tightly controlled that supplies were inaccessible to others when the person in charge was absent.

Although stakeholders indicated that the ideal PAC site would have services available continuously (24 hours/day, 7 days/week), this situation has been extremely difficult to attain, even for the premier PAC facility at the Maternity Hospital, which only extended its hours to a 24-hour service after completion of this study. Of greater concern was that, even though women treated outside normal service hours received appropriate care for bleeding, they did not necessarily receive the needed counseling and FP services, even when PAC-trained physicians were available 24 hours a day.

#### 4) Are Logbooks and Records Regularly and Accurately Maintained?

##### *Quality of Record Keeping*

Record keeping was observed to be generally of very poor quality, making it difficult for the evaluators to establish information such as monthly PAC caseloads and statistical information about PAC clients. In general, very little information was recorded in the logbooks. Moreover, client charts were often difficult to access because they were stored in a haphazard manner (often by date of client discharge) so that even if information was recorded, it was not available. In the OT logbooks, there was often no differentiation between evacuations performed for PAC and those performed for gynecological reasons. In other cases, some information was recorded only in the PAC unit logbooks or the OT logbooks, and some information was recorded only in the client notes. At some of the sites the caseloads verbally quoted by PAC staff did not tally with what was written in the logbooks. When MVA procedures were observed, it was noted that the majority of providers did not complete records immediately. Information on gestational age, symptoms of incomplete abortion and FP use and referral were often missing from client charts, logbooks or both.

##### *MVA and D&C Caseload*

The recorded annual caseloads for MVA and D&C documented from the site visits are as shown in **Table 21** below.

**Table 21. Recorded Annual Caseloads**

Site	MVA	D&C
1	43	13
2	29	No information
3	69	No information
4	22*	92*
5	1,477	958
6	136	No information
7	42	No information
8	10**	No information
9	256***	97

\*Only information for 10 months was available, so 2 months were estimated to calculate annual total.

\*\*This site (ADRA) had not had any cases since July 2000. PAC clients were reportedly going to a nearby district hospital.

\*\*\*This site (Western Regional Hospital) had a category of procedure called “Evacuation” in its logbooks separate from “MVA.” An explanation of this category was unclear to the research team so the annual caseload (60 cases) for this category was not included in the PAC total presented here.

When compared with the monthly caseloads verbally reported by supervisors (see **Table 15**), these numbers are low for many of the sites. Only 1 supervisor reported a monthly MVA caseload of 5 or less (i.e., less than 60 cases per year), whereas **Table 21** shows 5 sites with an annual MVA caseload of less than 60. Four supervisors reported a MVA monthly caseload of 11 to 20 (132 to 240 per year), whereas **Table 21** shows 3 sites within this category. Two supervisors reported monthly caseloads of above 50 (above 600 per year), and only one site showed this level in the records. This difference may be partly because of faulty recall on the part of the supervisors. It appears, however, that under-recording is likely to be a significant factor also.

### ***FP Acceptance in the Logbooks***

Details of FP acceptance did not appear to be recorded accurately in the PAC logbooks at many of the sites visited. Three sites’ records looked better than the others. Overall findings include:

- ◆ Three sites did not have any information on FP acceptance.
- ◆ Four sites had acceptance of 0 to 5 condoms, pills or injectables per month.
- ◆ One site had more active monthly injectables acceptance (1 to 9) but only 1 condom and 1 pill acceptor per month (with 3 IUDs and 2 vasectomy referrals for the year).

The observations made of providers during PAC services showed poor performance on recording and reporting and these observations seem to be substantiated here as well. Logbooks and records were deficient in the accuracy of information collection, and they were not regularly maintained.

## **5) Are Hospital Administrators and Other Hospital Personnel Supportive of Postabortion Care Services?**

### ***Acceptability of Nurse Providers***

Seven of the supervisors said that there was support among physicians for nurses providing MVA services, with one saying “if nurses have a good surgical hand they should be encouraged to provide service.” When asked if nurses trained in MVA are as competent as physicians, 5 of the supervisors said yes and 4 said no. None of the supervisors was able to give a specific reason why nurses could not be as competent as physicians. From conversations, it seems that in some hospitals the physicians are very reluctant to allow nurses to work as providers, preferring to maintain control of the clinical procedures themselves. At other sites, however, particularly in the smaller district hospitals where there was a shortage of physicians, there was real support for nurses in this role and physicians were grateful for a reduction in their workload. This issue is very closely related to the culture of relationships between physicians and nurses in the hospitals and is discussed in the **DISCUSSION AND CONCLUSIONS** section.

Data compiled by research team members from their site visits showed the following PAC policies and practices with respect to nurse providers, listed in **Table 22**.

**Table 22. Postabortion Care Policies and Practices for Nurse Providers**

<b>Hospital</b>	<b>Use of Nurse Providers</b>
Maternity	All routine, uncomplicated MVAs performed by nurse providers from 9am to 4pm. Physician assesses first.
TUTH	No nurse providers
Pokhara	No nurse providers
ADRA	Two nurse providers do all MVAs from 9am to 5pm under the supervision of the physician.
Military	No nurse providers
Baglung	One SN provider does MVA from 8am to 2pm. ANMs trained as assistants also do MVA at other times of the day when they are on duty. The medical superintendent fully supports this arrangement.
Surkhet	Two nurse providers are available to do MVA, but one does 85% of the routine MVA cases from 9am and 5pm, though usually after 12pm.
Kailali	Two nurse providers do MVA from 9am to 2pm. Physicians usually assess first.
Butwal	Only one nurse provider trained, but she was on maternity leave at the time of the assessment.

***Support From Administrators and Other Staff***

Seven of the supervisors said that the hospital director was supportive of PAC services with 1 saying this support took the form of occasional visits to the unit, another saying there was “moral support” and the others not specifying how the support was shown. Among those who said the director was not supportive, 1 said he never visited the unit and another that he knew very little about the services. Eight supervisors said other staff members were supportive of PAC services, with one saying they “made things ready for MVA” and 1 saying even untrained staff sometimes helped with cases.

Discussions showed that at some of the sites there were clear relationship problems that were a hindrance to efficient service provision. In some cases, the problem took the form of a senior member of the nursing staff, such as the nurse in charge, keeping MVA kits and supplies under tight security and only she was able to access them. When combined with her limited duty hours or frequent absences from the hospital, this situation was observed to limit the provision of PAC services severely. In other cases, these problems manifested as a gulf between nurses and physicians with the physicians taking a very authoritarian role, sometimes preventing the nurses from providing PAC services. In many cases, communications between physicians and nurses or between senior and junior nurses were observed to be poor, especially in the larger establishments.

***Community and Other Local Support***

Five of the supervisors said there were other facilities in the area able to handle emergency PAC cases, and 3 said there were not. Only 3 of the supervisors said there were community outreach programs (e.g., mobile clinics) in their area to raise awareness about PAC services, as well as referrals from staff at other health service sites. In general, it appears that currently little is being done to increase awareness of PAC and abortion-related issues within local communities.

Most of the hospital administrators and other hospital personnel stated their support for PAC services including having nurses provide PAC services and MVA. There were, however, sites at which senior personnel clearly hindered efficient PAC service provision.

## 6) Do Hospital Staff Have Any Recommendations for Improving Postabortion Care Services?

### *Suggestions for Improving PAC Services*

When asked for suggestions for improving PAC services, PAC staff made the following points:

- ◆ Give PAC training to all staff including OT staff (14 providers, 12 assistants).
- ◆ Increase staffing levels in PAC units (14 providers, 12 assistants).
- ◆ Provide 24-hour/immediate service (9 providers, 4 assistants).
- ◆ Ensure FP methods are available in the PAC unit (3 providers).
- ◆ Give more FP training (3 assistants).
- ◆ Provide more supervision (2 providers).
- ◆ Advertise the service/give more education (1 provider, 2 assistants).
- ◆ Provide more MVA kits (1 provider).
- ◆ Allocate more space/separate room for MVA (4 assistants).
- ◆ Legalize abortion (1 assistant). Two providers also made this suggestion when they were asked how they felt about the clients' situations.

