GLOBAL EVALUATION
OF USAID’S
POSTABORTION CARE PROGRAM

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<thead>
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<th>Description</th>
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<tbody>
<tr>
<td>ACNM</td>
<td>American College of Nurse-Midwives</td>
</tr>
<tr>
<td>ANE</td>
<td>Bureau for Asia and the Near East</td>
</tr>
<tr>
<td>CA</td>
<td>Cooperating agency</td>
</tr>
<tr>
<td>CDC</td>
<td>U.S. Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CPR</td>
<td>Contraceptive prevalence rate</td>
</tr>
<tr>
<td>CRHCS</td>
<td>Commonwealth Regional Health Community Secretariat for East, Central and Southern Africa</td>
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<td>D&amp;C</td>
<td>Dilation and curettage</td>
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<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
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<td>DHS</td>
<td>Demographic and Health Survey</td>
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<tr>
<td>E&amp;A</td>
<td>Bureau for Europe and Eurasia</td>
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<tr>
<td>EOC</td>
<td>Emergency obstetric care</td>
</tr>
<tr>
<td>ESA</td>
<td>East and Southern Africa</td>
</tr>
<tr>
<td>FCI</td>
<td>Family Care International (in Kenya)</td>
</tr>
<tr>
<td>FHI</td>
<td>Family Health International</td>
</tr>
<tr>
<td>FP</td>
<td>Family planning</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal year</td>
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<td>HIV/AIDS</td>
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<td>Information, education and communication</td>
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<td>Program for International Training in Health</td>
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<td>International Standards Organization</td>
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<td>IUD</td>
<td>Intrauterine device</td>
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<td>JHU/CCP</td>
<td>Johns Hopkins University/Center for Communication Programs</td>
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<td>Maternal and child health</td>
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<td>MOHP</td>
<td>Ministry of Health and Population</td>
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<tr>
<td>MSH</td>
<td>Management Sciences for Health</td>
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<tr>
<td>MVA</td>
<td>Manual vacuum aspiration</td>
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<td>On-the-job training</td>
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<td>Respiratory tract infection</td>
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<td>Sida</td>
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<td>SPA</td>
<td>Service Provision Assessment Survey (Kenya 1999)</td>
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<td>STI</td>
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<td>United Nations Development Programme</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Curriculum
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EXECUTIVE SUMMARY

A global evaluation of the U.S. Agency for International Development’s (USAID) postabortion care (PAC) program was conducted in the fall of 2001 to serve as a thorough review of programmatic and technical strengths and challenges. It was conducted at the request of USAID/Washington in order to strengthen its global PAC program. The full report includes case studies of PAC in four countries: Bolivia, Kenya, Ghana, and Nepal.

Most societies have provided some care to women suffering from the complications of abortion, whether induced or spontaneous. In recent years, however, the international reproductive health community has recognized the tremendous mortality and morbidity that results from abortion complications and has resolved to reduce it, on a global basis. The turning point was the 1994 International Conference on Population and Development (ICPD), at which governments, nongovernmental organizations (NGOs), and individuals affirmed, “all countries should strive to make accessible through the primary health care system, reproductive health to all individuals of appropriate ages as soon as possible.” Prevention of abortion and the management of the consequences of abortion were among the reproductive health care services specifically identified. Most recently, in January 2001, the Bush Administration released a statement in strong support of postabortion care programs.

Since 1990, when USAID funding for PAC programming began, the Agency has had remarkable success, with relatively limited funding. USAID/Washington support for PAC, coming from both the family planning/reproductive health and safe motherhood programs, has been about $20 million; $15 million represents spending in the past two years. There are now PAC programs in Africa, Latin America and the Caribbean, Europe and Eurasia, and Asia and the Near East. USAID has worked through its cooperating agencies (CAs), which have effectively used USAID’s funding and leadership to leverage funding from foundations as well as bilateral and multilateral donors. Together, the international community has initiated PAC activities in more than 40 countries. Over a quarter of all countries with populations over 2 million have some USAID–funded PAC activities. Striking progress has been made in starting PAC activities in most regions with a high burden of mortality from unsafe abortion.

The PAC program has three elements:

- emergency treatment for complications of spontaneous or induced abortion,
- postabortion family planning counseling and services, and
- linkages between emergency care and other reproductive health services, for example, management of sexually transmitted infections (STIs).

Success to date is greatest in the first component: treatment of abortion complications. In those countries with PAC programs—in hospitals, clinics, and small maternity facilities at the community level—women are receiving treatment through manual vacuum
aspiration (MVA), which is safer and less costly for both the woman and the health facility than traditional dilation and curettage (D&C). One important innovation in the process has been the demonstration in a number of countries that trained nurse-midwives can provide high-quality treatment, thus expanding access to the community level. The benefits of expanding such access were observed in both Ghana and Kenya.

In Kenya, evidence was available for declines in hospital admissions for abortion complications and for declines in hospital maternal mortality. Moreover, the rapid decline in maternal mortality during 1995–99 in the chief teaching hospital in Nairobi suggests that the reduced complications from abortion have facilitated redirecting resources to the prevention of obstetric deaths from other causes. In other countries, the contributions of PAC, other efforts to prevent unintended pregnancy, and changes in health care services have led to reductions in maternal mortality in hospitals, reduced frequency of hospitalizations for severe complications from abortion, and reduced demand for postabortion care. In Kenya, Ghana, and Bolivia, abortion appears to be a declining contributor to the total morbidity of women.

While many of the programs were begun as pilot studies, most countries are in the process of scaling up. The process of initiating and developing PAC was different in each country, depending upon the country context. In some countries, PAC is a public sector program, while in others it is multisectoral. In some countries, treatment of complications is the responsibility of tertiary facilities; in other countries, treatment is occurring at the primary level in communities. Regardless of the country context, however, PAC managers and providers and the CAs that have worked with them have sought to expand access to services. There are notable successes:

- Bolivia has incorporated PAC into its national health insurance program, thus removing financial barriers.

- Mexico and Egypt have sponsored operations research to understand and reduce the social and cultural barriers that lead women to delay seeking help and treatment.

- Many countries, using operations research data, have trained providers to be more compassionate than they had been, using materials produced by USAID’s CAs.

The second component of PAC—family planning counseling and services—is not as strong as the first component and needs to be strengthened. PAC family planning counseling and services is dependent upon the maturity of the national family planning program. In countries with strong programs, there are trained providers; extensive information, education and communication (IEC); good contraceptive logistics; and high demand, all facilitating the development of this PAC component. Few countries have such a program, however, and developing strong PAC family planning counseling and services entails reinforcing clinical training in family planning, improving counseling and IEC, and ensuring that a broad method choice is available to women after emergency treatment. All four countries visited by the evaluation team need to strengthen their PAC family planning.
The third component—linkages with other reproductive health services—is very weak. In general, while there are limited examples of attempts to link with other services, this component has received insufficient attention in protocols, training, implementation, and monitoring. Like the second component—family planning—the third component is dependent upon the national reproductive health program. In circumstances where other reproductive health services, such as diagnosis and treatment of STIs, are very poor or unavailable, linkages are difficult, if not futile. The Ghana case study (presented in an appendix to the full report) demonstrates the challenge involved in establishing effective linkages. The Kenyan case study illustrates the importance of doing so in a country with a high prevalence of human immunodeficiency virus (HIV). USAID should define what this component realistically should comprise, in differing country contexts.

PAC programs face considerable challenges, such as the following:

- There is a critical need for data for efficient and effective planning and for assessing impact. Data are necessary for demonstrating the unique contribution of PAC on maternal morbidity and mortality—a demonstration that is increasingly important given the high opportunity costs of any program in developing countries.

- Many countries with a high burden of mortality have no PAC activities. In no country have PAC activities been shown to have reached the majority of the population.

- The community and community demand for high-quality postabortion care will be the basis of PAC sustainability. To date, however, PAC has been largely a medical model. Further work needs to be undertaken to generate understanding and demand for PAC at the community level.

RECOMMENDATIONS

Comprehensive Postabortion Care

Managers should ensure that PAC programs start with a conceptualization of comprehensive PAC for all women treated for complications from spontaneous or induced abortion and should address the attitudinal and organizational issues that lead to separate treatment for MVA and D&C patients.

PAC programs should devote more attention in training, monitoring, and supervision to ensure high-quality family planning:

- knowledge, attitude and skills in family planning (FP),
- organization of FP services (physical location and space),
- counseling,
- IEC materials,
- contraceptive supply and method mix,
- privacy, and
- integration with providers of emergency care.
USAID should fund operations research to determine feasible, acceptable, and effective ways to provide linkages to appropriate reproductive health services.

PAC planners and managers should encourage efforts to work with, educate, and involve the community.

PAC planners, managers, and providers should create partnerships with national and international PVOs and NGOs with expertise in working with communities and maternal and child health (MCH) programs to strengthen PAC programs.

**Accessibility**

USAID should fund operations research on the most effective ways to expand access to adolescents.

Country PAC managers should carefully analyze key country data and establish objectives, strategies, and indicators for expanding and maximizing geographic access.

PAC planners should specify clear national objectives for PAC (e.g., prevent abortion mortality, prevent need for hospitalization from complications from abortion, prevent repeat abortions through contraception) and set up appropriate surveillance or research to determine whether the objectives are being achieved.

PAC planners and managers should analyze further currently available data, such as Kenyatta and other hospital data, to determine trends in abortion mortality in hospitals and trends in where women live who continue to require hospitalization for abortion complications. Are there PAC services in the communities from which these women come?

**Organization of Services**

Comprehensive PAC preservice training for all cadres of health care providers (physicians, nurses, clinical officers) should be considered a priority for USAID and CAs.

PAC country programs should attempt to designate model clinical sites with high PAC caseloads for regional training centers to ensure clinical mastery of important PAC clinical skills.

Increased programmatic efforts should be made to find ways to provide PAC services 24 hours a day, 7 days a week.

USAID and CAs should continue to identify effective methods to motivate and encourage both providers and managers to ensure that adequate family planning and other important reproductive health (RH) services are routinely offered as an integral part of PAC.
Quality of Care

The routine sensitization of providers, facility managers, and other staff as well as community leaders and other stakeholders to increase support for the compassionate treatment of PAC clients should be seen as a priority and as the first step in all PAC programs (as much of a priority as MVA and other technical training).

The importance of changing poor and often punitive provider attitudes toward women seeking postabortion care should continue to be emphasized in PAC programs.

USAID should fund high-quality research on pain management, including the need to reduce pain, best methods to reduce pain, and the costs and logistics of reducing pain.

USAID should support the clarification of existing guidelines on pain management for women with bleeding in early pregnancy receiving MVA. At a minimum, the World Health Organization (WHO) guidelines should be promoted: “Provide emotional support and encouragement and give paracetamol 30 minutes prior to procedure. Rarely, a paracervical block may be needed.” Postprocedure care, according to WHO, should be: “Give paracetamol 500 mg by mouth as needed.”

Sustainability

Countries without a strategic plan for national scale up should develop such a plan.

USAID should continue to provide leadership from Washington and the Missions and to promote dedicated PAC staff within governments, CAs, and donors.
I. INTRODUCTION

GLOBAL PROBLEM OF COMPLICATIONS FROM ABORTION

Worldwide, about 37 percent of all pregnancies end in spontaneous or induced abortion or stillbirth; perhaps 17 percent of all pregnancies end through induced abortion. Complications from abortion can kill; the World Health Organization (WHO) estimates that in 1995, there were approximately 20 million unsafe abortions, leading to approximately 70,000 deaths. The most recent global estimate of the proportion of maternal deaths due to complications of abortion is 13 percent. The risk of death from complications of abortion is global, yet varies greatly from region to region, as table 1 indicates. The largest number of deaths due to unsafe abortion occurs in Asia (38,500, or 49 percent of the total), the highest rate per 100,000 live births occurs in Africa (110), and the highest proportion of maternal deaths due to unsafe abortion is in Latin America (21 percent). Within Latin America, the highest proportion of maternal deaths due to unsafe abortions is in South America (24 percent)—a proportion equal to that of Eastern Europe (24 percent).

Table 1

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Number of Unsafe Abortions (millions)</th>
<th>Estimated Number of Deaths due to Unsafe Abortion</th>
<th>Mortality Ratio (deaths due to unsafe abortion per 100,000 births)</th>
<th>Proportion of Maternal Deaths (percent of maternal deaths due to unsafe abortions)</th>
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<td>63</td>
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<td>South America</td>
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<td>30</td>
<td>150</td>
<td>51</td>
<td>8</td>
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*Japan, Australia, and New Zealand have been excluded from the regional estimates, but are included in the total for developed countries. Note: For regions in which incidence is negligible, no estimates are shown.
WHO published the preceding data in 1998. The U.S. Agency for International Development (USAID) is currently funding a study through WHO to review the direct causes of maternal mortality and to identify regional variation.