### **Results for Criteria for an Established Postabortion Care Site**

A comparison of the overall findings from the study against the operationalized criteria for an established PAC site (see **Appendix A**) revealed that the sites fulfilled the criteria to a great extent:

- ◆ Five sites had a PAC caseload of at least 5 per month, while 4 did not. It was unclear how many other “incomplete abortion” cases the 4 sites that did not meet the criterion received, if any, that met the requirements for MVA but were given D&C.
- ◆ Five sites fully met the PAC staffing criteria. Three sites did not have any SN PAC providers and one site did not have a PAC assistant (the 2 assistants who were originally trained were now providers—the only PAC providers at the hospital).
- ◆ At all 9 sites the PAC procedure room was clean and had a reliable source of water.
- ◆ Seven sites stored at least 3 FP methods in the PAC procedure room or adjacent room. Two sites did not store *any* temporary FP methods in the PAC procedure room or adjacent room but referred PAC clients elsewhere in the hospital.
- ◆ Six sites had 2 or more MVA kits accessible and in good working condition, while three sites had only one.
- ◆ HLD processing of MVA equipment was done correctly at 8 of the 9 sites.
- ◆ At most sites FP counseling was not done for all PAC clients or for those clients who were eligible for MVA but received D&C after hours (at all sites but one). Therefore, not all PAC clients were offered a FP method.
- ◆ Because of poor recording keeping, the extent to which PAC clients were receiving, or being offered, FP methods could not be verified.
- ◆ RH referrals were reportedly made regularly and appropriately at 7 of the 9 sites.

- ◆ Triage was carried out to standard at 8 of the 9 sites.
- ◆ Only 29% of 17 trained PAC providers observed adequately informed the PAC client about the MVA procedure and obtained informed verbal or written consent for the procedure. At 7 of the 9 sites, at least one trained provider obtained informed consent and at 8 of the sites at least one trained provider discussed examination findings and the plan for MVA with the client and her family.
- ◆ At 4 sites at least, PAC-eligible clients arriving after the close of normal service hours were often held until the next morning and even for 2 days if they arrived on a Friday after hours. They then received either D&C or MVA.
- ◆ Only one site at the time of the study offered 24-hour PAC services.
- ◆ Although all 9 sites had a logbook for PAC cases, record keeping was inadequate at 6 out of 9 sites.
- ◆ A regular (at least once every 6 months) service statistics review by the sites that included PAC services was not occurring at any of the sites.
- ◆ All 9 sites provided MVA/FP services on a regular basis as an emergency service, although one site had not had any cases since July 2000.

In sum, no single site met every criterion, but the majority of the sites met the majority of the criteria.

## **DISCUSSION AND CONCLUSIONS**

The criteria for an established PAC site outlined by the Nepal PAC stakeholders, including FHD and other members of the Nepal PAC Consortium, proved to be a useful, if ambitious, framework for assessing the nine PAC sites considered to be “established.” To make these criteria more measurable, the research team operationalized the criteria by creating associated indicators prior to the start of the evaluation. When the findings from the study were compared against the operationalized criteria (see **Appendix A** and section above), the team determined that the majority of sites fulfilled most of the criteria.

The study also examined the competency of providers at each of the sites. Because there were no official standards for determining the competency of PAC providers, the clinicians on the research team adapted the checklist from the national PAC training courses. Other PAC stakeholders in Nepal should review this checklist and a consensus should be reached on how to evaluate other PAC service providers in the future as PAC services expand. These materials should be reviewed in relation to other safe motherhood monitoring efforts to ensure consistency and coordination. Also, the list of criteria for established PAC service delivery sites may need to be revised in light of the existing constraints facing PAC service sites, and should be agreed upon by PAC stakeholders.

### **Quality of Postabortion Care Services**

PAC providers’ and assistants’ comments about PAC clients suggest that the staff were largely sensitive to the needs of their clients and not judgmental about their situation. Furthermore, many providers regarded the inclusion of FP advice and service with the clinical treatment as a key success of PAC service delivery that has reduced or even removed instances of clients returning for treatment after repeated abortions.

Many trained PAC service providers were competent in providing PAC services, including appropriate IP practices. Moreover, the nurse providers were observed to be providing services

as competently as trained physicians, particularly in situations where they had the full support of physicians and had the opportunity of frequent client care to ensure that their competence was maintained. To build further on the successes noted, it is important to ensure that the full range of FP methods is available in the PAC service delivery area at all sites with staff trained to administer them. Currently, Norplant and IUD are available only at a limited number of sites.

Generally, performance of the MVA procedure and the standard of IP practices observed was very good. On the other hand, such components of PAC service provision as initial IPC/counseling, FP history/counseling, physical examination, informed consent, examination of evacuation contents, post-procedure care, client discharge and record keeping/reporting need strengthening.

Providers provided counseling about FP methods and the MVA procedure for most PAC clients receiving MVA, but not for those receiving D&Cs. It appears that counseling is not routinely done at all sites, even though providers demonstrated knowledge of counseling steps. FP counseling also may not always be given to clients receiving MVA for reasons that are not well understood. Nurse providers gave more detailed counseling than physicians. The amount of counseling that was provided, however, represents significant progress, and needs to be built upon in a positive way. There is still a need to ensure counseling becomes a more routine part of PAC service delivery for all clients. Counseling is also important for informing clients who do want more children (i.e., whose abortions were spontaneous) of the quick return of fertility after the procedure, so that they can avoid becoming pregnant again too quickly and endangering their health.

PAC services are not equivalent to MVA services, but in some cases this appeared to be the perception among hospital staff who did not perceive FP counseling or referrals to other RH services as integral components of PAC service delivery at their hospital. PAC services must be linked to other RH services to ensure clients' health, and this link was reportedly in place but appeared to need strengthening and better documentation. Lack of records on the number of PAC clients referred to other areas or facilities for RH services (e.g., sexually transmitted infection services, infertility services), or even for other FP services such as sterilization, made it impossible to verify to what extent this element of PAC services has been instituted. In addition, in principle, greater use of MVA in lieu of D&C, when appropriate, should lead to decreased hospital stays, cost savings for the client and a reduction in the hospital bed occupancy rates (and accompanying paperwork) for cases needing hospital admission. Although supporting data on associated costs for both procedures was lacking, the "usual" PAC client was reportedly released without an overnight stay.

A number of concerns were voiced by the PAC staff about pain management practices, with some assistants and providers feeling that verbicaine alone was not sufficient in all cases. The use of antispasmodics, analgesics or paracervical blocks could make the procedure less painful and traumatic for some clients when combined with well-managed verbicaine, but providers were not appropriately using these medications. This situation may be in part because the use of these medications is not well modeled during the clinical practice portion of PAC training, although they are advocated for use in theory. The appropriate application of pain management strategies may need to be more strongly emphasized and even demonstrated with clients in trainings and during followup and monitoring visits. It may be useful to examine the feasibility of training nurse providers in addition to physician providers on how to use a paracervical block to reduce client discomfort. Furthermore, clients need to be better warned of the possible discomfort associated with MVA, rather than being led to believe there will be no pain at all, as they have been in some cases.

There were also indications of the unnecessary use of antibiotics and even blood transfusions as a routine part of treatment instead of on an as-needed basis. These procedures expose the client to increased risks of antibiotic resistance and even HIV or hepatitis, and are not recommended. They are most commonly an issue when clients are kept waiting until the next day for services, and their prevalence could be considerably reduced by a 24-hour service.

### **Access to Postabortion Care Services**

PAC sites have the capacity for full-time services, but the services are now available 24 hours a day at only two of the nine sites (Baglung and Maternity hospitals). In fact, PAC service hours were found to be extremely limited elsewhere. At most of the sites, clients presenting outside of the normal service hours of 9am to 2pm (9am to 5pm in a few cases) were not receiving the full PAC services. In many cases after hours, D&C was performed in the OT even when the case was within the criteria for MVA, meaning that clients were receiving an unnecessary surgical intervention with anesthesia and the accompanying requirement for more bedtime and staff attention. Importantly, the one site outside the Kathmandu valley with more extended PAC service hours, up to 24 hours, was one that relied heavily upon trained staff nurses who worked multiple shifts. The site, however, did not have a PAC-trained physician.

In addition, when cases went to the OT, clients were not treated by PAC-trained staff and, therefore, did not receive any FP counseling and services. This situation meant a loss of all the advantages of the PAC services including the cost savings and reduction of bed occupancy rates, as well as the improved services to clients. Many of the nursing staff in the OT were frustrated by this arrangement because it added to their workload unnecessarily. In addition, the waiting times for non-urgent cases presenting during out-of-service hours were unacceptably high. Because clients were often kept until the next day or even the day after if they arrived on a Friday afternoon, clients could wait up to 20 or even 36 hours. This situation again removes the advantages of the savings of costs and bedtime associated with PAC services and underscores the humanitarian issue of leaving a client in pain/discomfort and distress for so long. It may also entail increased use of antibiotics because of the greater risk of infection during a long waiting period and even blood transfusions because clients continue bleeding.

There were a number of factors linked with and causing such restricted access to PAC services:

- ◆ During out-of-service hours, the physicians on call often directed clients to the OT for D&C because many of these physicians were not trained PAC providers, and, therefore, not confident about performing MVA.
- ◆ Staff stated that MVA was more time-consuming, and so during the night a simple D&C was easier for busy staff to handle. On the contrary, the MVA procedure itself is not time consuming; in fact, it is likely quicker because no anesthesia is used. The counseling, however, takes more time. Because counseling is not a regular part of many hospital services, especially those associated with “mechanical” surgical procedures, there is a reluctance and lack of skilled staff to provide it on the night shift.
- ◆ In some cases, even if a physician was willing to perform MVA out-of-service hours in the OT, the MVA kits were locked away in the PAC unit, which was closed.
- ◆ The normal system for dealing with general night cases was well established, and usually clients were admitted to the ER and taken straight to the OT for any necessary procedures. The provision of PAC services requires a departure from this regimen, i.e., contacting PAC staff and taking the client to the PAC unit, which staff may be disinclined to do on a busy night shift.

- ◆ In busy hospitals, staff shortages are a significant issue, and the provision of 24-hour PAC services with the need for giving time to FP counseling and method provision would be an additional strain on already stretched staff resources.

Currently, it seems that the majority of clients coming to the PAC service sites are from the immediate area surrounding the hospital rather than from more remote villages. Although there are obvious financial and cultural reasons for why it is difficult for women from poor and remote backgrounds to travel to a district hospital, it is important to ensure they are aware of the service and of the desirability of early consultation. Rather than waiting until sepsis has set in or after there has been severe blood loss, women should be encouraged to come to the PAC service sites as soon as they are aware of problems. This action requires public education of both women and their families through village development committee meetings, wide-scale communication campaigns and the advice of staff at primary healthcare posts. Early referral and an understanding of what to look for by primary healthcare staff are also important.

### **Management of Postabortion Care Services**

It is clear that there is no one blueprint policy that can be applied to developing efficient and appropriate PAC service provision at all sites. The presence of a trainer at the site for the followup visit period would provide support to staff in developing their own management systems that are appropriate to the individual needs and staffing situation of the site.

Attention needs to be given to developing systems for sites to monitor their own PAC services periodically. There was little evidence at any of the sites that the data currently gathered about PAC services were reliable or reviewed on a regular basis and used to make decisions about service delivery. At the most basic level, record keeping was generally observed to be poor and incomplete, inaccessible or both. For example, logbooks and client records were not adequate to document whether there were high acceptance rates among PAC clients for FP methods, although PAC providers stated that clients did have high acceptance rates. Even though it is desirable to modify this system, changing recording and reporting practices entails more than just additional training. Supervisors need to be enlisted as advocates, and a review of the recording and reporting system needs to be done to determine changes and areas for strengthening. The site needs to place greater importance on data and their use by hospital staff; otherwise, interest in collecting the data may be low.

Other basic systems that could be developed include regular staff feedback meetings to ensure that lines of communication within the unit are open and functioning and a system for recording client comments and feedback. Again, appropriate systems would need to be developed by individual units based on a recommended framework, while keeping in mind the difficulties of gathering together staff who may work different shifts. A followup support visit by a trainer could also assist with this development.

There were instances where PAC-trained staff members were transferred to other sites within a very short time after their training, and policies to avoid this practice need to be developed through discussions with the MOH and with the management at individual sites. It seems to be more often a problem with higher-level staff, particularly physicians and, to some extent, senior nurses. It was also seen as well with lower-level staff who were transferred around within the district or hospital departments. In general, a policy of training more nurse providers would seem to be an appropriate response because they are less likely to move on, particularly if they are local. In addition, ensuring that there are at least two trained providers at each site would mean that if one moves on there is still one remaining.

Within the hospitals, a number of instances were seen of internal transfers of PAC-trained nurses to other departments where they were no longer available for services, and also may quickly lose their skills through lack of practice. This issue should be addressed with the hospital administration. If there is genuine support on the part of the administration, it should be agreed that staff who have been trained in PAC are not to be moved at least within an agreed period.

At two of the sites, there was a very evident blockage of PAC services arising from the rigid attitudes of a senior nurse combined with a general lack of communication and openness. This scenario was seen to result in MVA kits being locked away and not accessible to other staff and a general lack of cooperation over service provision. In such a situation, the whole unit is unable to develop and perform properly. To avoid such situations arising in the future and to remedy current difficulties, open discussions and meetings are needed so that workable policies can be developed and all staff are clear about the requirements of their roles. In particular, it is important to ensure that the service does not depend too heavily on one person, but can be operated by a number of different individuals, of whom at least one is always likely to be present.

The other level at which relationships were observed to be causing difficulties was between physicians and nurses. At some sites (more common at national, regional and zonal hospitals than at district hospitals), the physicians were very evidently authoritarian in their attitudes, protective of their clinical work and discouraging toward nurses working as providers. At these sites it was clear that nurses were not able to challenge the physicians or work on any kind of partnership basis, but were expected to take a subservient role. Again, this situation acts as a block to PAC services that rely on teamwork and increasingly on nurse providers. At other sites the evaluators reported that, although the physicians expressed support for nurse providers, it seemed that their actions did not back up this claim. As a result, the nurse providers were undermined in subtle ways and the physicians retained control of the services. A followup visit by a trainer might help to resolve both of these issues. On the positive side, at some sites it was observed that nurses and physicians functioned very well as a team with physicians trusting the ability of nurses to provide services, giving only backup support and being happy to be relieved of some of their work. This arrangement was particularly true at the smaller sites (district-level hospitals) where there was often only one physician to cover the whole hospital. At some of these sites, even ANMs were seen to be providing service with the full support of the physicians. These sites had fewer administrators, less red tape and seemed to have better communication between the PAC unit and upper management.

Evidence from the study further suggests that, at the three sites where safe motherhood programs existed, PAC services may have benefited from an already improved “enabling environment.” At the three PAC sites in the study where Nepal Safer Motherhood Project (NSMP)/Department for International Development-assisted safe motherhood programs were in place (Surkhet, Kailali and Baglung), PAC services seemed to run more smoothly. These sites, however, were also smaller, district-level sites, and the reduced layers of administration and limited staff likely played a major role in facilitating well-run PAC services.

### **Postabortion Care Services Training, Followup and Monitoring**

Overall, the majority of PAC staff and supervisors appeared satisfied with the training they received, although some of the supervisors commented on a lack of confidence on the part of the nurse providers and one said that assistants needed refresher training. Discussions with trainers and evaluators indicated that, in general, participants were able to reach competency by the end of the training, but they often had problems in maintaining competence and confidence after returning to post for the reasons discussed above. Many of these minor problems could be

resolved by followup visits within a few months of the training. Followup visits would ensure that newly trained staff are given the opportunity to use their PAC skills and to discuss any concerns. This process would be particularly important for the nurse providers to ensure they get off to a good start and gain confidence. Currently, the nurse providers are given two days extra training (i.e., eight days instead of six), but ideally it is felt by trainers that the training should be increased to 10 days or even 12. Extra time is needed for practicing the pelvic and breast examination techniques, which are new skills for nurses but are already familiar to physicians.

In view of the growing need for more staff training, it would be desirable to begin decentralizing training. FHD and NHTC have been considering this plan for some time. Setting up additional training centers outside Kathmandu would reduce the burden on Maternity Hospital, as well as reducing participants' traveling requirements and living expenses while away. It would also be less disruptive to their work routine if participants were able to attend a training at a nearby regional center. Ongoing contact between the participants and the trainers after training could be facilitated through followup visits by the trainers and other informal contacts. In establishing regional training centers, it will be important to ensure that the high standards of the training are retained, there is sufficient caseload at the training center for participants to have clinical exposure and that the site is supportive of nurses as PAC service providers.

To maintain the quality of services at PAC sites, monitoring or supervisory visits should be conducted on a regular basis. Provider competence and caseload for nurse providers could be better ensured by followup visits after training (consisting of two to three days at least, preferably a week) during which the trainer works with the newly trained provider and assistant, gives support and encouragement during procedures and discusses difficulties as they arise. At the same time, support and encouragement could be given to staff in setting up a workable system for providing PAC services outside of normal service hours and allowing nurse providers to perform MVA in facilities where physicians are reticent about their abilities.