**Burden upon the Woman and Her Family**

Morbidity and mortality from complications obviously place a tremendous burden on the woman and her family. For example, in Ethiopia, unsafe abortion is second only to tuberculosis as a cause of death among young women; 52 percent of obstetric admissions are due to unsafe abortion, and more than half of the women dying from abortion are women under age 20. Data from Eastern Europe, where the frequency of hospitalization and duration of hospitalization associated with complications were recently measured in four surveys, present another picture of the burden. The proportion of women having complications soon after an abortion ranged from 8 percent in Romania and Georgia to 14 percent in Ukraine. Between 2–6 percent of women reported complications 6 months after the abortion. In the 1997 survey in Moldova, 11 percent of women who had abortions reported complications shortly after the procedure; 19 percent of these spent four or more nights in the hospital. Six months later, 25 percent still had complications, including chronic pelvic pain (33 percent), irregular bleeding (30 percent), and pelvic infection (14 percent). In the 1999 survey in Romania, 7 percent of women who had abortions reported early complications; 32 percent of them were hospitalized for four or more nights. Six months later, 14 percent still had complications consistent with pelvic infection and intrauterine adhesions. In Ukraine in 1999, 14 percent of women who had abortions reported early complications; 37 percent of them were hospitalized after the abortion.

**Burden upon the Health System**

Numerous studies around the world have documented the burden that treatment of the complications of abortion places upon a health system. In a Kenyan study of five major hospitals, the percentage of gynecological ward admissions for treatment of incomplete abortion ranged from 29–46 percent. In Egypt, in a sample of 86 of the country’s 538 Ministry of Health (MOH) hospitals, admissions for abortion complications averaged 19 percent of all obstetric/gynecologic admissions. Peru noted that 10 percent of the inpatients on obstetric/gynecologic wards were hospitalized for treatment of abortion complications. In a recent five-hospital study in Nepal, abortion-related complications led to 20–48 percent of all obstetric and gynecologic hospital admissions. Bolivia, alarmed by the high percentage of such admissions in late 1989, initiated a family planning program for the first time in its history, under the banner of “La lucha contra el aborto” (the fight against abortion). At that time, the Bolivian MOH estimated that there were 40,000 abortions annually; 30 percent of those patients were hospitalized for postabortion care. The MOH cited figures indicating that 46 percent of all admissions to the gynecologic ward of the main hospital in La Paz were for complications of abortion.

The cost of medical treatment for unsafe abortion complications is high. In 1990, Jacobson reported that nearly half of Brazil’s national obstetric budget was used for treating complications of illegal abortion. The public and private legal costs of the judicial system for pursuing and imprisoning women who have had illegal abortions or for pursuing those who provide abortions has not been estimated.
Missed Opportunities

Some of the women presenting at hospitals for bleeding in early pregnancy or for treatment of abortion complications have miscarried and mourn the loss of a wanted child. For most women, however, this pregnancy was either unplanned or unwanted. The Egyptian study findings suggest that “there are approximately 28,000 women who present for postabortion treatment in Egyptian public sector hospitals each month—or about 336,000 patients per annum.” Only about one third of the cases are classified as spontaneous miscarriage with certainty; the remainder can be considered as being largely avoidable through the provision of family planning.15

Women presenting with abortion complications have, on average, used family planning less than the national use of contraception. In Egypt, approximately 47 percent of women presenting had ever used a contraceptive method (including traditional), less than the 68 percent of ever use among married women and 70 percent among those currently married, reported in the 1995 Egyptian Demographic and Health Survey (DHS). In other studies, less than one third of the women in Latin America, Asia, and Africa receiving care for abortion studies had ever used modern contraceptives.16

Some women have repeated failures in planning their families. In Egypt, 37 percent of women presenting for treatment of complications reported a previous miscarriage.17 In Romania, where modern method use of contraception is only 30 percent, the average woman has three abortions per live birth; in Georgia, with a contraceptive prevalence rate (CPR) of 20 percent, the average woman has two abortions per live birth. In Nigeria, women seeking care for postabortion complications were more likely to have had a previous abortion than to have used contraception; only 5 percent had ever used contraception, while 11 percent had had a previous abortion.18

The failure of women to plan their families (i.e., to have the number of children they want when they want them) results in unnecessary suffering and costs to the woman and her family and preventable costs to the national health system. In Ukraine, where the modern method CPR is 38 percent, 60 percent of women failed to receive contraceptive counseling after abortion. Failure to provide information, education and communication (IEC) and family planning services broadly throughout a country is a lost opportunity for preventing unnecessary suffering and costs. Failure to do the same after treatment of abortion complications is a second lost opportunity.

INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT:
A GLOBAL RECOGNITION OF THE NEED FOR POSTABORTION CARE

In response to the magnitude of the problem, abortion and postabortion care were discussed at the United Nations International Conference on Population and Development (ICPD), held September 1994 in Cairo. World leaders, high-ranking officials, representatives of nongovernmental organizations (NGOs), and United Nations agencies agreed upon a Programme of Action that included postabortion care, as follows:

In no case should abortion be promoted as a method of family planning. All governments and relevant intergovernmental and nongovernmental organizations are urged to strengthen their commitment to women’s health, to deal with the health aspect of unsafe abortion as a major public
health concern and to reduce the recourse to abortion through expanded and improved family planning services. Prevention of unwanted pregnancies must always be given the highest priority and every attempt should be made to eliminate the need for abortion. Women who have unwanted pregnancies should have ready access to reliable information and compassionate counseling. Any measures or changes related to abortion within the health system can only be determined at the national or local level according to the national legislative process. In circumstances where abortion is not against the law, such abortion should be safe. In all cases, women should have access to quality services for management of complications arising from abortion. Postabortion counseling, education and family planning services should be offered promptly, which will also help to avoid repeat abortions.

POSTABORTION CARE (PAC): A DEFINITION AND RESPONSE

Ipas developed the term postabortion care in 1993; after the 1994 ICPD, countries moved to formally initiate postabortion care programs. The term is now widely used and understood to include the following three critical elements:

- emergency treatment for complications of spontaneous or induced abortion,
- postabortion family planning counseling and services, and
- linkages between emergency care and other reproductive health services, for example, management of STIs.

USAID'S POSTABORTION CARE PROGRAM

History and Leadership

In 1994, for the first time, USAID authorized the use of population funds for postabortion treatment and postabortion family planning services. In addition to a favorable political environment, two events led to the commitment to and mobilization of resources to address postabortion care. Domestically, the Postabortion Care Consortium was established by leaders within the community of cooperating agencies (CAs) to advocate that bilateral and multilateral donors, particularly USAID and the United Nations Population Fund (UNFPA), address the issue of unsafe abortion in their policies and programs.

To date, USAID has funded PAC programs of varying levels in all four regions, in more than 40 countries. PAC has been funded through centralized core funds from USAID/Washington and by field support and direct agreements in the field, and by USAID Missions as well as regional USAID offices. In Washington, the operating units that support PAC are the Center for Population, Health and Nutrition in the Bureau for Global Programs, Field Support and Research (G/PHN) and the regional bureaus. USAID funds and implements PAC as both a safe motherhood and a family

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The PAC Consortium was established by Ipas, AVSC International, Pathfinder, and the International Planned Parenthood Federation (IPPF). Additional organizations, such as the Population Council, Johns Hopkins University/Center for Communication Programs (JHU/CCP), JHPIEGO, Program for International Training in Health (INTRAH)/PRIME, Family Care International (FCI), American College of Nurse-Midwives (ACNM), and others have participated over time. USAID and the Packard Foundation are the funding agencies that regularly participate in PAC Consortium activities.
planning/reproductive health initiative; as this report indicates, there is success with both approaches.

Approximately $20 million of core and field support funds have been spent on postabortion care over the past seven years. The exact amount of USAID expenditures is unknown due to the incorporation of PAC within larger reproductive health projects (there is no line item for PAC) and the decentralized nature of the agency. (Detailed information on funding investments is outlined in section IX.)

Key technical components are in the areas of policy and advocacy, operations research, training, improving supervision and service delivery, and health communication. Although some organizations contributing to postabortion care programs fund them entirely with non–USAID resources, the following CAs receive significant USAID funds for postabortion care: EngenderHealth, JHPIEGO, Pathfinder International, Population Council, and the Program for International Training in Health (INTRAH) (PRIME project). The Johns Hopkins University/Center for Communication Programs (JHU/CCP) and the Futures Group International (POLICY project) also contribute to postabortion care with USAID funds. A significant amount of other donor resources have been leveraged by these organizations with USAID funds. (Other donor support is addressed in greater detail in section II.)

USAID may well be the largest single donor of postabortion care worldwide. Most PAC programs receive a combination of centrally managed and field-managed funds; therefore, leadership both in Washington and the Missions is crucial to building momentum both internationally and within specific countries.

Despite a large and varied portfolio, there are currently no dedicated postabortion care staff members at USAID/Washington. Individual Missions have varying approaches to managing PAC programs. Leadership and advocacy for postabortion care is a recognized need and has been met with the creation of an internal PAC working group. Established in 1994, the working group is composed of interested individuals from G/PHN and the regional bureaus. The working group’s purpose is to provide technical and programmatic assistance and information to USAID/Washington, Missions, and other relevant groups as well as input to processes in order to improve and promote postabortion care programs globally. To date, there is no official policy or strategy on postabortion care, but the working group plans to develop a global postabortion care strategy.

Leadership for postabortion care within USAID has not come exclusively from Washington. The USAID Regional Economic Development Services Office for East and Southern Africa (REDSO/ESA) has been a leader in advancing PAC programs in its region. In 1996, REDSO, in collaboration with the USAID Bureau for Africa, the POLICY project, and other partners, launched the regional postabortion care initiative. Activities within the PAC initiative aimed at increasing investment in PAC in ESA countries by improving the availability and use of information about unsafe abortions and PAC and expanding partnerships and networks. Advocacy materials that were developed include a popular brochure, “What Can You Do? Postabortion Care in East and Southern Africa” and country assessments in Kenya, Malawi, Uganda, and Zambia. This initiative also funded a study tour of eight delegates from ESA to Ghana, a regional quality-of-care
Concrete achievements have resulted from these efforts. For example, following the assessment in Uganda, the MOH supported a pilot study to demonstrate the efficacy and safety of nurse-midwives providing PAC in Uganda. Efforts to expand the program there are ongoing. Today, seven countries in the ESA region have postabortion care programs. Leadership from REDSO/ESA, and in particular, dedicated staff, have been crucial to the movement to initiate and expand PAC services in ESA. Another regional approach, in West Africa, has been centrally funded in order to increase attention to postabortion care in another region of Africa with high maternal mortality.

**U.S. Government Policy and Postabortion Care**

Postabortion care is a high priority for USAID. In an electronic message addressed to all population, health, and nutrition (PHN) officers on August 2, 2000, the deputy assistant administrator reiterated the Agency’s strong commitment to global postabortion care programs and clearly stated that its work on postabortion care would not be affected by the abortion-related restrictions affecting population-directed assistance that were included in the fiscal year (FY) 2000 appropriations act.

More recently, a critical White House statement accompanied President Bush’s reinstatement of the Mexico City Policy that was in effect from 1985–93.

> The President’s clear intention is that any restrictions (on family planning assistance) do not limit organizations from treating injuries or illnesses caused by legal or illegal abortions, for example, postabortion care. (White House statement on postabortion care, January 22, 2001)

On September 10, 2001, in another electronic message to all PHN officers, the deputy assistant administrator stated that

> USAID places high priority on preventing abortions through the use of family planning, saving the lives of women who suffer complications arising from unsafe abortion and linking those women to voluntary family planning and other reproductive health services. Postabortion care should be a key component of USAID–assisted safe motherhood and family planning programs...USAID will continue to support postabortion care activities, and foreign organizations are permitted to implement such activities without affecting their USAID family planning assistance. It should be noted that USAID does not finance the purchase or distribution of manual vacuum aspiration (MVA) equipment for any purpose.

These strong statements should reassure USAID officers and implementing partners that there are no policy reasons for not supporting the postabortion care activities that the agency supported before the restoration of the policy.

**USAID’s Cooperating Agencies**

Many CAs have played direct leading roles in initiating and developing PAC programs. Pathfinder International, EngenderHealth, INTRAH/PRIME, JHPIEGO, the Population Council, JHU/CCP and Futures (POLICY) have been PAC leaders. Other CAs have contributed to PAC development through building the foundation upon which a PAC program is established; to have a successful PAC program, a country needs family
planning and other reproductive health services. Those CAs who contributed to building a country’s family planning logistics system (John Snow, Inc. [JSI]), to improving the quality of care (Family Health International [FHI]), or to the rational use of drugs (Management Sciences for Health [MSH]) have also contributed to postabortion care.

OTHER DONORS

A number of donors other than USAID have funded PAC activities. These include bilateral organizations (Department for International Development, United Kingdom [DFID], the Swedish International Development Cooperation Agency [Sida], and the German Technical Cooperation [GTZ]), multilateral organizations (UNFPA and the United Nations Children’s Fund [UNICEF]), and private foundations (the David and Lucile Packard Foundation, the Rockefeller Foundation, and the Erik E. and Edith H. Bergstrom Foundation). The Packard Foundation has provided important support for a drawdown account that makes MVA equipment available for a number of USAID–funded projects that could not have procured this equipment with USAID funds.

It is important to note how significant foundation funding has been for CAs. USAID funds only constituted 15 percent of the $1.7 million that Pathfinder spent on PAC in FY 2001. EngenderHealth received a substantial grant from the Packard Foundation for PAC work; due to this grant and funds from a number of other sources, the proportion of its PAC funds from USAID was 31 percent (of $2,907,366) in FY 1999, 34 percent (of $2,995,553) in FY 2000, and 40 percent (of $3,583,751) in FY 2001.

The above data point out the importance of using USAID funds to leverage additional funding from other sources. Often these different funding sources can mutually support and reinforce each other. For example, EngenderHealth uses funding from the Packard Foundation to fund three regional PAC supervisors (in Asia, Latin America, and Africa). These supervisors also serve to strengthen EngenderHealth’s USAID–funded work. At the same time, core support from USAID created the base of EngenderHealth’s PAC program to enable the organization to obtain support for these positions and for these supervisors to effectively do their work.

For different funding sources to be able to reinforce each other effectively, it is important to have donor coordination, particularly at the country level. However, little evidence of this kind of coordination, other than donors agreeing to divide up their work to cover different regions of a country, was visible during the development of case studies in this report. In some countries there was coordination between the different implementing agencies, which has been effective, but which could be enhanced further by improved communication and coordination at the donor level.
II. BACKGROUND FOR THE GLOBAL EVALUATION

Several years ago, the USAID PAC Working Group recognized that although PAC programs had been initiated in over 30 countries, there was no central database describing the scope or reach of activities or any indication of potential Mission needs in terms of technical or programmatic assistance. Accordingly, the working group surveyed Missions to obtain descriptions of their PAC activities or their level of interest, other donor support, or need for assistance. Later, CAs were asked to describe their programs by country. Results of these two activities revealed considerable progress and success in implementing PAC services worldwide. But the results also indicated significant gaps in terms of program, strategy, and scale. For example, demand for PAC services is presumed to have not been met in any country, nor has a full range of PAC services been systematically ensured. A wide range of pilot projects and program models exist, but there is no clear plan for initiating or scaling up postabortion care. A global postabortion care strategy is needed; the findings and recommendations of this report will contribute to this strategy.

SCOPE OF WORK

The purpose of this evaluation was to “conduct a comprehensive and thorough review and analysis of the outstanding programmatic and technical issues in the current PAC portfolio. The evaluation will be used by USAID to develop a three to five year strategy to mainstream its PAC efforts and to direct its global and Mission-level PAC activities and programming.” Specifically, the objectives of the evaluation were to

- analyze the outstanding technical and programmatic issues,
- synthesize program strengths and weaknesses,
- identify significant global and regional achievements and needs/gaps, and
- document past investments of field and global support and make recommendations for the future.

(See appendix A for the complete scope of work.)

METHODOLOGY

A team of seven persons, which included three USAID staff members, undertook this evaluation with the support of the USAID PAC Working Group. Before the formal start of the evaluation, USAID prepared CAs, key donors, and Missions for the work of the evaluation team by

- contacting CAs to explain the purpose of the evaluation and to solicit their cooperation with the evaluation team on the program and financial review, and assistance with logistics in Bolivia, Nepal, Ghana, and Kenya. These four countries were selected to be the focus of country case studies because of their significant PAC program efforts;
- contacting key donors with significant investments in PAC programming to inform them of the evaluation and indicate USAID’s interest in future collaboration/coordination after the evaluation; and

- developing and conducting a survey of Mission activities, levels of interest, perspectives, and concerns about PAC programming.

At the evaluation’s formal onset, the team reviewed PAC programming and investments, read project reports and documentation, and conducted interviews with identified CA PAC experts, PAC Working Group members, and selected staff from G/PHN and the regional bureaus.

The team divided into two subteams, visited four countries selected by USAID, and studied their PAC programs in order to develop case studies. The conceptual framework for these case studies was the PAC framework for quality of care, developed by PRIME. It adapted from Judith Bruce’s six elements of quality of care in family planning, and postulates that the quality of care of the three components of PAC can be assessed in terms of:

- information and counseling,
- interactions between women and providers/staff,
- equipment, supplies, and medications,
- appropriate technologies for the treatment of complications, and
- technical performance.

**Figure 1**

The team studied the PAC programs of Bolivia, Ghana, Kenya, and Nepal in light of these elements of quality and in terms of access to services and other critical factors to
success, such as policy. Additionally, the process of scaling up and the issues related to sustainability were assessed.

A limitation to this methodology is that the team visited only 4 of the approximately 30 countries in which USAID has invested in PAC. (Appendix B lists the persons contacted during the evaluation.) The team did not visit any programs in the USAID region of Europe and Eurasia. The team attempted to compensate for this limited sample through a review of documents (see appendix C) and data on other countries, some of which, such as Egypt, have extensive documentation on the process of developing a PAC program. (Case studies on the four country programs are presented in appendices D–G.)
III. PAC AROUND THE WORLD

PAC IN 40 COUNTRIES

PAC programs have been initiated in at least 40 countries around the world since 1994. Over 30 of these programs currently receive funds from USAID. Table 2 on the following page presents those countries in terms of the sector, cadre, and type of training.

Table 2 was created from information gathered by survey from the following CAs: EngenderHealth, INTRAH/PRIME, JHPIEGO, JHU/CCP, Pathfinder International, and the Population Council. CAs reported their activities and start dates, including non–USAID funded PAC programs worldwide (in italics). The years listed next to each country name may not reflect the actual initiation of programs or efforts to move postabortion care forward in that country; they simply represent initiation of USAID funding to specific organizations or years that USAID–funded organizations initiated PAC programs with other donor resources. In some countries, many individuals are responsible for promoting or improving postabortion care programs without either external support or USAID funding.

The table categories were created to present a sense of the progress of the USAID–related PAC program. Level of effort also is not reflected. No formula was used in this categorization; rather, some judgment was required to determine whether the program in each country was at the pilot or expansion phase. In general, pilot programs can include operations research, work with policymakers and stakeholders, and in general, intensive efforts to establish postabortion care. Training of providers is generally focused on major tertiary hospitals. Expansion refers to programs that have moved from major tertiary hospitals to a lower level health care facility, such as a district hospital.

PAC AND MATERNAL MORTALITY AND MORBIDITY

During the past decade, efforts to improve postabortion care have been based on numerous studies documenting abortion mortality and morbidity and their associated costs and on studies demonstrating that PAC services reduce abortion morbidity and associated costs. As part of the scope of work for this evaluation, USAID requested information regarding whether the support it has provided “focused on those countries or areas where a significant proportion of maternal mortality and morbidity is due to unsafe abortion.” The presence or absence of PAC is being interpreted in terms of a formal donor-funded program that explicitly defines the three elements of PAC. Many countries, including the United States and those in northern Europe, provide good care for a woman following complications of an abortion, including family planning and attention to other reproductive health issues; however, they may not define that care as PAC.

b For instance, this table indicates that USAID–funded organizations will begin activities in Nigeria in 2002. There have been, however, PAC activities in Nigeria since the mid–1990s, funded by other donors and institutions.
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<td>Ukraine 1998</td>
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<tr>
<td><strong>Asia and the Near East (ANE)</strong></td>
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<td>X</td>
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<td>India 1998</td>
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<td>Indonesia 1995</td>
<td>X</td>
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<td>X</td>
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<td>Myanmar 2000</td>
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<td>Nepal 1994</td>
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<td></td>
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<td>X</td>
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<td></td>
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<tr>
<td>Turkey 1998</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Vietnam 1994</td>
<td>X</td>
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</tbody>
</table>
*Italics represent funding by organizations other than USAID.*
WHO’s national estimates of maternal mortality and regional estimates of unsafe abortion compared with recent USAID information on the presence or absence of PAC services provides at least a partial answer to that question. In 1995, WHO, UNICEF, and UNFPA attributed 514,145 deaths to pregnancy-related causes and estimated the numbers and ratios of maternal deaths by country. In addition, WHO recently estimated that 78,000 maternal deaths result from about 20 million unsafe abortions that occur each year.

Overall, 41 (31 percent) countries with a population of 2 million or more have some postabortion care services; 34 countries (26 percent) have USAID CA–supported activities. While initial services have been provided primarily to countries with maternal mortality ratios over 100 maternal deaths per 100,000 live births, no special priority has been given to countries with the highest ratios. Moreover, most countries with high maternal mortality ratios lack any PAC services. Of 27 countries reported to have maternal mortality ratios over 850 maternal deaths per 100,000 live births, 9 (33 percent) now have PAC activities. All four countries with very high maternal mortality ratios and without PAC activities are in Africa.

### Table 3

**Presence or Absence of Postabortion Care, by Maternal Mortality Level of Country**

<table>
<thead>
<tr>
<th>Maternal Deaths per 100,000 Live Births*</th>
<th>Number of Countries</th>
<th>Countries with PAC**</th>
<th>Percentage of Countries with PAC</th>
<th>Percentage with USAID CA PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>USAID CA</td>
<td>Non–USAID</td>
<td></td>
</tr>
<tr>
<td>More than 1,000</td>
<td>20</td>
<td>8</td>
<td>1</td>
<td>45%</td>
</tr>
<tr>
<td>500–999</td>
<td>22</td>
<td>9</td>
<td>1</td>
<td>45%</td>
</tr>
<tr>
<td>100–499</td>
<td>28</td>
<td>12</td>
<td>1</td>
<td>46%</td>
</tr>
<tr>
<td>30–99</td>
<td>30</td>
<td>5</td>
<td>4</td>
<td>30%</td>
</tr>
<tr>
<td>Less than 30</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>133</td>
<td>34</td>
<td>7</td>
<td>31%</td>
</tr>
</tbody>
</table>

*Source: Population Action International (most recent WHO data, October 2001), countries with a population of 2 million or more, excluding nine with too few indicators.

**Survey of USAID cooperating agencies, September 2001.

An analysis of CA reports on PAC activities, compared with WHO regional data on deaths from unsafe abortion, indicates that 31 percent of the world’s population live in countries with some PAC activity; over half of the developing world’s population live in countries in which at least some PAC activity has been initiated. The regions in which over half of the countries’ populations have some PAC activity include Western Africa, Eastern Africa, Central America, South America, South Central Asia, Southeast Asia, and Eastern Europe. (See table 4.) Striking progress has been made in starting PAC activities in most regions with a high burden of mortality from unsafe abortion. Still, many countries with a high burden of mortality have no PAC activities, and in no country have PAC activities been shown to have reached the majority of the population.

In other countries, the contributions of PAC, other efforts to prevent unintended pregnancy, and changes in health care services have led to reductions in maternal mortality in hospitals, reduced frequency of hospitalizations for severe complications from abortion, and reduced demand for postabortion care. In Kenya, Ghana, and Bolivia,
abortion appears to be a declining contributor to overall morbidity of women (see case studies).

Table 4
Estimated Mortality from Unsafe Abortion (1995) and Presence or Absence of PAC Programs (2001), by United Nations Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Deaths from Unsafe Abortion</th>
<th>Deaths due to Unsafe Abortion per 100,000 Live Births</th>
<th>Proportion of Maternal Deaths due to Unsafe Abortion</th>
<th>Population in Countries with PAC (in 000s)</th>
<th>Population in Countries without PAC (in 000s)</th>
<th>Percentage of Population in Countries with PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLD</td>
<td>78,000</td>
<td>57</td>
<td>13</td>
<td>2,786</td>
<td>3,330</td>
<td>45.6%</td>
</tr>
<tr>
<td>More Developed</td>
<td>500</td>
<td>4</td>
<td>13</td>
<td>194</td>
<td>850</td>
<td>18.6%</td>
</tr>
<tr>
<td>Less Developed</td>
<td>77,500</td>
<td>63</td>
<td>13</td>
<td>2,593</td>
<td>2,481</td>
<td>51.1%</td>
</tr>
<tr>
<td>Less Developed-China</td>
<td>2,569</td>
<td>1,220</td>
<td>67.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFRICA</td>
<td>34,000</td>
<td>110</td>
<td>13</td>
<td>470</td>
<td>359</td>
<td>56.7%</td>
</tr>
<tr>
<td>Northern</td>
<td>1,200</td>
<td>24</td>
<td>7</td>
<td>70</td>
<td>107</td>
<td>39.4%</td>
</tr>
<tr>
<td>Western</td>
<td>12,000</td>
<td>121</td>
<td>12</td>
<td>194</td>
<td>46</td>
<td>80.7%</td>
</tr>
<tr>
<td>Eastern</td>
<td>16,000</td>
<td>153</td>
<td>14</td>
<td>207</td>
<td>56</td>
<td>78.7%</td>
</tr>
<tr>
<td>Middle</td>
<td>4,000</td>
<td>98</td>
<td>10</td>
<td>0</td>
<td>99</td>
<td>0.0%</td>
</tr>
<tr>
<td>Southern</td>
<td>800</td>
<td>49</td>
<td>19</td>
<td>0</td>
<td>50</td>
<td>0.0%</td>
</tr>
<tr>
<td>NORTH AMERICA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>316</td>
<td></td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>5,000</td>
<td>41</td>
<td>21</td>
<td>404</td>
<td>121</td>
<td>76.9%</td>
</tr>
<tr>
<td>Central</td>
<td>700</td>
<td>20</td>
<td>14</td>
<td>126</td>
<td>12</td>
<td>91.1%</td>
</tr>
<tr>
<td>Caribbean</td>
<td>600</td>
<td>71</td>
<td>18</td>
<td>16</td>
<td>21</td>
<td>42.2%</td>
</tr>
<tr>
<td>South America</td>
<td>3,500</td>
<td>47</td>
<td>24</td>
<td>262</td>
<td>88</td>
<td>75.0%</td>
</tr>
<tr>
<td>ASIA</td>
<td>38,500</td>
<td>48</td>
<td>12</td>
<td>1,719</td>
<td>2,001</td>
<td>46.2%</td>
</tr>
<tr>
<td>Western</td>
<td>1,100</td>
<td>20</td>
<td>6</td>
<td>74</td>
<td>119</td>
<td>38.5%</td>
</tr>
<tr>
<td>South Central</td>
<td>29,000</td>
<td>72</td>
<td>13</td>
<td>1,235</td>
<td>270</td>
<td>82.1%</td>
</tr>
<tr>
<td>Southeast</td>
<td>8,100</td>
<td>66</td>
<td>15</td>
<td>410</td>
<td>109</td>
<td>79.0%</td>
</tr>
<tr>
<td>East</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,503</td>
<td>0.0%</td>
</tr>
<tr>
<td>EUROPE</td>
<td></td>
<td></td>
<td></td>
<td>194</td>
<td>534</td>
<td>26.6%</td>
</tr>
<tr>
<td>Eastern</td>
<td>500</td>
<td>15</td>
<td>24</td>
<td>194</td>
<td>110</td>
<td>63.9%</td>
</tr>
<tr>
<td>Northern</td>
<td>&lt;20</td>
<td>0.2</td>
<td>2</td>
<td>0</td>
<td>96</td>
<td>0.0%</td>
</tr>
<tr>
<td>Southern</td>
<td>&lt;20</td>
<td>1</td>
<td>10</td>
<td>0</td>
<td>145</td>
<td>0.0%</td>
</tr>
<tr>
<td>Western</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>184</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