Record keeping needs to be examined in more detail as part of followup and monitoring visits and emphasized more strongly during training. A standardized and consistent approach should be used, and all staff should be given a thorough training on what should be recorded (gestational age, general conditions, pelvic examination, FP acceptance) and how, and also the reasons why it is important. The latter is key because only when the PAC staff are convinced of the need for accurate record keeping will they be more willing to give the time and effort to ensuring it is done.

### **Expansion of Postabortion Care Services**

In view of the clear need for PAC services and the benefits to women and their families, plans should be developed for further expansion of services, or taking services to scale, including considering further integration of PAC services into safe motherhood efforts. The general impression of the research team is that the smaller sites (district hospitals) have been the most successful in setting up a PAC service that runs in the way in which it is intended with nurse providers supported by physicians. These hospitals are also more likely to serve the needs of poorer women in more remote areas, whereas the larger zonal hospitals are more likely to serve women from urban centers only.

To facilitate the expansion process, new PAC training delivery systems should be considered, such as the development of a PAC on-the-job training (OJT) package for Nepal. Training of PAC providers at expansion sites should take into account and respond to the strengths and weaknesses in PAC services identified at the established PAC sites evaluated in this study. But

most importantly, consensus must be obtained from all PAC stakeholders on how best to proceed with the expansion process in an efficient and effective manner.

## **RECOMMENDATIONS**

### **Service Delivery**

#### *Access to PAC Services:*

- ◆ All sites with PAC providers should offer PAC services around the clock. The national PAC management staff should work with PAC sites to:
  - Ensure PAC service coverage 24 hours a day (when the PAC unit is open and when PAC cases would be handled in the minor OT or emergency department)
  - Encourage district hospitals to have more nurse providers to be able to keep the PAC unit open continuously
  - Ensure that PAC service providers can open the PAC unit and access MVA kits and FP supplies at any hour when they are on duty
- ◆ The requirement of two trained PAC providers per site should be flexible so that it could be two physician providers, two nurse providers or one of each. In cases where both providers are nurses, it is important to ensure there is a physician at the hospital who is supportive of PAC and willing to give back up for emergency care or administer a cervical block, if these are needed.
- ◆ PAC should be identified as an integral part of safe motherhood efforts. As such, PAC services should be integrated into emergency obstetric care services.

#### *Supplies and Equipment:*

- ◆ One MVA set needs to be kept in the OT so that MVA can be performed there, as indicated, and one set should be in the MVA procedure room/minor OT as well.
- ◆ FP supplies and MVA kits, if they are locked in a cupboard, must still be accessible to those who might need them. In other words, more than one key must be available, and one person alone should not control the keys.

#### *Infection Prevention:*

- ◆ Staff members who are responsible for waste disposal should be trained to follow appropriate IP practices. In particular, it is important to ensure that biological waste that is disposed of in the sink drain or toilet is flushed away adequately and immediately. The transport of waste for long distances to a pit should be discouraged.

#### *Case Management:*

- ◆ All clients irrespective of treatment type (MVA or D&C) should receive complete PAC care including FP counseling and services and referral to other RH services as needed.
- ◆ Each PAC service site should maintain a standard logbook giving details of gestational age, general conditions, pelvic examination, procedure performed and FP method acceptance.



These data should then be used for regular monitoring of the facility's PAC services as well as for quality assurance reviews (e.g., appropriateness of triage for MVA, FP acceptance rates) and aggregation at the national level for PAC services performance.

### **Followup and Monitoring Visits**

Current PAC sites should be strengthened through on-site coaching, problem-solving exercises and supervision support. The focus should be on facilitating consensus within the site for longer PAC/MVA service hours. In addition, it is necessary to ensure that on-call physicians are oriented to PAC and supporting PAC services during nighttime service hours and that there is improved triage for MVA, appropriate pain management, improved waste disposal and systematic recording and reporting. PAC training centers should be set up outside the Kathmandu valley.

Followup visits after PAC training should be made to all new PAC providers between 3 to 6 months after the end of the training. This initial visit should focus on supporting newly trained providers in the clinical aspects of PAC to ensure that skills learned in training are being implemented and to help providers acquire more confidence in their PAC skills. After this time, periodic monitoring or supervisory visits should be conducted to review and maintain the quality of services at PAC sites. These visits should include provider-based and facility-based foci. PAC service monitoring teams need to be formalized and should include MOH personnel from FHD's Quality of Care Centre and FHD's PAC team (e.g., PAC program officer), and at least one PAC clinical trainer who can observe the MVA procedure.

#### *Provider-Based Focus:*

- ◆ PAC providers' skills at all sites should be reinforced through initial followup and ongoing monitoring visits. Provider skills during PAC service provision should be assessed, and the provider coached and mentored if needed. Special attention should be given to coaching for the PAC service component areas where provider performance was inadequate in this study, i.e., initial IPC/counseling, FP history/counseling, physical examination, informed consent, examination of evacuation contents, post-procedure care and client discharge.
- ◆ A focus on FP counseling and method provision is needed to ensure that it becomes a part of the provider's routine.
- ◆ Record keeping systems need to be checked to ensure they are set up and maintained by the PAC providers.
- ◆ IP practices and access to supplies should be observed to ensure that all personnel and clients are protected.
- ◆ Support for PAC providers to use pain management appropriately, perhaps by retraining, is definitely needed.

#### *Facility-Based Focus:*

- ◆ Facilitate with the hospital administration:
  - The promotion of good relationships between PAC physicians and nurses
  - The need for physicians and other staff to give support to nurse providers in providing PAC services
  - The orientation of support staff to ensure they understand the needs of the PAC service and their role in quality PAC service provision
  - Solutions for logistical barriers to ensuring a 24-hour service

- ◆ Encourage the setting up and use of mechanisms for monitoring/feedback and sharing of ideas within the PAC unit and the incorporation of new ideas into the service.
- ◆ Ensure that the hospital PAC staff are oriented to PAC guidelines prior to training and continue to use them as a resource.
- ◆ Ensure that at least three temporary FP methods are available in the area where the client receives MVA or D&C or in an adjacent room.
- ◆ Review and upgrade systems for storing and accessing supplies and equipment so that PAC providers can provide service at all hours.
- ◆ Facilitate the resolution of any problems that may prevent optimum service provision.

### **Inservice and Preservice Postabortion Care Training**

Inservice PAC training centers should be established outside the Kathmandu valley and alternative training delivery mechanisms, such as OJT, explored.

#### *Inservice Training Participants:*

- ◆ Train a larger number of staff—and more nurse providers—at the PAC sites to ensure availability of PAC services.
- ◆ Train more nurses so that they are able to become the main providers for routine PAC cases. Physicians who do on-call service should be trained so that at least one trained PAC provider is on duty at all times.
- ◆ Train more (preferably all) OT nurses as PAC assistants so that they are able to provide PAC counseling and can support nurse and physician providers. This training would mean the physicians would be free to treat other clients more quickly when appropriate, but would not alleviate their responsibility for counseling if an assistant was not available.

#### *Inservice Training Content:*

- ◆ Increase the length of the training for nurse providers by at least an additional two days to provide more opportunities to perform the MVA procedure, FP counseling and RH referrals with clients.
- ◆ Increase the focus on the importance of record keeping and provide training in proper logbook recording.
- ◆ Increase the emphasis on counseling techniques in PAC training.
- ◆ Develop a PAC-structured OJT training package to facilitate expansion of services to regional and district hospitals outside the Kathmandu valley.
- ◆ Improve and more strongly emphasize training in appropriate use of pain management.

#### *Preservice Training:*

- ◆ Include PAC in all preservice training for medical, nursing and ANM students, with the latter two receiving PAC counseling skills including FP counseling and method provision, at a minimum.
- ◆ Ensure that nursing training includes increased exposure to breast and pelvic examinations.

## **Expansion of Postabortion Care Services**

It is important to ensure that the entire hospital at a newly chosen PAC site is fully prepared for the PAC services and gives the required support before provider training is started.

### *Service Expansion:*

- ◆ Focus on increasing the number of district-level hospitals that provide PAC services with priority given to sites committed to supporting nurse provision of PAC services.
- ◆ Ensure followup visits to participating hospitals are always performed within a few months of training and again afterwards if indicated.

### *Increasing Awareness of and Ensuring Stakeholder Commitment to PAC Services:*

- ◆ Promote increased information dissemination and outreach to communities so that more women in remote areas are aware of PAC services. Community-level providers and village development committees could facilitate this process.
- ◆ Build consensus among stakeholders on expansion plans and required resources.
- ◆ Ensure full support and understanding of physicians toward nurse providers.
- ◆ Ensure zonal hospitals are aware of the PAC services provided in the district hospitals, even if they do not provide the services themselves, so that they are able to deal with any referred complications.