*See the note above as PAC being defined as a donor-funded program. Northern Europe, Southern Europe, and Western Europe have care for women following an abortion, but it is not funded by international donors. The sources for this table are the preceding table on PAC programs, The Population Reference Bureau 2001 World Population Data Sheet for population estimates, and the WHO web site for estimates on mortality related to unsafe abortion.
IV. THE ELEMENTS OF PAC

The PAC model includes the following three elements:

- emergency treatment for complications of spontaneous or induced abortion,
- family planning counseling and services, and
- linkages to other reproductive health services.

Recently, many groups have proposed adding a fourth element—community participation and education.

EMERGENCY TREATMENT FOR COMPLICATIONS OF SPONTANEOUS OR INDUCED ABORTION

Improving emergency treatment for complications of spontaneous or induced abortion has typically been the starting point for PAC programs. Manual vacuum aspiration (MVA) has been at the center of this, and is being promoted as a way to improve treatment, as it is safer, less costly, and as effective as the traditionally used dilation and curettage (D&C). MVA can be performed with low levels of pain control, while D&C is typically performed under general anesthesia. Therefore, switching to MVA for appropriate cases can greatly reduce the length of hospital stay for patients, as documented in many countries. Importantly, this allows for decentralization of services, as MVA can be provided at lower levels of health facilities and by cadres of providers other than doctors, bringing services closer to women and closer to the need.

MVA has generally been accepted into programs, although it has also met with resistance and sometimes has taken time to become well accepted. In Nepal, at the maternity hospital in Kathmandu (the national training site for PAC), from the time that the PAC program began in May 1995 until December 31, 2000, there were 6,763 PAC cases (38 percent of gynecologic admissions). Of these, almost half (48 percent) were treated with MVA. At five sites in Bolivia in 2000, out of 1,593 cases treated for abortion complications, almost half (49 percent) were treated with MVA; in 2001, the proportion increased to two thirds (67 percent), showing an increasing acceptance of MVA into hospital practice. This proportion varied greatly by site, as shown in figure 2 on the following page, highlighting the continuing challenges in getting all providers to accept MVA.

In addition to provider resistance, there are other factors that limit the number of cases treated with MVA, including limited service hours for MVA, limited number of providers trained in MVA, and women outside the established criteria for MVA. These criteria typically include being under 12 weeks uterine size and having no serious complications, such as sepsis.

It is important to note that MVA will not completely replace D&C, as some cases will require treatment with D&C. Many PAC programs have set up new rooms for MVA treatment, while D&C is still often performed in main operating theaters, thus creating a physical division of these services. Although this physical division is often necessary, it serves to reinforce the neglect of D&C patients within the PAC model. It is important for
PAC programs to look holistically at treatment services and to improve the quality and comprehensiveness of postabortion services, whether a woman is treated with MVA or D&C. A good demonstration of this concept was observed in Nepal at a district hospital where a nurse had crossed out ‘MVA’ on the ‘MVA Register’ and written in ‘PAC (MVA+D&C).’ EngenderHealth has addressed this problem in an innovative way by introducing PAC counseling and then moving on to introducing MVA.

Figure 2
Use of MVA and D&C in Five Bolivian Hospitals, January–June 2001

<table>
<thead>
<tr>
<th>Location</th>
<th>MVA</th>
<th>D&amp;C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sucre</td>
<td>116</td>
<td>241</td>
</tr>
<tr>
<td>Tarija</td>
<td>268</td>
<td>109</td>
</tr>
<tr>
<td>El Alto</td>
<td>75</td>
<td>39</td>
</tr>
<tr>
<td>Potosi</td>
<td>114</td>
<td>48</td>
</tr>
<tr>
<td>La Paz</td>
<td>435</td>
<td>58</td>
</tr>
</tbody>
</table>

RECOMMENDATION
Managers should ensure that PAC programs start with a conceptualization of comprehensive PAC for all women treated for complications from spontaneous or induced abortion and should address the attitudinal and organizational issues that lead to separate treatment for MVA and D&C patients.

POSTABORTION FAMILY PLANNING COUNSELING AND SERVICES

Providing family planning counseling and services to women treated for abortion complications is essential to enable women to prevent repeat unwanted pregnancies and unsafe abortions. Until the PAC interventions of the past several years, this linkage was virtually nonexistent. Numerous operations research studies have documented high demand for these services and significant increases in the proportion of women receiving family planning (FP) counseling and methods after PAC interventions were introduced. However, the case studies and literature highlight a number of continuing challenges, including the need to change attitudes among both providers and clients, and management and organizational issues, such as availability of FP commodities.

In Nepal, at the maternity hospital mentioned above, the service statistics state that 70 percent of PAC patients accepted a family planning method. However, this proportion only considers MVA patients, while this information is not even calculated for D&C patients, who will not receive PAC. Similarly, at the five sites in Bolivia in 2001, while 78 percent of MVA patients received family planning counseling (ranging from 9 to 98 percent), only 47 percent of D&C patients did (ranging from 0 to 69 percent). Of those women who received counseling, only a small proportion of MVA patients received a method before discharge (17 percent), and even fewer D&C patients did (8 percent).
The Bolivian statistics also highlight the discrepancy between the proportion of women counseled and the proportion that actually receive a family planning method before leaving the hospital. Studies have documented that FP acceptance is highest when counseling and services are offered on site, at the same location where the woman receives treatment. This is supported by evidence from the private nurse-midwives in Kenya where all services were offered in one location; over 80 percent of PAC patients received family planning counseling and 100 percent of those who did not want to become pregnant accepted a contraceptive method. The methods most commonly offered and accepted are oral contraceptives, Depo-Provera, condoms, and the intrauterine device (IUD) (common in Bolivia), while women are typically referred for most other methods. However, often when postabortion family planning does take place, women are counseled on the ward where they are treated, but then referred (either to another unit of the hospital or outside the hospital) to obtain any family planning method. Service statistics do not capture whether these women actually do then obtain a method.

While improving treatment services through the introduction of MVA has immediate benefits for the provider in terms of making the work environment more pleasant and less congested, incentives for providing family planning counseling are less tangible and clear. As the PAC coordinator in Nepal explained, the success of postabortion family planning “depends on the commitment of the provider.” At some hospitals visited during this evaluation, PAC registers included a column to note the name of the provider of the family planning counseling. This should be regularly incorporated into service statistics, as it helps to emphasize the importance of this aspect of PAC, as well as improving accountability and giving staff credit for this important work.

It is essential to recognize that because PAC takes place within the larger health system, it is affected by the strengths and weaknesses of that system. For example, if a national family planning logistics system is weak, this will affect the availability of a wide range of methods for PAC programs as well. This perspective is also important in looking at training issues. In Bolivia, family planning is not yet incorporated into preservice training for nurses; therefore, PAC training needs to include additional time to ensure that providers are adequately trained in FP. Cultural barriers to family planning use as well as misconceptions and fear of side effects for some FP methods among both providers and clients also affect postabortion family planning services.

Is postabortion family planning effective? A study in Zimbabwe attempted to answer this question by following up postabortion patients for one year. The study found that ward-based family planning services did significantly reduce unintended pregnancies, as well as lead to a reduction in repeat abortions. FRONTIERS is currently conducting a study in Russia in collaboration with EngenderHealth and the Russian Academy of Medical Sciences to measure the effectiveness of postabortion family planning in decreasing the high rates of repeat unplanned pregnancy and repeat abortion.

**RECOMMENDATION**
PAC programs should devote more attention in training, monitoring, and supervision to ensure high-quality family planning:
- knowledge, attitude, and skills in FP,
- organization of FP services (physical location and space),
- counseling,
- IEC materials,
- contraceptive supply and method mix,
- privacy, and
- integration with providers of emergency care.

LINKAGES TO OTHER REPRODUCTIVE HEALTH CARE SERVICES

Linkages to other reproductive health (RH) services are rare in PAC programs. If this third element is found at all, it tends to be sporadic, rather than systematic. Part of the problem is that this element remains vague. It is important that this element be defined clearly, based on the RH priorities and feasible solutions in each context. Services to be considered could include, for example, prevention and treatment of STIs, infertility, domestic violence, Pap tests, and nutrition. At this point, this element is only mentioned in passing in training curricula, and service statistics rarely collect information on whether it occurs.

These linkages are more likely to be found among private nurse-midwives in Ghana, Kenya, and Uganda, compared with other programs, based on available data. In Uganda, 64 percent of PAC clients treated by nurse-midwives received other reproductive health services, which was most often STI/HIV counseling. In Kenya, during the pilot nurse-midwives study, 13 percent of 366 PAC clients were referred for other RH services. In these cases, this indicator is actually routinely measured; the nurses were trained to record this information, which helps to emphasize its importance. Supervisors also regularly collected this information during supervisory visits. Putting the third element into a register is a small act that can have a significant impact. Providers in the private sector also have additional motivation to provide high-quality comprehensive services, as it is good for their business.

Part of the problem in improving this element is the lack of adequate services to which women can be referred. Linkages between emergency care and other RH services are not well defined or explored in most settings and are limited by the general lack of resources for diagnostic and treatment of RH problems, even in tertiary referral centers. For example, in Bolivia, the largest maternity referral hospital in the capital city of La Paz (ostensibly the national maternal reproductive health referral center) does not even have the most basic laboratory services for diagnosis and treatment of sexually transmitted diseases/reproductive tract infections (STDs/RTIs) (microscope, culture mediums); therefore, it relies on syndromic management for these conditions. However, in many of the facilities visited during this evaluation, other services, such as Pap tests or STI testing, were available on site. Managers setting up PAC services should explore potential linkages both within and outside their facilities, including the private sector. After identifying the key services for referral, PAC program staff could identify where these services are offered and provide referral information to clients, ideally in the form of IEC materials with information including addresses and cost of services. Even in settings with limited possibilities for referral, with proper training, all facilities could provide counseling on STI/HIV prevention and condom use to all PAC patients.

PRIME is currently undertaking a study on increasing access to other RH services for postabortion women through analyzing data from their work with nurse-midwives in Kenya. FRONTIERS is also planning to conduct a study to further develop the third element.
RECOMMENDATION
USAID should fund operations research to determine feasible, acceptable, and effective ways to provide linkages to appropriate reproductive health services.

COMMUNITY PARTICIPATION AND EDUCATION

PAC has been a facility-based program, focusing on the supply side of services, while giving little attention to the demand side. In the past few years, many organizations and individuals working on PAC have emphasized the need to address community participation and education issues. The PAC Consortium established a PAC community task force for the purposes of expanding the PAC model to include the community as a fourth element. The addition of the community acknowledges the partnership role community members have in strengthening efforts to reduce maternal mortality and morbidity due to complications from abortion. It also acknowledges that a strong and effective partnership among community members and health care providers is desired to improve the health and well-being of communities. The draft language in the proposed expanded model defines the community element as follows:

Community participation and education to prevent unwanted pregnancies and unsafe abortion, educate about the risks and consequences of unsafe abortion, ensure that women suffering from complications of unsafe abortion receive the care they need in a timely manner, and ensure community participation in decisions about what PAC and RH services are offered, how they are offered, where, by whom, how often and at what cost.