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## APPENDIX A

### Status of Trained Postabortion Care Providers at Nine Postabortion Care Sites

1. MATERNITY HOSPITAL, KATHMANDU			
Name of Participant	Type of Training	Date	Status as of Dec 2000–Feb 2001
<b>PHYSICIAN PROVIDERS (n=25)</b>			
Dr. Kasturi Malla, Senior Consultant	Service Provider	April 1995	Not providing services
Dr. Jeevan Atreya	Service Provider	11–16 May 1997	Transferred
Dr. Nafisha Malla	Service Provider	27 Apr–2 May 1997	Transferred
Dr. Hema Kumari Pradhan	Service Provider	5–11 May 1997	Diploma in Gynecology and Obstetrics
Dr. Mukunda Sharma, Trainer	Service Provider	18–20 Nov 1998	Trainer
Dr. Jasmine Diabagya Rajbhandari	Service Provider	30 Nov–5 Dec 1997	Transferred
Dr. Nirmala L Shrestha,	Service Provider	18–20 Nov 1998	Trainer
Dr. Sheela Verma, Consultant	Service Provider	18–20 Nov 1998	Not providing services
Dr. Meena Jha, Registrar	Service Provider	18–20 Nov 1998	Not providing services
Dr. Amila Shrestha, Registrar	Service Provider	18–20 Nov 1998	Not providing services
Dr. Usha Shrestha	Service Provider	18–20 Nov 1998	Currently providing services
Dr. Urmila Karki	Service Provider	15–17 Nov 1998	Kathmandu Medical College, transferred
Dr. Rajyalaxmi Sharma, Registrar	Service Provider	15–17 Nov 1998	Not providing services
Dr. Neebha Ojha, Trainer	Service Provider	15–17 Nov 1998	Currently providing services
Dr. Biloni Bidya, Registrar	Service Provider	15–17 Nov 1998	Not providing services, transferred
Dr. Samjhana Dhakal	Service Provider	15–17 Nov 1998	Not providing services, transferred
Dr. Sunita Joshi	Service Provider	22–27 Nov 1998	Studying in Bangladesh, transferred
Dr. Bina Basnyat, Senior Consultant	Service Provider	15–17 Nov 1998	Not providing services but supervises
Dr. Mira Thapa	Service Provider	15–17 Nov 1998	Providing services in Butwal, transferred
Dr. Dolmaya Thograr	Service Provider	15–17 Nov 1998	Currently providing services
Dr. Radha Shah, Registrar	Service Provider	22–27 Nov 1998	Not providing services
Dr. Indira Upadhaya, Registrar	Service Provider	18 Nov 1998	Currently providing services
Dr. Preeti Shrestha	Service Provider	15–17 Nov 1998	Studying in China, transferred
Dr. Sabina Shrestha	Service Provider	24–30 May 1999	Studying in China, transferred
Dr. Indira Satyal, Consultant	Service Provider	17–22 Sep 2000	Not providing services

Senior-level trained physicians in PAC do not provide services routinely because the junior physicians have this responsibility. If there is an emergency, only the senior physicians will provide services.

<b>1. MATERNITY HOSPITAL, KATHMANDU</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=6)</b>			
Dr. Shanti Shrestha	Service Provider	17–22 Sep 2000	Currently providing services
Dr. Suspana Hirachand	Service Provider	17–22 Sep 2000	Currently providing services
Dr. Gauri Shrestha	Service Provider	22–27 Nov 1998	Currently providing services
Dr. Madhu Shrestha	Service Provider	17–22 Sep 2000	Currently providing services
Dr. Suniti Acharya	Service Provider		Currently providing services
Dr. Peru Rajbhandari	Service Provider		Currently providing services
<b>SN PROVIDERS (n=5)</b>			
Ms. Maiya Manandhar	Assistant/now Service Provider	23–29 Apr 1999	Currently providing services
Ms Purna Keshari Manandhar	Assistant/now Service Provider	23–29 Apr 1999	On leave for one year from Maternity Hospital and working at Mustang
Ms. Ashamaya Gurung	Assistant/now Service Provider	7–16 Jun 1999	Currently providing services
Ms. Laxmi Rijal	Assistant/now Service Provider	7–16 Jun 1999	Stationed in OT, not providing services
Ms. Gayatri Subedi	Assistant/now Service Provider	24–30 May 1999	Currently providing services
<b>ASSISTANTS (n=11)</b>			
Ms. Bishnu Banjade (SN)	Assistant	27 Apr–1 May 1997	Bir Hospital, transferred
Ms. Bimla Thapa	Assistant		Transferred
Ms. Shubhadra Pyakurel	Assistant		Stationed in OT, not providing services
Ms. Sajana Ranjit, Assistant Matron	Assistant	29 Nov–4 Dec 1998	Currently providing services
Ms. Saraswati Bajarcharya	Assistant	22–27 Nov 1998	Stationed in OT, assists MVA in OT
Ms. Meena Shrestha	Assistant	22–27 Nov 1998	Stationed in OT, assists MVA in OT
Ms. Hari Devi Maharjan (SN)	Assistant		Stationed in OT, assists MVA in OT
Ms. Jayanti Channtiyal (SN)	Assistant	29 Nov–4 Dec 1998	Currently providing services
Ms. Jamuna Kapali (ANM)	Assistant	24–30 May 2000	Stationed in OT
Ms. Laxmi Manandhar (ANM)	Assistant	21–27 Jun 1999	Currently providing services
Ms. Vidya Maharjan	Assistant	7–16 Jun 2000	Stationed in antenatal care ward, does not assist MVA

<b>2. TUTH, KATHMANDU</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=5)</b>			
Dr. Rajshree Jha	Service Provider	12–18 Mar 1997	Currently providing services
Dr. Mita Singh	Service Provider	30 Mar–4 Apr 1997	Currently providing services
Dr. Jyoti Sharma	Service Provider	23–28 Nov 1997	Currently providing services
Dr. Gargi K.C.	Service Provider		Currently providing services
Dr. Bekha Laxmi Manandhar	Service Provider	30 Nov–5 Dec 1997	Currently providing services
<b>SN PROVIDERS (n=0)</b>			
<b>ASSISTANTS (n=10)</b>			
Ms. Rachna Ghimire (SN)	Assistant	12–18 Mar 1997	Medical ward, not providing services
Ms. Nirmala Shrestha	Assistant	12–18 Mar 1997	Maternity ward, not providing services
Ms. Nara Maya (Ward Attendant)	Ward Attendant	12–18 Mar 1997	Labor room, not providing services
Ms. Parwati K.C.	Assistant	30 Mar–4 Apr 1997	Medical ward, not providing services
Ms. Rama Bastola		12–18 Mar 1997	Resigned
Ms. Bishnu Shrestha	Assistant	30 Mar–4 Apr 1997	Family Planning and Fertility Care Center, not providing services
Ms. Pavitra Poudel	Assistant	30 Mar–4 Apr 1997	Resigned
Ms. Beena Neupane (SN)	Assistant		Labor room, not providing services
Ek Maya Gurung (Ward Attendant)	Assistant		Labor room, not providing services
Ms. Krishna Shova Shrestha (SN)	Assistant		Currently providing services

<b>3. BIRENDRA MILITARY HOSPITAL, KATHMANDU</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=2)</b>			
Dr. Lalita Joshi	Service Provider	5–11 Jul 1999	PAC supervisor
Dr. Binita Pandey	Service Provider		Currently providing services
<b>SN PROVIDERS (n=0)</b>			
<b>ASSISTANTS (n=2)</b>			
Ms. Mahadevi Badal (SN)	Assistant		Currently providing services
Ms. Anita Malakar (SN)	Assistant		Currently providing services

<b>4. ADRA, KATHMANDU</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=1)</b>			
Dr. Bidya Pradhananga	Service Provider	22–27 Nov 1998	Transferred
<b>SN PROVIDERS (n=2)</b>			
Ms. Sumitra Joshi (SN)	Assistant/now Service Provider	22–27 Nov 1998	When cases are available she provides the services but there is a very low caseload
Ms. Tulshi Manandhar (SN)	Assistant/now Service Provider	22–27 Nov 1998	Currently providing services
<b>ASSISTANTS (n=0)</b>			

<b>5. BAGLUNG DISTRICT HOSPITAL, BAGLUNG DISTRICT</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 00–Feb 01</b>
<b>PHYSICIAN PROVIDERS (n=3)</b>			
Dr. Kamal Raj Sharma	Service Provider	7–14 Feb 2000	Transferred
Dr. Indira Basnet (Human Resource Development Officer [HRDO])	Service Provider	17–22 Jan 1999	Transferred
Dr. Tarun Poudel	Service Provider		Currently providing services
<b>SN PROVIDERS (n=3)</b>			
Ms. Janaki K.C. (SN)	Service Provider		Currently providing services
Ms. Manjula Rajbhandary	Service Provider	29 Jun–7 Jul 2000	Currently providing services
Ms. Kopila Tripathi (SN)	Service Provider	21–28 Mar 1999	Now working at Kanti Children's Hospital, transferred
<b>ASSISTANTS (n=8)</b>			
Ms. Devi Bhattarai (ANM)	Assistant		Currently providing services
Ms. Goma K.C (ANM)	Assistant	24–30 May 1999	Currently providing services
Ms. Damari Maya (ANM)	Assistant		No one named Damari Maya works at Baglung District Hospital
Ms. Dilshova Gurung (ANM)	Assistant		Currently providing services
Ms. Durga Uchei (ANM)	Assistant	22–30 Nov 1999	Currently providing services
Ms. Meena Kumari Shrestha	Assistant		Working for NSMP, transferred
Ms. Maina Shrestha	Assistant	29 Jun–7 Jul 2000	Currently providing services
Ms. Kopila Tripathi (S/N)	Assistant		Currently providing services

<b>6. SURKHET DISTRICT HOSPITAL, SURKHET</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=2)</b>			
Dr. Bhola Shrestha	Service Provider	21–27 Jun 1999	Transferred
Dr. Keshar Dhakal	Service Provider	9–19 Jan 2000	Transferred
<b>SN PROVIDERS (n=3)</b>			
Ms. Jala Devi Rai (SN)	Service Provider	21–28 Mar 1999	Currently providing services
Mitra Devkota (SN)	Service Provider	29 Jun–7 Jul 2000	Currently providing services
Ms. Goma Shrestha	Service Provider		Transferred
<b>ASSISTANTS (n=6)</b>			
Chana Tiwari (ANM)	Assistant	7–16 Jun 1999	Currently providing services
Mithila Shrestha (ANM)	Assistant		Currently providing services
Renu Shingh (ANM)	Assistant	29 Jun–7 Jul 2000	Currently providing services
Ms. Indu Thapa (HRDO)	Assistant	17–22 Jan 1999	Working for NSMP, transferred
Ms. Khumkala B.C. (ANM)	Assistant		Currently providing services
Ms. Ram Kumari Sapkota	Assistant		Currently providing services

<b>7. WESTERN REGIONAL HOSPITAL, POKHARA</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=4)</b>			
Dr. Shanti Josh	Service Provider	27-Apr–2 May 1997	Obstetrics/gynecology department, currently providing services
Dr. Yamuna Suwal	Service Provider		PAC supervisor
Dr. Dibyaswari Shrestha	Service Provider	5–11 Nov 1997	Currently providing services
Dr. Niraj Kumar Dubey	Service Provider	23–28 Nov 1997	Currently providing services
<b>SN PROVIDERS (n=0)</b>			
<b>ASSISTANTS (n=7)</b>			
Ms. Ratna Shakya (SN)	Assistant		Labor room, not providing services
Ms. Radha Poudel (SN)	Assistant		In-charge gynecology ward, not providing services
Ms. Basundhara (Ward Assistant)	Assistant		Gynecology ward, currently providing services
Ms. Ganga Shakya (SN)	Assistant	11–16 May 1997	Gynecology ward, not providing services
Ms. Shakuntala Rai (SN)	Assistant		Anesthesia department, not providing services
Ms. Babi Sharma (SN)	Assistant	Oct 1998	Obstetrics/gynecology ward, currently providing services
Dr. Shobha Shrestha			Head of Department of Obstetrics/ Gynecology, not providing services

<b>8. SETI ZONAL HOSPITAL, KAILALI DISTRICT</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=1)</b>			
Dr. Krishna Kumar Rai	Service Provider	7–14 Feb 2000	Currently providing services
<b>SN PROVIDERS (n=2)</b>			
Ms. Bishnu Shah	Service Provider		Currently providing services
Ms. Sunita Khatri	Service Provider		Currently providing services
<b>ASSISTANTS (n=3)</b>			
Ms. Bhagwati Badal	Assistant	22–27 Nov 1998	Currently providing services
Ms. Meena K. Shrestha (HRDO)	Assistant		Transferred
Ms. Dibyashwori Bistha (ANM)	Assistant		Currently providing services

<b>9. LUMBINI ZONAL HOSPITAL, BUTWAL</b>			
<b>Name of Participant</b>	<b>Type of Training</b>	<b>Date</b>	<b>Status as of Dec 2000–Feb 2001</b>
<b>PHYSICIAN PROVIDERS (n=1)</b>			
Dr. Amita Pradhan Thapa	Service Provider	9–19 Jan 2000	Currently providing services
<b>SN PROVIDERS (n=0)</b>			
<b>ASSISTANTS (n=2)</b>			
Ms. Kalpana Basyal (ANM)	Assistant		Currently providing services
Ms. Meena Shrestha	Assistant		Currently providing services but is on maternity leave. She will resume her duties after maternity leave.

Service providers who are not trained but are providing services at Western Regional Hospital, Pokhara:

1. Dr. Goma Tulachand
2. Dr. Ram Prasad Aryal
3. Dr. Malati Tripathi
4. Dr. Chandrika Pandit

## APPENDIX B

### Postabortion Care Criteria for Established Sites Operationalized by the Research Team

Criteria	Verification Tools	Yes	No	Comments
Site receives at least 5 to 8 cases of incomplete abortion per month.	<b>PAC logbook</b>			
<b><i>Presence of at least two trained providers (physicians or nurses) and one assistant (registered nurse or ANM)</i></b>				
<i>Physician 1</i> May or may not be trained with the PAC program but is working in the maternity section in the hospital, is supportive of PAC services and can provide backup for emergency care	<i>NHTC database</i>  <i>Provider observation</i>			
<i>Nurse</i> One or two registered nurse providers (SN) and at least one assistant (SN or ANM) are trained in the MVA procedure.	<i>NHTC database</i>  <i>Provider observation</i>			
Waiting room is clean and comfortable.	<i>Observation of waiting room</i>			
Procedure room is clean and equipped with MVA instruments.	<i>Observation of procedure room</i>			
<b>Procedure room has:</b>				
<ul style="list-style-type: none"> <li>• Reliable and regular source of water available (tap, running water, bucket)</li> </ul>	<i>Observation of procedure room</i>			
<ul style="list-style-type: none"> <li>• Toilet/sinks adjacent to PAC procedure room for:               <ul style="list-style-type: none"> <li>– Clients</li> <li>– Disposal of products of conception</li> </ul> </li> </ul>	<i>Observation of procedure room</i>			
<ul style="list-style-type: none"> <li>• FP supplies are stored in the procedure room or the adjacent room.</li> </ul>	<i>Observation of procedure room</i>			
At least two sets of MVA instruments are accessible and in good working order.	<i>Observation of instruments</i>			
<b>MVA instrument processing is performed following standard principles of IP using the recommended instrument processing technique:</b> <ul style="list-style-type: none"> <li>• MVA equipment is processed by HLD or by using Cidex.</li> </ul>	<i>Observation of instrument processing</i>			
<b><i>Discussion of FP and choosing a method is performed prior to and after the MVA procedure.</i></b>				
<ul style="list-style-type: none"> <li>• The facility has at least three FP methods available:               <ul style="list-style-type: none"> <li>– Pills, condoms and injectables (Depo-Provera)</li> </ul> </li> </ul>	<i>Observation of provider counseling client</i>			
<ul style="list-style-type: none"> <li>• FP counseling before and after the MVA procedure includes:               <ul style="list-style-type: none"> <li>– Vulnerability to pregnancy</li> </ul> </li> </ul>				
<ul style="list-style-type: none"> <li>• Provider offers a FP method or one pack of pills or 10 condoms.</li> </ul>				

Criteria	Verification Tools	Yes	No	Comments
<ul style="list-style-type: none"> <li>• The woman gets a method or if referred is told: <ul style="list-style-type: none"> <li>– Where to go (location)</li> <li>– When to go (opening hours)</li> <li>– How to go (directions and transportation method)</li> </ul> </li> </ul>				
Provider assesses client's status and what procedure is needed (informs the woman and her attendants [family and friends] and obtains consent from guardian/client).	<i>Client chart or Provider observation</i>			
<b>Timing of services:</b>				
Client receives MVA service immediately or within six hours.				
The facility provides PAC services 24 hours a day, 7 days a week.				
The PAC procedure room contains a logbook with the standard format for recording of services.	<b>PAC logbook</b>			
The information from the client chart is accurately transferred to the logbook.	<i>Review sample client charts with logbook</i>			
The hospital or the maternity section has a policy of conducting hospital statistics review once every month or every six months.				
The hospital or maternity section provides MVA/FP services on a regular basis as an emergency service.	<b>PAC logbook</b>			

# APPENDIX C

## Critical Steps in Observation of Postabortion Care Service Provision

Below is the observation checklist used to observe PAC service providers during the evaluation study. The critical steps are in italics and bold.