Although work with the community has not been a regular part of PAC programs, there have been examples of this type of work, for example, in Kenya, Ghana, Zimbabwe, India, and Haiti. Private nurse-midwives in Kenya have conducted community outreach to promote their new service to clarify that it is not abortion and to provide general reproductive health education in churches and schools. In Ghana, community education efforts enhanced the quality of and access to PAC programs with nurse-midwives. Zimbabwe has used social theater to document community perspectives, to raise awareness about the problem of unsafe abortion and to promote community dialogue to determine ways to address this problem. An assessment in the state of Uttar Pradesh in India explored community-level dynamics of PAC services and identified an informal system that could potentially serve the local population more effectively than the formal health system. Community surveys conducted in Haiti helped to guide the development of PAC services at the hospital and community outreach efforts.

There has been little effort to measure the impact of this work, but in the cases described above, it clearly seems to have been beneficial to the programs. However, these efforts have generally been small-scale interventions. Increasing and improving relationships with the community will require working with organizations that have not previously been active in PAC. Many USAID–collaborating international NGOs and private voluntary organizations (PVOs), such as CARE, Save the Children, and PLAN, have extensive experience in community participation and education, as well as with maternal and child health (MCH) programs, and their expertise should be garnered to improve PAC.
RECOMMENDATION
PAC planners, managers, and providers should create partnerships with national and international PVOs and NGOs with expertise in working with communities and MCH programs to strengthen PAC programs.
V. POLICY ENVIRONMENT FOR PAC SERVICES

IMPORTANCE OF ADVOCACY

Countries have policies that support or impede PAC in a number of ways. Increasingly, realizing the importance of PAC programs, countries are implementing supportive PAC policies. Advocacy has been important in this change.

A lead advocate for PAC programming has been the Commonwealth Regional Health Community Secretariat for East, Central and Southern Africa (CRHCS). In 1993, at the 21st Conference of Health Ministers for East, Central and Southern Africa, the health ministers adopted a resolution in which they identified unsafe abortion as a major cause of maternal morbidity and mortality in the region. In addition, the ministers recommended specific actions to address the problem of unsafe abortion in member countries. As a next step, the CRHCS undertook a study in 1994 to document the magnitude of abortion complications in commonwealth member countries and Sub-Saharan Africa as a whole. That study led to the 1995 publication of the influential Monograph on Complications of Unsafe Abortion in Africa, as a collaborative effort of CRHCS, JHPIEGO, Ipas, and the Academy for Educational Development.

Advocacy has also been critical at lower levels. In Kenya, there has been community-level advocacy developed by the POLICY project and the National Nursing Association of Kenya (NNAK). These nurse-midwives and others were influential in building community support for PAC, as well as enabling change in other areas of PAC programming.

ADVOCACY FOR PAC, FAMILY PLANNING, AND REPRODUCTIVE HEALTH SERVICES

One of the most basic policy and advocacy efforts in PAC has been the effort to clearly define PAC. It has been important in the introduction of PAC to emphasize that PAC does not mean induced abortion, but in fact refers to dealing with the consequences of unsafe abortion and helping to save lives. This clarification has been important for gaining support for PAC programs and minimizing the stigma around the word abortion.

A critical policy decision is to include PAC in national health guidelines. Many countries have done so, with the support of USAID and its CAs. The following list contains countries that have included PAC in national guidelines or standards: Burkina Faso, Ethiopia, Ghana, Guinea, Kenya, Senegal, Tanzania, Indonesia, Nepal, Turkey, Vietnam, Brazil, Bolivia, Colombia, Ecuador, Peru, Mexico, and Egypt. In some countries, guidelines and protocols are within national guidelines on reproductive health. In other countries (Egypt), PAC is part of emergency obstetric care (EOC) and protocols are part of EOC.

A further advance is to include PAC in national health plans. Bolivia, which only a dozen years ago had restrictive policies on family planning, has now embraced family planning and PAC. The national health insurance plan includes free coverage for PAC. Large signs
on hospital walls proclaim that “health is a right for all” and list services for women, including treatment for bleeding in the first half of pregnancy and uterine evacuation.

PROVIDERS

National policies on the clinical providers that may perform specific clinical procedures are designed to assure safe and effective services. Sometimes, those provider cadre policies can restrict women from services. Recognizing that restriction, countries have sometimes moved to lift the restriction. Three countries examined during this evaluation acted to expand access by training nurse-midwives and nurses, although traditionally these providers would not have been thought to be qualified (by the medical establishment) to perform MVA procedures. Those countries—Kenya, Nepal, and Ghana—have predominantly rural populations that have little access to the urban hospital-based doctors. Training nurses and nurse-midwives who practice at the community level means that women who might have died at the community level for lack of treatment now have access to care.

MVA EQUIPMENT

MVA equipment has revolutionized the treatment of complications of abortion for the majority of women for whom it is the appropriate procedure. A less invasive procedure, with lower risks for the woman and shorter hospital stays, makes MVA preferable for a woman. Lower hospital costs and a more pleasant work environment make it preferable for a hospital. However, importing and assuring a sustainable supply of MVA is a problem. In many countries, MVA is approved for commercial importation, thus assuring that once the equipment is on the MOH equipment list, importation will be possible. Other countries, such as Egypt, are still struggling for approval for commercial importation, hence prolonging dependency on donor supply.

Limited awareness of alternative distributors of MVA equipment may impede wholesale purchase. USAID and donor PAC programs have relied upon one manufacturer/distributor of MVA equipment. Although there are other manufacturers in the world (India, Mexico, England, Taiwan), MOH managers have little or no knowledge of other companies and thus are not pursuing the standard business practice of obtaining three bids for large purchases. In Peru, “the lack of three providers of the equipment impeded a tender for the MOH purchase.” The MOH in Kenya, which is supportive of PAC and expanding access to PAC, stated that it would like to put MVA on the MOH equipment list and purchase in bulk; however, negotiations with one manufacturer have not been successful.

Evaluation of equipment manufactured by other companies would seem to be in everyone’s best interests. The International Standards Organization (ISO) may provide periodic review to verify that the quality of products is consistent; however, no international organization evaluates comparative performance of equipment in clinical usage. These evaluations could be conducted by health authorities, such as WHO, the National Institutes of Health, the Centers for Disease Control and Prevention (CDC), and professional organizations, such as Program for Appropriate Technology in Health (PATH). Given the issues identified, systematic scientific comparisons of different MVA devices should be made, particularly by WHO, as well as global dissemination of the
findings. Development of competitive, high-quality devices by more than one manufacturer would also be helpful.
VI. ACCESSIBILITY OF PAC SERVICES

COUNTRY ACCESS

Geographic

Although PAC activities have been initiated in more than 40 countries, it is unclear in any one country the degree to which there is geographic access to PAC services on a national level. It appears that geographic access is currently relatively limited but expanding (as discussed in section IX). Countries have not collected data on access nor has there been consensus on indicators for doing so.

Kenya is one country with situational analysis data, which although imperfect, are the best data currently available. The 1999 Service Provision Assessment Survey (SPA) reported on the percentage of facilities that provided assisted vaginal deliveries (delivery facilities) and that also provided postabortion care. However, the percentage of all licensed health facilities that had the staff, equipment, and supplies needed for normal deliveries or the percentage of the population that had access to such a delivery facility is unknown.

The SPA reported that 43 percent of the delivery facilities also provided postabortion care. Of these, 70 percent were able to perform D&Cs, and 41 percent provided MVAs. Of the sampled delivery facilities, 48 percent of private, 40 percent of Mission, and 29 percent of public facilities provided postabortion care. Postabortion care was provided at 56 percent of maternity-nursing homes, 46 percent of clinics with delivery care, 39 percent of hospitals with delivery care, and 25 percent of health centers with delivery care. Overall, 86 percent of these delivery facilities offered family planning counseling and 81 percent offered family planning services.

For maternal mortality programs, Wardlaw and Maine suggest UNICEF, WHO, and UNFPA process indicators that would measure change in the availability, utilization, and quality of care for women with obstetric complications over a short period. These indicators would serve to answer important PAC questions:

- Are there enough facilities providing EOC (and PAC)?
- Are they well distributed?
- Are enough women using these facilities?
- Are women with obstetric complications using these facilities?
- Are sufficient quantities of critical services being provided?
- Is the quality of services adequate?

Two access indicators that are relevant for PAC are presented in table 5.

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d Situation analyses (SPA) can identify sites and attributes of service but they do not identify access problems. Surveys such as MEASURE DHS+ and CDC conduct and QWIC can identify access problems—if USAID/Washington and Missions want them to pursue these questions. Mortality reviews may provide information on access issues associated with death. Qualitative research, such as focus group interviews, might provide greater insight into access problems.
Table 5
Process Indicators and Acceptable Levels: A Guide

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Acceptable Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Essential EOC Facilities</td>
<td>For every 500,000 population</td>
<td>“This indicator requires a count of the facilities in which EOC services are actually being provided. This is different from process indicators that measure the capacity to perform EOC or related services. Unfortunately, … there are many health facilities in the world that should be able to provide EOC (that is they have the staff and so on), but in fact, they do not provide it. That is why these indicators focus on actual functioning, not capability.”</td>
</tr>
<tr>
<td>Basic EOC</td>
<td>At least 4 basic EOC facilities</td>
<td></td>
</tr>
<tr>
<td>Comprehensive EOC</td>
<td>At least 1 comprehensive EOC facility</td>
<td></td>
</tr>
<tr>
<td>Geographic Distribution</td>
<td>Minimum level is met in subnational areas</td>
<td>“If sufficient numbers exist, then the next step is to determine whether they are adequately distributed. One telling indicator is the average travel time to an EOC facility. While this is an informative indicator, the data required are difficult to obtain…A crude but efficient way to assess the distribution of EOC services throughout the country is to calculate the amount of EOC services in areas smaller than the country as a whole … mapping facilities would be helpful in visualizing the geographic distribution of EOC services.”</td>
</tr>
</tbody>
</table>

As Wardlaw and Maine note, it is essential that indicators focus on actual functioning of services, not just past or present capability. Training and equipping do not assure access. An evaluation of an attempt to establish PAC services in refugee camps in Kenya reported that of the seven sites where providers had been trained and equipment and supplies provided, only two sites were providing services less than a year later.

Staff turnover, with a consequent departure of clinical skills and new (less positive) attitudes toward PAC, was a main reason. In one hospital, “the newly posted medical coordinator (who was not part of the training course) did not support use of MVA. She was also not receptive to midlevel providers providing PAC services, and therefore continued to treat all incomplete abortion cases with D&C herself.” In another hospital, the reorganization of medical staff and the departure of two key medical officers impeded PAC. In a third hospital, no staff had been through PAC training (although equipment had been supplied); staff who had received training at two of the other refugee hospitals were to have provided on-the-job training; they did not. In a fourth hospital, “a PAC provision room had been established in the maternity unit and upgraded with all the necessary fitting, furnishings, and equipment before the departure of the PAC trained medical officer. However, at the time of the monitoring visit, emergency treatment of incomplete abortion using MVA had not yet started. Encouragingly, PAC patients treated with D&C were being provided with postabortion family planning counseling and services.”

Problems with infrastructure were the reason in one of the hospitals. The evaluation report noted, “No postabortion care services had commenced due to a number of persistent infrastructural problems. The room originally identified for PAC service...
provision was proven too costly to renovate, so two other better equipped rooms were identified” in the evaluation visit.

The evaluation report notes that the evaluators stressed that “even in situations where D&C was taking place before on-the-job training of MVA could start, the linkages and referral to other reproductive health services were important, and that postabortion family planning counseling for all postabortion clients was necessary.”

In Ghana, the need for follow-up supervision and support to enable access was also noted. In a supervisory field visit to 12 nurse-midwives 2 months after their training, 3 of the 12 were not providing treatment for abortion complications. Feeling inadequate and lacking confidence, these nurse-midwives referred patients to other facilities.

**Misoprostol to Expand Access**

Misoprostol has the potential to improve the treatment of postabortion complications. The potential use of misoprostol in the periphery of low resource countries offers the possibility of scaling up and expanding PAC into underserved areas where geographic access to surgical services (MVA or D&C) is limited, and oxytocin is not available. The benefits of misoprostol, a prostaglandin E1 analog indicated for the prevention and treatment of gastric and duodenal ulcers, have been presented as follows:

- has a reported success rate of 66–95 percent as the medical treatment of incomplete abortion;
- reduces the need for surgically trained health providers;
- can be provided at all levels of the health care system;
- reduces the risk of sepsis and uterine perforation (spontaneous, MVA, or D&C); and
- is low cost and safe and has few side effects.

The following limitations have been identified:

- 2–10 percent of women require surgical treatment (MVA or D&C);
- 3–5 percent of women had nausea, vomiting, and diarrhea at high doses;
- 40–50 percent reported shivering;
- misoprostol does not have FDA approval for treatment of incomplete abortion, nor does Searle, the manufacturer, condone its off-label use; and
- although in some countries, significant proportions of postabortion patients have used misoprostol, providers and patients need additional information.
Misoprostol is available in more than 80 countries around the world; the wholesale cost in the United States is approximately US $.37 per tablet. The use of misoprostol to treat postabortion complications is being investigated in the PAC community. More research is needed on its role, safety, and effectiveness when used in the community by lower level health workers.