### Instructions:

- ◆ Indicate whether the provider adequately performed each of the steps in the observation checklist by making a check mark (√) in the YES or NO column.
- ◆ If the step was not needed, write N/A in the “Comments” column.
- ◆ Please write any additional **remarks** about the provider’s performance of the step in the “Comments” column also, including **if anyone else performed the step other than the PAC service provider (e.g., MVA assistant or ward attendant).**

OBSERVATION CHECKLIST FOR PAC COUNSELING			
TASK/ACTIVITY	YES	NO	COMMENTS
Greets client/couple respectfully and with kindness; makes her comfortable.			
Introduces herself/himself to the client.			
<b><i>Ensures privacy (others cannot hear or see client).</i></b>			
Determines whether client needs immediate treatment.			
Does initial history.			
Determines reproductive history.			
Asks about pregnancy:			
<b><i>Asks about last menstrual period:</i></b>			
• <b><i>Menstrual history</i></b>			
• <b><i>Date of last menstrual period</i></b>			
Ask about FP methods used.			
Asks about pregnancy symptoms.			
<b><i>Asks about incomplete abortion symptoms:</i></b>			
Asks about vaginal bleeding.			
Asks about lower abdominal pain.			
Asks about vaginal discharge.			
<b><i>Asks about fever, chills and malaise.</i></b>			
Determines if any medication allergies.			
Assesses TT vaccination status.			
<b><i>Ascertains client’s desire to prevent pregnancy.</i></b>			
Asks about previous FP method use.			
Provides FP counseling (whenever appropriate).			
Treats client politely and respectfully.			
Uses 2-way communication.			
Informs client that return of fertility may occur within two weeks.			
<b><i>Discusses what FP methods are available before discharge.</i></b>			
If client wishes a FP method, assists client to choose method by briefly discussing each method.			
Describes in detail advantages and disadvantages of the method selected.			

OBSERVATION CHECKLIST FOR MVA PROCEDURE			
STEP/TASK	YES	NO	COMMENTS
<b>Preparation for Procedure:</b>			
<i>Washes hands thoroughly with soap and water, and dries them on a clean, dry towel.</i>			
Performs physical examination:			
Takes vital signs (temperature, blood pressure and pulse if not already taken).			
Confirms hemoglobin level. Sends for test if not available.			
Assesses lungs and heart.			
Performs abdominal examination.			
<i>Performs speculum examination checking for bleeding, tears, trauma and infection.</i>			
<i>Performs bimanual examination.</i>			
Uses appropriate IP practices for instrument decontamination/processing.			
Determines client examination/history according to training manual guidelines.			
Notes any abnormal findings on client chart.			
Refers client if any complicating factors.			
Rules in pregnancy by examination or pregnancy test.			
<b>Informs Client of Treatment Options:</b>			
<i>Discusses findings and plan for MVA with client.</i>			
Discusses risks and benefits of MVA procedure.			
Asks the client if she has any questions or concerns.			
<i>Obtains verbal or written consent for the procedure.</i>			
<b>PERFORMING MVA PROCEDURE:</b>			
Sets out instruments needed for insertion procedure.			
Verifies verbal consent.			
Treats client politely and respectfully.			
Verifies that client has emptied her bladder.			
Puts new examination, high-level disinfected or sterile surgical gloves on both hands.			
Administers analgesia and/or para-cervical block if needed. (Only physicians are allowed to perform a para-cervical block procedure. If done, was it done correctly?)			
Inserts vaginal speculum to see the cervix.			
Applies antiseptic solution Betadine to cleanse cervix two times.			
<i>Uses no-touch technique with cannula.</i>			
<i>Maintains sterile field throughout procedure.</i>			
Examines cervix for bleeding. (If client has chosen IUD for FP method, inserts IUD after conclusion of the MVA procedure.)			
Gently removes speculum.			
<b>Ensures Thoroughness of Evacuation:</b>			
Examines tissue for chorionic villi.			
Verifies that tissue removed is consistent with gestational age.			
<b>Ensures Client Comfort and Care During Procedure:</b>			
Pays careful attention to client throughout the procedure.			
<i>Uses verbicaine (verbal reassurances) continually throughout the procedure.</i>			

OBSERVATION CHECKLIST FOR MVA PROCEDURE			
STEP/TASK	YES	NO	COMMENTS
<b>POST-PROCEDURE TASKS</b>			
<b>Post-Procedure Care of Client:</b>			
Helps client to recovery area.			
<b>Monitors client status immediately after procedure and one hour later if necessary. Checks for:</b>			
<ul style="list-style-type: none"> <li>• <b>Vital signs</b></li> <li>• <b>Bleeding</b></li> <li>• <b>Comfort</b></li> </ul>			
Assists client to choose a FP method and provides client with FP method that is available in PAC area (can be supplied at any time that is appropriate during the client's stay in PAC area). Explains to client the instructions for use, advantages, disadvantages, potential complications and followup.			
If client chooses a FP method that cannot be provided immediately, gives client detailed information about referral, how to find service site location and schedules.			
<b>Post-Procedure Care of the Examination Room:</b>			
<b>Places used instruments in 0.5% chlorine solution, and soaks them for 10 minutes.</b>			
<b>Briefly immerses gloved hands in chlorine solution. If disposing of gloves, places them in leak-proof container or plastic bag. If reusing gloves, soaks gloves in 0.5% chlorine solution for 10 minutes.</b>			
Assures that ward attendant wipes down couch, equipment table, trolleys and other large surfaces with decontamination solution.			
Disposes of waste materials according to IP guidelines.			
Washes hands thoroughly with soap and water.			
<b>Recording and Reporting:</b>			
<b>Completes client record/chart immediately after procedure.</b>			
Records client's name and information in logbook.			
Notes any critical information about procedure on client chart.			
<b>Notes provision of FP method on chart or logbook (notes which one[s]).</b>			
Notes referral to other services on chart.			
<b>Client Discharge Counseling:</b>			
<b>Reviews discharge instructions.</b>			
Informs client about activities to avoid.			
<b>Reviews warning signs with client:</b>			
<ul style="list-style-type: none"> <li>• <b>Heavy bleeding</b></li> <li>• <b>Fever</b></li> <li>• <b>Foul-smelling discharge</b></li> <li>• <b>Abdominal pain</b></li> </ul>			
Informs client about date and need to return for followup visit.			



# APPENDIX D

## Components of Observation of Postabortion Care Service Provision

*Critical steps are in italics and bold.*

STEP/TASK	TOTAL	MD	RN	TOTAL	CRITICAL
<b>A. INITIAL IPC/COUNSELING</b>					
Greets client/couple respectfully and with kindness; makes her comfortable.				5	1
Introduces herself/himself to the client.					
<b><i>Ensures privacy (others cannot hear or see client).</i></b>					
Treats client politely and respectfully.					
Uses 2-way communication.					
<b>B. TRIAGE</b>					
Determines whether client needs immediate treatment.				1	0
<b>C. INITIAL HISTORY</b>					
Determines reproductive history.				13	4
Asks about pregnancy:					
<b><i>Asks about last menstrual period:</i></b>					
• <b><i>Menstrual history</i></b>					
• <b><i>Date of last menstrual period</i></b>					
Asks about FP methods used.					
Asks about pregnancy symptoms.					
<b><i>Asks about incomplete abortion symptoms:</i></b>					
Asks about vaginal bleeding.					
Asks about lower abdominal pain.					
Asks about vaginal discharge.					
<b><i>Asks about fever, chills and malaise.</i></b>					
Determines if any medication allergies.					
Assesses TT vaccination status.					
<b>D. FP HISTORY/USE</b>					
<b><i>Ascertains client's desire to prevent pregnancy.</i></b>				7	2
Asks about previous FP method use.					
Provides FP counseling (whenever appropriate).					
Informs client that return of fertility may occur within two weeks.				7	2
<b><i>Discusses what FP methods are available before discharge.</i></b>					
If client wishes a FP method, assists client to choose method by briefly discussing each method.					
Describes in detail advantages and disadvantages of the method selected.					