Social and Cultural Access

Social and cultural factors influence the frequency of abortion, the care-seeking behavior of women when they have complications, and the way they are received at health facilities to which they have gone for help. Section I highlighted national and cultural frequencies of abortion. Section VII is concerned with provider attitudes. In this section, social and cultural factors affecting access are addressed.

It is believed that women delay seeking help for complications due to the fear of the stigma attached to abortion, whether that abortion was induced or spontaneous. Women fear that providers will treat them badly when it is learned that the suffering is due to complications resulting from an abortion. Research from Africa, Latin America, and the Middle East supports this belief.

Research in Kenya quotes one adolescent, “If complications occur, the only place for treatment is the public hospital because private hospitals are very expensive and most cannot afford. Everyone knows that girls in public hospitals are treated very badly by nurses once they discover they tried to abort.”

A valuable operations research project to expand access was conducted in Mexico, where data from public sector institutions indicate that unsafe abortion is the fourth most important cause of maternal mortality. The study noted, “That women continue to seek care from traditional midwives rather than from the formal health care systems indicates that facilitating access is not simply an issue of geographic proximity.” Women reportedly consulted with a midwife because of a cultural identification between the pregnant woman and midwife; however, studies have shown that few midwives recognized the risk factors related to pregnancy or the management of abortion complications. Moreover, the study indicated that traditional midwives held negative attitudes that might lead women to delay seeking help. “Midwives saw spontaneous abortion as a woman’s failure to fulfill her primary gender role of reproduction. Women themselves were often blamed for their loss; as midwives noted ‘these women don’t know how to have children’ or ‘they don’t take care of themselves and because of this, they abort.’”

In another Latin American country, Bolivia, women’s fear of being treated badly by providers was noted in a study conducted from 1995–98. “When women come for services, they usually do it after having suffered long periods of pain and bleeding and frequently with severe complications leading to important sequelae or even to death. In addition, women do not admit that they have induced the abortion because of the risk of being mistreated, denounced or sued.” Since this study, extremely important policy changes and provider training have reduced the risks of being mistreated, denounced, or sued, as noted in the Bolivia case study in appendix D; as the case study notes, there is high client volume in hospitals with PAC services. However, women continue to seek
postabortion care with severe complications; there are no data yet to indicate whether women are seeking care more rapidly due to reduced fear of being mistreated.

In Egypt, study data on caseloads in public hospitals comment that “abortion is an extremely delicate and sensitive issue.” Data on distance traveled and source of referral for postabortion care probably have a degree of response error due to the sensitivity. “Some women will prefer to seek treatment for an incomplete abortion under conditions of anonymity, thus hiding previous contacts with health care providers or traveling a greater distance than necessary for care.”

According to CA reports, Ghana may be an exception. Findings from an operations research project training private nurse-midwives indicated that, “Women treated by midwives indicate that they are comfortable talking with midwives about their problems. Midwives who work in the communities in which they live may have an established and ongoing relationship with local women, and women may find them easier to communicate with than providers who are based in urban hospitals.”

Community-level activities to reduce women’s social and cultural barriers to promptly seeking care need to be conjoined with activities to improve providers’ attitudes and treatment.

Age (Adolescents)

Considerable research has been undertaken on adolescence and sexuality. The United Nations Development Programme (UNDP), UNFPA, WHO, and the World Bank have undertaken 34 studies in 20 countries. An abstract of the findings notes:

Many common themes emerge from these studies. In every setting, sexual activity begins during adolescence among many young people. Much of this activity is risky—contraceptive use is often erratic, and unwanted pregnancy and unsafe abortions are observed in many settings. Sexual relations may be forced. There are wide gender-based differences in sexual conduct, and in the ability to negotiate sexual activity and contraceptive use. Despite this, relatively few young people think that they are at risk of disease or unwanted pregnancy. Awareness of safe sex practices seems to be superficial, and misinformation regarding the risks and consequences of unsafe sex is widespread.

The unmet need for FP, which leaves adolescents vulnerable to unwanted pregnancy and abortion, was very considerable in the four case study countries, as table 6 indicates. In Bolivia and Nepal, more than one third of adolescents have an unmet need for FP.

<table>
<thead>
<tr>
<th>Country</th>
<th>To Space</th>
<th>To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>21</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>Kenya</td>
<td>24</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>Ghana</td>
<td>24</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Nepal</td>
<td>33</td>
<td>2</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 6

Percentage of Adolescents (15–19 years) with an Unmet Need for Family Planning in Four Case Study Countries (respective country DHS)

* However, as is noted in the Ghana case study, the majority of nurse-midwives interviewed had very few PAC clients.
Given their vulnerability, are adolescents adequately receiving PAC services? As noted, adolescents particularly fear being treated badly. Data collected during the case studies indicate that PAC clients come at all points in a woman’s reproductive years, from early adolescence to the approach of menopause. In various Kenyan studies, adolescents have been 16 percent of the PAC caseload of private nurse-midwives and 17–18 percent of MOH provincial and district hospitals.

Case study data collected from PAC registers indicated lower percentages; few cases were reported of teenagers younger than 16 years. Providers commented that it is very likely that girls reported themselves as being older than they really were (to lessen the stigma) and that really young girls were quietly receiving care in the private sector. No one seems to have good information on where teenagers obtain postabortion care services, but surveys consistently show that few sexually active teenagers use effective contraception.

Severity of Complications

The evaluation scope of work asked, “Is it the case that a focus on MVA equipment has resulted in limiting access to PAC services because some women are MVA ineligible (based on complications or gestational age) or because MVA equipment is unavailable in some settings?” The following section addresses this question. (See also section IV, Elements of PAC, Postabortion Family Planning Counseling and Services.)

The severity of abortion and postabortion care complications have not been systematically evaluated. Past studies most often report the contribution of abortion-related death, which is the infrequent, often underreported, and most serious complication. Surveys and clinical reports may describe complications immediately after the abortion—bleeding, pain, infection, perforation, associated surgery (e.g., hysterectomy) and duration of hospitalization—but may not report the long-term ill effects of continuing infection, chronic pain, involuntary sterility, or loss of potential motherhood. Moreover, the severity of complications depends, in part, on gestational age of termination, whether spontaneous or induced. If it was spontaneous, the cause needs to be determined—underlying febrile illness, environmental agent (e.g., lead poisoning), or chromosomal abnormality, for example. If it was induced, the method used needs to be identified as well as the quality of the procedure (medical versus foreign body/surgical versus instillation). The social complications may sometimes be worse than the medical complications. If a woman has an infected uterus removed after a perforation, her value is reduced in a society that places high value on a woman’s reproductive ability.

No population-based study was found that measured the frequency of these complications. Because they have not been measured, one tends to rely on anecdotes. Some providers, who in recent years admitted fewer women to hospitals for abortion complications, also believed that a lower proportion of those admitted had severe complications; there was no evidence to support or refute that claim. In both Kenya and Ghana, substantial evidence was found for the continuing high contribution of abortion to maternal mortality, as well as evidence for fewer admissions for abortion complications, and some evidence for an overall decline in maternal mortality.
While most incomplete early abortions appear to have been treated effectively by PAC service providers, site visits often identified women who came for services after 12 weeks gestation. Protocols for the appropriate treatment of complications after 12 weeks gestation and after 20 weeks vary. In Kenya and Ghana, nurse-midwives are authorized to treat women only up to 12 weeks, and then refer women beyond that point to the nearest hospitals. Data from Kenyan and Ghanaian hospitals indicated that many cases over 12 weeks were treated by MVA, and in two hospitals in Kisumu, Kenya, women with gestational ages as late as 22 weeks were treated with MVA. Egyptian protocols explicitly spell out the appropriate procedure for physicians, who are the only providers authorized to perform MVA or a D&C (See section VIII, Quality of Care, Standards and Procedures.)

In conclusion, planners and managers need to use currently available tools and data to evaluate the severity of postabortion complications.

- Surveillance of PAC registries could assess the proportion of abortion complications by gestational age (the single best predictor for incidence of complications after induced abortion).
- Hospital-based data provide trends in hospitalizations, duration of hospitalization, types of medical complications, and mortality.
- Surveys (e.g., Eastern Europe) provide a woman’s perspective on the frequency of complications at different times after abortion.

USAID might consider developing new tools for more rigorous assessment of frequency of complications and associated preventable risk factors. One example might be the use of the U.S. (Population Council and CDC) Joint Program for Study of Abortion methodology as a model for rigorous assessment of abortion morbidity.

**Lack of Data on Accessibility**

Lack of data on national access (geographic, social/cultural, age, and severity), is a problem.

- Currently, there are insufficient data on geographic access to PAC services, although such data are critical to the efficient expansion of PAC.
- Numerous individual studies document social and cultural access barriers and programs to reduce those barriers. There has been, however, no systematic review of the social and cultural factors in facilitating or inhibiting access to PAC services, or of the success of PAC programs to reduce such barriers.
- The severity of abortion and postabortion care complications has not been systematically evaluated in the USAID PAC program.
- There has been no formal attempt to define or measure unmet need for PAC, as there has been in family planning.
Surveys such as DHS and CDC conduct and QWIC can identify access problems—if USAID/Washington and its Missions want them to pursue these questions. Mortality reviews may provide information on access issues associated with death.

GLOBAL ACCESS AND IMPACT UPON GLOBAL
MATERNAL MORTALITY AND MORBIDITY

PAC services are available in many of the countries with high maternal mortality rates. In order to affect national maternal mortality in a measurable way, however, they must be expanded to all areas of the country—including those that lack delivery services by doctors or midwives. While some women will travel 80–90 kilometers to obtain PAC services (as was found in Kenya), others will not have the resources or time (before dying) to travel such distances. Countries with a highly dispersed rural population and little rapid transportation infrastructure are less likely than countries with highly concentrated populations and good ambulance services to be able to implement PAC services to most of the population. In any country in which fully expanded PAC services are extended to only a small minority of the population, one would not expect PAC to have an important measurable impact on national maternal mortality. PAC should lead to lower maternal mortality for populations who have access to and use PAC services. If PAC services are provided to a large majority of a population burdened by unsafe abortion complications, one might expect PAC to reduce national maternal mortality.

Data, however, are necessary to demonstrate the unique contribution of PAC on maternal morbidity and mortality. Given the lack of vital statistics and the inaccuracy of cause of maternal death data in developed countries, as well as the multiple changes in health services that may improve or worsen maternal mortality, demonstrating impact is a challenge. Evidence was sought for

- a reduction in the proportion of maternal deaths due to abortion,
- a reduction in hospital admissions for abortion complications,
- a reduction in admissions for severe abortion complications, and
- any studies that systematically documented trends or patterns in abortion morbidity.

In all of the hospitals visited in Ghana and Kenya, evidence was available for declines in hospital admissions for abortion complications and for declines in hospital maternal mortality; it was not available for a decline in the proportion of maternal deaths due to abortion. The generalization that there is a national decline is not being made; surveillance of maternal mortality is necessary.

Most countries lack the simplest national means for monitoring maternal deaths that occur in hospitals. Ghana has established such a reporting system, but no analysis of the data has been published. Teaching and district hospitals that have implemented PAC services in the hospital and through midwives in the community have observed striking declines in hospital admissions related to abortion complications. Moreover, the rapid

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1 The two countries visited by the epidemiologist.
decline in maternal mortality during 1995–99 in the chief teaching hospital in Nairobi suggests that the reduced complications from abortion have facilitated redirecting resources to prevent obstetric deaths from other causes.\(^g\) (See the Kenyan case study, which presents four possible reasons for declining mortality, the first of which is the expansion of other service providers.)

At the hospital or clinic level, PAC registers are helpful in assessing the total recorded numbers of women that received services. As indicated in section VIII, Quality of Care, Record Keeping and Data, varying quality of recorded information items was observed; in some instances, the validity of the data on the type of abortion complication (incomplete versus spontaneous) was questioned. More important than the specifics of what is in the registry at one particular site is the use of information at the national, regional, district, and community levels to determine where PAC services are located and how access to services relates to abortion mortality and morbidity levels.

Moreover, countries (and donors and CAs) need clear objectives for PAC (e.g., prevent abortion mortality, prevent need for hospitalization from complications from abortion, prevent repeat abortions through contraception). To determine whether the objectives are being achieved, appropriate surveillance or research is needed. The specific type of surveillance or research and the data elements will depend in part on the PAC objectives.

**RECOMMENDATIONS**

- **USAID should fund operations research on the most effective ways to expand access to adolescents.**
- **Country PAC managers should carefully analyze key country data and establish objectives, strategies, and indicators for expanding and maximizing geographic access.**
- **PAC planners should specify clear national objectives for PAC (e.g., prevent abortion mortality, prevent need for hospitalization from complications from abortion, prevent repeat abortions through contraception), and set up appropriate surveillance or research to determine whether the objectives are being achieved.**
- **PAC planners and managers should analyze further currently available data, such as Kenyatta and other hospital data, to determine trends in abortion mortality in hospitals and trends in where women live who continue to require hospitalization for abortion complications. Are there PAC services in the communities from which these women come?**

\(^g\) The inference that resources had been redirected is based upon the following:

- Compared with earlier periods, very few women are now admitted for abortion complications; hospital resources now care for women with other health problems.
- Mortality from all maternal causes appears to have declined, suggesting the possibility that redirected resources have had an impact on other causes of death (other explanations are also possible).
- This inference was derived from reading Susan Obote, *Case Records and Commentaries in Obstetrics and Gynecology*, submitted for degree of master in medicine in obstetrics and gynecology, University of Nairobi, August 2001.
- This inference should be viewed as a seemingly plausible hypothesis for further evaluation.

\(^h\) In two of the four countries visited for the case studies (Kenya and Ghana), a major thrust of USAID’s assistance is to private nurse-midwives who, individually, have low caseloads.
VII. ORGANIZATION OF PAC SERVICES

This section explores the ways that countries have organized PAC services, including the roles of the MOH, who provides PAC services, how PAC services are supervised, and collaboration within facilities.

ROLE OF THE MOH AND NATIONAL POLICIES

PAC services in most countries are offered in the public, private, and NGO sectors, although programs have largely focused on the public sector, particularly at tertiary referral hospitals, even in countries where services are decentralized. The rationale for this focus is that first priority should be given to sites that are currently treating large numbers of women for complications of abortion. However, a number of countries, such as Peru, Bolivia, and Nepal, have plans in place to expand in a phased manner to the secondary and eventually the primary care levels in order to expand access to PAC at the regional and local levels.

USAID and CAs have generally collaborated successfully with ministries of health to implement PAC programs and change policies. PAC programs have necessarily had to work with and have been limited by the existing policies, infrastructure, general organization, and capacity and quality of the RH services in each country. Despite the problems inherent in reorganizing public sector institutions (lifetime employment contracts with little incentive to provide client-centered care, frequent rotation of and inadequate number of qualified staff, lack of essential supplies, and diagnostic services), the contracting agencies implementing PAC programs have made a number of positive changes by combining technical training with infrastructure improvements and the provision of equipment and supplies, along with the introduction of protocols and an emphasis on improved client-provider interactions (Peru and Bolivia).

The degree to which the MOH has played a leadership role in the implementation, expansion, and improvement of PAC has varied in different countries. Ministries of health have often promoted PAC as a pilot project, which has enabled them to make important policy changes after demonstrating success and demand for services. In some countries, ministries have modified policies to allow nurses to practice in the expanded role to perform MVA (Nepal) or encouraged training private sector midwives to offer PAC services, including MVA (Ghana).

In Bolivia, there were a number of impressive policy changes (see the Bolivia case study) and the contracting agencies were so successful in establishing PAC as a priority service within the MOH that the government of Bolivia enacted a policy in 1999 to include PAC in the Seguro Básico (national health insurance system). This policy has resulted in significantly increased numbers of women receiving PAC by removing the financial barrier to care.

NATIONAL COORDINATION AND COLLABORATION

The successful implementation of a sustainable PAC program is a long-term process (particularly in public sector settings) and requires the skills, experience, and
commitment of the host country government and reproductive health community, cooperating agencies, and donors. Coordination among all of these critical stakeholders is essential.

At the country level, coordination of PAC has been implemented in different ways and to varying degrees. There are PAC working groups in Bolivia, Kenya, and Nepal. In Bolivia, the working group (CICAPA) has 29 members and has been effective in developing national standards and norms, training materials, and client registration forms, as well as in promoting the expansion and improvement of PAC services. In Kenya, the PAC working group was originally an informal group coordinated by USAID. However, in the past two years, as more organizations have become involved in PAC, it has grown and developed into a more structured and defined entity. CAs now alternate organizing the meetings and developing the agenda. The working group is in the process of finalizing the terms of reference with the following objectives:

- to advise the reproductive health advisory board on PAC,
- to bring together stakeholders,
- to reduce duplication of effort,
- to harmonize IEC and training materials, and
- to develop a national PAC strategy.

In Nepal, the PAC program is coordinated through the Family Health Division of the MOH, with a full-time staff member who is the designated PAC coordinator.

LEVELS OF SERVICE (TERTIARY, SECONDARY, AND PRIMARY)

PAC services have been established to varying degrees in countries at the tertiary, secondary, and primary levels in all sectors (public, private, and NGO), including refugee camps. In some countries, services are available at all levels (Kenya, Ghana, and Indonesia), although this is rare. In the majority of countries, PAC services are available primarily in secondary or tertiary settings. The issues of cost-effectiveness and maintenance of quality in settings with dispersed populations and low client volumes are complex and difficult to balance with the competing priority to cover as many clients as possible.

In countries in which it has been feasible to train nurses to perform MVA, PAC programs have been implemented at the primary level because MVA can safely be performed outside an operating room, unlike D&Cs. During the site visits, the evaluation team heard reports of referrals from the public sector to private nurse-midwives for PAC when public facility staff was unavailable or unable to treat clients. The ability of countries to implement PAC services at the primary level is severely limited in settings in which nurses are unable to perform MVA, for political or other reasons, due to the lack of physicians in rural areas, especially on a 24-hour basis. However, providers can still provide effective PAC services through training and supervision in stabilizing and referral, postabortion family planning counseling and provision, and other types of related reproductive health care.

In most countries, pilot PAC programs have been initiated in public sector tertiary hospitals, although in the past few years, increased emphasis and attention has been
placed on implementing and improving PAC in the private and NGO sectors in countries such as Kenya, and most recently, Nepal. The focus on establishing PAC programs in tertiary and secondary settings has merit, given that these sites are currently seeing the greatest number of postabortion cases and high caseloads are desirable (even necessary) for training providers. Other reasons given for the emphasis on tertiary and secondary settings include the belief that ideal PAC models should be established in high volume/high resource settings first so that PAC trainees will be more likely to learn and incorporate quality PAC practices into their own settings. Also, the team approach to providing PAC (doctors, nurses, social workers, counselors, watchmen, and other auxiliary personnel) is more likely to succeed in tertiary and secondary settings. A good example of this is the regional hospital in Oruro, Bolivia, where even the maintenance man appeared to play an active role in ensuring quality PAC services at the hospital.

Even in secondary and tertiary settings, however, 24–hour service, 7 days a week is rare due to lack of staff, hospital policies, the dual demand of public/private practices (physicians are only available a few hours a day in the public sector), and safety issues (high assault and crime rates after dark). One large Ghanaian teaching hospital provides MVA everyday at a scheduled time in the afternoon; this hospital does not but could allow nurses to provide PAC services at other hours. One large Kenyan nursing home sends patients at night by ambulance to a large teaching hospital that provides PAC services during three shifts of the day. A rural Kenyan district hospital, fearing that if treatment of abortion complications were provided in the evening people would think abortions were being induced, locked up MVA equipment at night so that no one could use it. Quality PAC services, however, require 24–hour coverage. Additional efforts need to be made to improve policies and the organization of services to ensure that care is provided 24 hours a day, 7 days a week.

Establishing and maintaining adequate referral systems and links between levels for postabortion care has been a major challenge for PAC programs, particularly in settings where there is little or no communication, transportation, or formal established referral system for any type of emergency service. Providers need to be adequately trained to recognize complications of abortion, determine their severity, treat complications immediately, and refer clients to other facilities when they are unable to treat them due to lack of qualified staff, necessary medications, equipment, or other support services (laboratory or blood supply). In countries or settings where safe motherhood programs are already established, it may be easier to implement PAC referral systems as part of an overall strategy to improve emergency obstetric care.

**PAC PROVIDERS**

**Cadres**

Significant differences exist from country to country in the types of providers offering PAC services, although most programs have focused on physicians as PAC providers. In Latin America and Egypt—countries in which there is an excess of physicians—only doctors have been trained in MVA, although many nurses have been trained to be part of a PAC team. In Africa, where there is a shortage of doctors and where nurses have often traditionally practiced in the expanded role, nurses (nurse-midwives) as well as clinical officers have been trained in PAC/MVA. In Asia, both nurses and doctors have been
trained in PAC/MVA (Nepal). Training nurses to perform MVA expands access to PAC beyond the availability of physicians in both urban and rural settings. Some countries that have trained nurses to perform MVA include Ghana, Nepal, Kenya, Uganda, Zambia, and Indonesia.

Evaluations in Nepal and Ghana have shown that nurses can safely perform MVA (JHPIEGO and Ipas). In the majority of countries, nurses are trained in PAC to support physicians, care for the instruments, and provide postabortion family planning counseling and services. In some settings, other types of health professionals, such as social workers and psychologists, have been trained in PAC (not MVA) to develop a team approach to providing PAC services. As stated previously, a team approach is more likely to be feasible and successful in high volume, tertiary, or secondary settings. The training of a variety of professionals and the team approach should improve the quality of and access to PAC services and increase the support for PAC by actively including more stakeholders in the process.

TRAINING

Curriculum

PAC training has been generally of high quality and standardized by the cooperating agencies and has followed the three elements. Different elements have been emphasized in different settings depending on the philosophy, experience, and approaches of the implementing CAs as well as country situations and priorities. For example, in Bolivia, the focus has been on advocacy and improving client-provider interactions; in Nepal, it appears that the focus has been more on the development and improvement of clinical skills for emergency treatment of complications. Given the medical profession’s desire to use new technologies, as well as the low priority given to preventive and counseling services, it is not surprising that in some settings the CAs have had more difficulty in strengthening all the elements equally. Continued emphasis on providing integrated PAC services will be needed.

During the country site visits, it was found that the universal emphasis on infection prevention by all the CAs (Pathfinder, Ipas, JHPIEGO, EngenderHealth, PRIME) during PAC training has appeared to not only improve infection prevention during PAC, but also has led to the improvement of infection prevention practices in general at PAC hospital sites.

Inservice Training

Training in PAC in most countries has been primarily inservice, of 1 or 2 weeks in duration, often depending on whether or not the emphasis in training was on learning technical MVA skills or a more integrated approach to PAC. Occasionally, providers have received training only on specific aspects of PAC, such as postabortion family planning counseling and services (Kenya).
Preservice Training

Attempts have been made to incorporate PAC into preservice nursing and medical training (essential for the sustainability of services). Some successful examples include Nepal (nurses), Ecuador and Ghana (physicians), and Indonesia and Turkey (nurses and physicians). In Bolivia, where attempts to integrate PAC training into preservice training have not been successful for nurses or physicians, family planning is not even a part of preservice training. This is a huge barrier to improving the acceptance of family planning postabortion in that country. In Ghana, nurse-midwives receive preservice training in postabortion family planning skills.

Continued work to move PAC into preservice training is necessary to ensure its sustainability. As Hegazi of the Population Council stated about the status of PAC in Egypt, “University medical schools need technical support to integrate improved PAC, including MVA, into the obstetric/gynecologic training given to medical students. MOHP teaching hospitals will need to add PAC services to their residency requirements. Ensuring that future generations of Egyptian physicians are trained in MVA and comprehensive PAC services will strengthen the long-term sustainability of improved postabortion care in Egypt.”

On-the-Job Training

On-the-job training (OJT) is an important way for providers to learn PAC skills, particularly in settings with frequent staff transfer or a limited number of providers. OJT reduces inservice training costs as well as staff time lost to offsite training, and minimizes the disruption to existing services. Examples of successful and less than successful OJT in Kenya and Ghana were observed during the field visits. In both countries, nurse-midwives in the public sector indicated that they had trained colleague nurse-midwives (on the same ward) in MVA, following their own training. Less successful was the planned OJT of providers in one refugee hospital by trained providers in another hospital (Kenya).

Last year, JHPIEGO developed an OJT program for Kenya, with plans to expand the program to Haiti, Malawi, Nepal, Senegal, and Zambia.

Training Issues

Planners and managers should consider the following training issues.

An adequate caseload is essential: training sites in countries are both central (Nepal) and regional (Bolivia, Ghana, and Kenya) and vary widely in terms of size of caseload. In Bolivia, there were reports that providers had only practiced once on a model during MVA training; in Ghana, there were reports that some sites did not have a high enough volume to ensure trainee competency. The advantages of centralized training include increased and variety of cases for clinical training, standardized training experiences, and increased opportunity to show students ideal or model behavior on the part of providers.

In Ghana, PAC training occurs within decentralized safe motherhood training. While these decentralized sites have adequate caseload for clinical training in most aspects of
safe motherhood, other sites have an insufficient volume of postabortion clients to assure competency. One small hospital visited, which had a safe motherhood training program, had an average of 150 deliveries a month, but only two or three postabortion care cases. The managing physician commented that he was concerned about PAC competency and would prefer that trainees go to the nearby teaching hospital for PAC clinical training.

The lack of an adequate caseload during training could be offset by the increased use of models to practice mastery of important techniques (manipulation of the cannula, IUD insertion after MVA) before treating clients. The Pathfinder/Peru low-cost homemade pelvic model (see photograph below) could be used at all PAC training sites to improve and maintain the quality of the technical skills of providers, especially in low-volume settings.

![Photograph of training](image)

A **critical mass of trainers** is necessary to have an impact, and training a critical mass of excellent trainers is a major investment. Such trainers need to have skills in training, counseling, client interaction, infection prevention, MVA, family planning, and knowledge about reproductive health in general.

The **training of multiple providers** at each PAC site helps to promote a team approach to care, offsets the problem of staff transfers, and reduces the likelihood that PAC will not be seen as the responsibility of only one person.