Notes: MD=physician, RN=nurse

STEP/TASK	TOTAL	CRITICAL
<b>E. IP</b>		
<i>Washes hands thoroughly with soap and water, and dries them on a clean, dry towel.</i>	2	1
Uses appropriate IP practices for instrument decontamination/processing.		
<b>F. PHYSICAL EXAMINATION</b>		
Takes vital signs (temperature, blood pressure and pulse if not already taken).	10	2
Confirms hemoglobin level. Sends for test if not available.		
Assesses lungs and heart.		
Performs abdominal examination.		
<i>Performs speculum examination checking for bleeding, tears, trauma and infection.</i>		
<i>Performs bimanual examination.</i>		
Determines client examination/history according to training manual guidelines.		
Notes any abnormal findings on client chart.		
Refers client if any complicating factors.		
Rules in pregnancy by examination or pregnancy test.		
<b>G. INFORMS CLIENT OF TREATMENT OPTIONS</b>		
<i>Discusses findings and plan for MVA with client.</i>	4	2
Discusses risks and benefits of MVA procedure.		
Asks the client if she has any questions or concerns.		
<i>Obtains verbal or written consent for the procedure.</i>		
<b>H. MVA PREPARATIONS</b>		
Sets out instruments needed for insertion procedure.	4	0
Verifies verbal consent.		
Treats client politely and respectfully.		
Verifies that client has emptied her bladder.		
<b>I. MVA PROCEDURE</b>		
Puts new examination or high-level disinfected or sterile surgical gloves on both hands.	8	2
Administers analgesia and/or para-cervical block if needed. (Only physicians are allowed to perform a para-cervical block procedure. If done, was it done correctly?)		
Inserts vaginal speculum to see the cervix.		
Applies antiseptic solution Betadine to cleanse cervix two times.		
<i>Uses no-touch technique with cannula.</i>		
<i>Maintains sterile field throughout procedure.</i>		
Examines cervix for bleeding. (If client has chosen IUD for FP method, inserts IUD after conclusion of the MVA procedure.)		
Gently removes speculum.		
<b>J. EXAMINES EVACUATION</b>		
Examines tissue for chorionic villi.	2	0
Verifies that tissue removed is consistent with gestational age.		
<b>K. ENSURES CLIENT COMFORT</b>		
Pays careful attention to client throughout the procedure.	2	1
<i>Uses verbicaine (verbal reassurances) continually throughout the procedure.</i>		

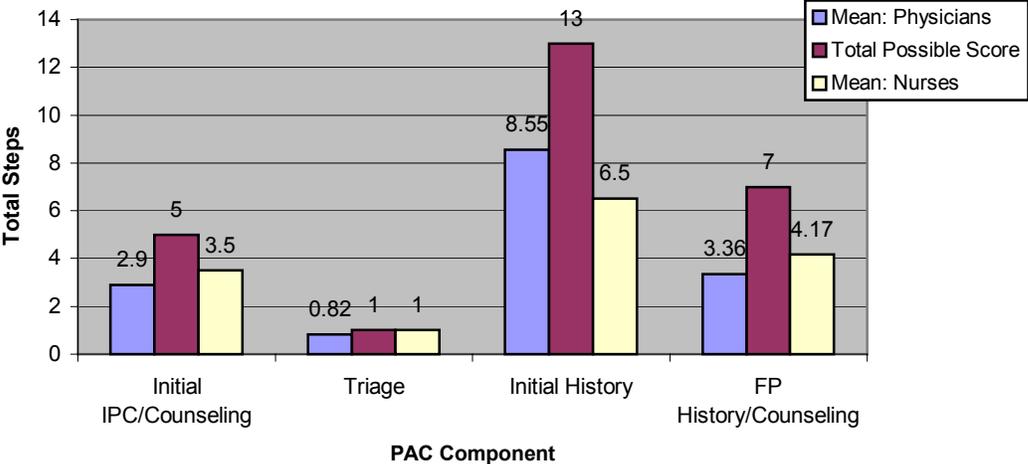
STEP/TASK	TOTAL	CRITICAL
<b>L. POST-PROCEDURE CARE</b>		
Helps client to recovery area.	6	3
<b>Monitors client status immediately after procedure and one hour later if necessary. Checks for:</b>		
• <b>Vital signs</b>		
• <b>Bleeding</b>		
• <b>Comfort</b>		
Assists client to choose a FP method and provides client with FP method that is available in PAC area (can be supplied at any time that is appropriate during the client's stay in PAC area). Explains to client the instructions for use, advantages, disadvantages, potential complications and followup.		
If client chooses a FP method that cannot be provided immediately, gives client detailed information about referral, how to find service site location and schedules.		
<b>M. POST-PROCEDURE IP</b>		
<b>Places used instruments in 0.5% chlorine solution, and soaks them for 10 minutes.</b>	5	2
<b>Briefly immerses gloved hands in chlorine solution. If disposing of gloves, places them in leak-proof container or plastic bag. If reusing gloves, soaks gloves in 0.5% chlorine solution for 10 minutes.</b>		
Assures that ward attendant wipes down couch, equipment table, trolleys and other large surfaces with decontamination solution.		
Disposes of waste materials according to IP guidelines.		
Washes hands thoroughly with soap and water.		
<b>N. RECORDING AND REPORTING</b>		
<b>Completes client record/chart immediately after procedure.</b>	5	2
Records client's name and information in logbook.		
Notes any critical information about procedure on client chart.		
<b>Notes provision of FP method on chart or logbook (notes which one[s]).</b>		
Notes referral to other services on chart.		
<b>O. CLIENT DISCHARGE</b>		
<b>Reviews discharge instructions.</b>	7	5
Informs client about activities to avoid.		
<b>Reviews warning signs with client:</b>		
• <b>Heavy bleeding</b>		
• <b>Fever</b>		
• <b>Foul-smelling discharge</b>		
• <b>Abdominal pain</b>		
Informs client about date and need to return for followup visit.		



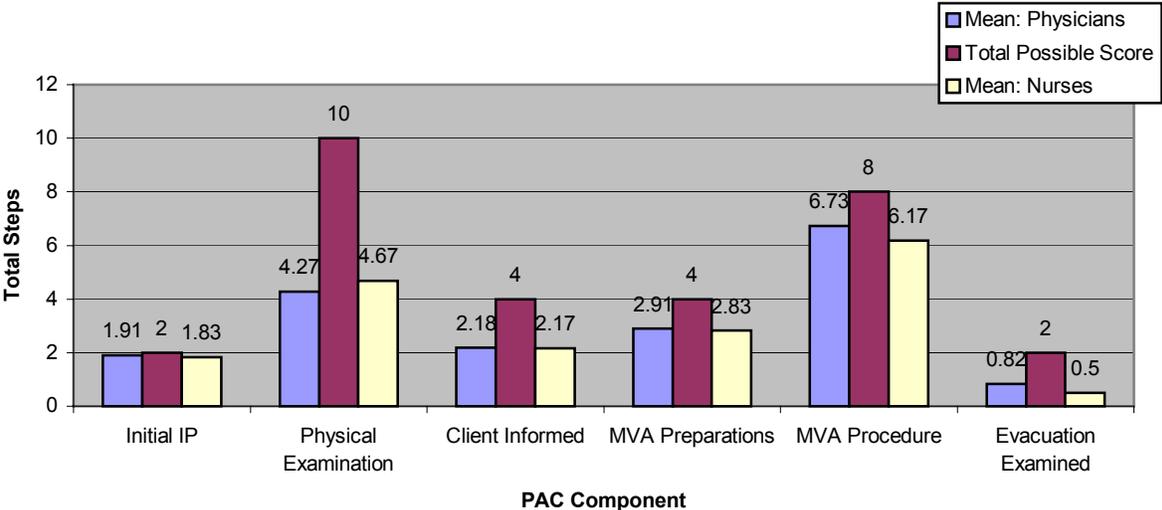
# APPENDIX E

## Component Competence Mean Scores for Physicians and Nurses Separately

**Figure F-1. Postabortion Care Observation Components: Mean Scores of Physicians Versus Nurses, Pre-Procedure Counseling**



**Figure F-2. Postabortion Care Observation Components: Mean Scores of Physicians Versus Nurses, Treatment of Incomplete Abortion**



**Figure F-3. Postabortion Care Observation Components: Mean Scores of Physicians Versus Nurses, Post-Procedure Services**