**SUPERVISION**

Adequate and regular supervision and monitoring are essential to the successful implementation of any health service, including PAC. CAs have recognized the importance of supervision in their country programs; however, establishing even basic supervisory systems has been a challenge, especially within public sector facilities that may lack any mechanisms for supervision of staff. All supervisors of PAC providers need to be at least well oriented and trained (whenever possible) in PAC. In Nepal, where training has been consciously limited to a few providers at a time to ensure quality and adequate caseload, many of the providers’ supervisors have not been trained in PAC.
A cost-effective solution to this problem might be to give all supervisors a 1–day PAC orientation/training.

Although the implementation of effective and sustainable supervisory systems for PAC has been a challenge, a number of CAs have developed innovative ways to address the problem. In Bolivia, supervision has been improved through the creation of regional- and facility-level PAC program coordinators who have clear terms of reference and nonmonetary incentives (increased status and professional development opportunities). These regional-level and facility-level supervisors oversee the routine provision of PAC services, supervise providers’ MVA technique, and ensure the maintenance of the MVA equipment as well as the supply of family planning commodities. In Nepal, systematic supervision of PAC has been emphasized in settings where supervision was previously nonexistent.

Public sector supervision of the private sector to ensure quality PAC services is rare. However, a system of peer supervision (Intervision) has been implemented in Kenya to create public–private sector linkages by having supervisors from the public sector work with private sector nurses who provide PAC services. The goal of peer supervision is not only to improve the quality of PAC services, but also to create a network of providers to exchange ideas, share resources, and help each other solve problems.

**INTRAFACILITY COLLABORATION AND REFERRAL**

As noted in section IV, Elements of PAC, Postabortion Family Planning Counseling and Services, studies have documented that family planning acceptance is highest when counseling and services are offered on site, at the same location that the woman received treatment. This model—provision of services on site by gynecological staff—was more effective than either of two other models tested: having staff from the MCH/FP clinic provide counseling and services on the gynecological ward, or providing family planning at the MCH/FP clinic after treatment, but before discharge. (See figure 3.)

![Figure 3](image)

Counseling and services on the ward (provided by gynecological ward staff) is the ideal model. There is currently, however, a lack of adequate incentives or mechanisms to motivate managers and providers to organize services so that high-quality family planning services can be offered on the ward. Numerous MOH facilities were observed in Kenya (where this study was conducted in six district and provincial hospitals) that had no or inadequate family planning services on the ward.
Part of the difficulty in organizing such intrafacility collaboration may be the traditional separation of family planning from maternal health and gynecology in many developing countries. In MOH facilities, family planning is often a vertical program with a separate clinic removed from other outpatient and inpatient facilities. Egypt, which has had recent success in training many specialists in obstetric wards in MVA, and which has had such a traditional separation, now must bring family planning onto the ward or establish effective linkages between emergency obstetric care and family planning.

In some countries and facilities, there may not be internal reproductive health services with which to link. In such a case, increased efforts need to be made to at least identify other public and private sector resources to enable referral for other postabortion reproductive health services.

FAMILY PLANNING COMMODITIES AND LOGISTICS

The maturity and nature of the family planning program was quite different in each of the four case study countries. Each country, however, needs to forecast, order, fund, distribute, and monitor commodities. PAC planners and managers need to assure that the logistic system extends to PAC sites. Table 7 presents modern method contraception in the four case study countries. Note the variation in method mix. Planners and managers in Nepal, where sterilization accounts for 60 percent of modern use and the pill only 4 percent, might well have different counseling and logistic considerations than would Ghana, where sterilization accounts for 10 percent of contraception and the pill has greater acceptability and usage.

<table>
<thead>
<tr>
<th>Country</th>
<th>Pill</th>
<th>IUD</th>
<th>Condoms</th>
<th>Injectables</th>
<th>Sterilization</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia 1998</td>
<td>2.5</td>
<td>7.0</td>
<td>2.0</td>
<td>0.8</td>
<td>4.1</td>
<td>0.1</td>
<td>16.5</td>
</tr>
<tr>
<td>Ghana 1998</td>
<td>3.9</td>
<td>0.7</td>
<td>2.7</td>
<td>3.1</td>
<td>1.3</td>
<td>1.5</td>
<td>13.2</td>
</tr>
<tr>
<td>Kenya 1998</td>
<td>8.5</td>
<td>2.7</td>
<td>1.3</td>
<td>11.8</td>
<td>6.2</td>
<td>0.8</td>
<td>31.5</td>
</tr>
<tr>
<td>Nepal, 2001 Preliminary Data</td>
<td>1.8</td>
<td>0.4</td>
<td>3.2</td>
<td>9.3</td>
<td>23.5</td>
<td>0.7</td>
<td>38.9</td>
</tr>
</tbody>
</table>

In the four case study countries, a variety of methods were available, as shown in table 8.

In Kenya, according to the MOH director of reproductive health, the availability of clinical methods is declining due to the cessation of USAID support for those methods. For a number of years, USAID funded the IUD, Norplant and tubal ligation, and the MOH provided the services. Donor funds have ceased and the MOH is reportedly no longer providing services at the same level.
Table 8
Availability of Modern Contraception in Four Case Study Countries, August 2000

<table>
<thead>
<tr>
<th>Country</th>
<th>Combined Pill</th>
<th>Progestin-only Pill</th>
<th>IUD</th>
<th>Condoms</th>
<th>Injectables</th>
<th>Norplant</th>
<th>Sterilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Pills available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Not readily available</td>
<td>Policy restriction limits access</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Available at most sites visited by team</td>
<td>Little knowledge of this pill; just being introduced</td>
<td>Some provider misinformation and bias in sites visited by team</td>
<td>Available at most sites</td>
<td>Available at most sites</td>
<td>Current USAID–funded training program to increase availability</td>
<td>Current USAID–funded tubal ligation training program to increase availability</td>
</tr>
<tr>
<td>Kenya</td>
<td>Full supply</td>
<td>Shortage at time of case study</td>
<td>Diminished provider skills; SPA data indicate 51% of facilities provide it</td>
<td>Supply good to district level; concern for distribution to facility level</td>
<td>Full supply</td>
<td>Diminished provider skills; SPA data indicate 8% of facilities provide it</td>
<td>Diminished provider skills; SPA data indicate 11% of facilities provide tubal ligation</td>
</tr>
<tr>
<td>Nepal</td>
<td>Pills available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Available at sites visited by team</td>
<td>Not readily available</td>
<td>Available in major cities and camps</td>
<td></td>
</tr>
</tbody>
</table>

RECOMMENDATIONS

- Comprehensive PAC preservice training for all cadres of health care providers (physicians, nurses, clinical officers) should be considered a priority for USAID and CAs.
- PAC country programs should attempt to designate model clinical sites with high PAC caseloads for regional training centers to ensure clinical mastery of important PAC clinical skills.
- Increased programmatic efforts should be made to find ways to provide PAC services 24 hours a day, 7 days a week.
- USAID and CAs should continue to identify effective methods to motivate and encourage both providers and managers to ensure that adequate family planning and other important RH services are routinely offered as an integral part of PAC.
VIII. QUALITY OF CARE

ELEMENTS OF QUALITY OF CARE

More than 10 years ago, Judith Bruce proposed fundamental elements of quality in family planning. Her framework, widely endorsed by the family planning community, served as a model for PRIME and Ipas in the development of a PAC quality-of-care framework. (Figure 1 in section II presents that framework; it was used as the basis for the four case studies.)

Information and Counseling

Ipas and PRIME developed the PAC quality-of-care framework, which suggests that women need providers to do the following seven things after treatment:

- Find out about a woman’s individual needs and situation.
- Give appropriate information that responds to individual needs and preferences.
- Use counseling to assist women in making decisions and acting upon them.
- Give information about all aspects of their care, including current condition, treatment plan, warning symptoms of postabortion complications, and what to do if they occur.
- Make sure each woman knows three key facts about postabortion family planning:
  - she can become pregnant again right away,
  - she can delay or avoid another pregnancy by using family planning, and
  - how she can get help to begin using a family planning method.
- Offer a range of methods.
- Help address all reproductive health needs by providing information, services, and referrals.

As discussed in this report, information and counseling have been weak in PAC, a fact which is regrettable for two reasons. First, such information and counseling is important; second, resources exist that could guide managers and providers to improve their programs. JHU/CCP has an extensive listing of materials specifically developed (and USAID funded) for PAC information and counseling. There are materials in English, Spanish, French, Russian, and Ukrainian, developed by JHU/CCP and other CAs to meet a range of needs in a variety of country contexts.

The quality of care in family planning IEC in PAC may be similar to the quality of care in the national program. In the development of the case studies, the team encountered PAC providers that needed training or refresher training in family planning.
In Ghana, a number of providers, including doctors, were misinformed about the IUD and believed it could travel within the body.

In Kenya, despite the high HIV prevalence, a number of providers expressed a bias against condoms and inexperience with counseling on dual protection. In contrast, in Nepal, which has a low HIV prevalence, dual protection was being highly promoted. (See Nepal case study for a photograph of a large outdoor sign promoting dual protection).

Interactions between Women and Providers/Staff

Reported and observed poor treatment by providers of clients seeking postabortion care has been widespread, particularly in public sector settings. Negative provider attitudes can affect all women seeking postabortion care, even when the abortion has been spontaneous and the pregnancy was desired. Providers may punish women by delaying treatment, charging higher than normal fees for care, or withholding pain medication. Often health care workers take it upon themselves to reproach women for having an abortion, for not using family planning, or even for having sex in the first place (especially in the case of adolescents). The reasons are both social (deep-seated religious and social stigma and guilt associated with induced abortion and even spontaneous abortion) and structural (lack of a client-centered focus; shortage of adequate staff, supplies, and equipment to attend patients; and poor quality care in public health systems). The physician director of the PAC program in the Dominican Republic stated that the poor attitudes of health care professionals (particularly doctors) toward women postabortion is the most difficult thing to change.

The Mexican operations research study previously referred to noted that traditional midwives held “many negative attitudes toward women experiencing abortion complications, whether from induced or spontaneous… with widespread implications for the care they provide.” The operations research project concluded that, “The intimacy and confidence that characterize many women’s relationships during pregnancy and birth do not seem to be present after an abortion. Programs and training interventions should address these attitudes so that women experiencing abortion complications are not reluctant to seek care from a local midwife or health service.”

PAC training has addressed these attitudes (focus on empathizing) and the results are dramatically improved client-provider interactions in many settings, even in the public sector. Given the right incentives, providers can change their behaviors. One resource used in PAC training has been the JHU/CCP videotape, “Put Yourself in Her Shoes,” that develops empathy for PAC clients among service providers. In data collection for this case study, service providers related that before they had received PAC training, they did not understand women suffering from complications as well as they did afterwards—they believed that they were able to be more compassionate because of the training.

PAC providers and CAs have also developed materials to advise women to seek prompt attention, assuring them of good care. Recognizing that community participation is essential to the success of a PAC program, providers noted that they are reaching out to
the community on a regular basis with IEC on PAC services, stressing compassionate care.

- In Bolivia, Ipas and the Population Council produced a brochure advising women about bleeding in pregnancy. The cover of the brochure, with the figure of a woman, speaks of health, rights, prevention, care, respect, information, and options.

- In Kenya, the National Nurses Association of Kenya produced a pamphlet, *Unsafe Abortion and Postabortion Care: What Everyone Must Know*. The pamphlet urges members of the community to help “girls and women in need,” reminding them to act promptly, be supportive and compassionate, treat the woman gently, and move her carefully.

These excellent materials and other similar materials produced by EngenderHealth and Family Care International need to be provided to women on a routine basis, which is not currently the case.

**Equipment, Supplies, and Medications**

**Treatment of Complications**

As discussed in section V, Policy Environment for PAC Services, Providers, MVA equipment has revolutionized the treatment of complications of abortion for the majority of women for whom it is the appropriate procedure. MVA is not essential for good postabortion care but it is preferable, when appropriate, due to its lower costs for both the woman and the hospital.

Current USAID policy stipulates that MVA equipment may not be purchased with USAID funds. In many countries, other donors are supporting the purchase of MVA through a variety of means and/or individuals and hospitals are procuring the equipment in the commercial market. In Ghana, some nurse-midwife trainees have been given startup equipment by CAs that have secured it through the Packard Foundation; still other nurse-midwives reported that they bought the equipment in the market. In Kenya, there is both donation and commercial purchase of equipment. In Egypt, MOH facilities are receiving MVA equipment through an Egyptian NGO that has received it from Packard; commercial importation is not allowed. In most countries, however, there is a common concern about the sustainability of MVA equipment. It would be beneficial to the global program if managers and providers knew of a variety of MVA manufacturers from which they could competitively purchase equipment.

**Family Planning**

See section VII, Organization of PAC Services, Family Planning Commodities and Logistics.
Other Reproductive Services

To paraphrase the old family planning adage, “No product, no program,” one could say “no program, no linkages” of the third element of PAC. As the four case studies indicate, other reproductive health services are very weak in many developing countries. As noted in section IV, Elements of PAC, Linkages to Other Reproductive Health Care Services, hospitals may lack even the most basic laboratory equipment for diagnosis of STDs; the Bolivian national referral center relies on syndromic management. As noted in the Kenyan case study, hospitals may not have the medication, should problems be diagnosed. For linkages to other reproductive services to be meaningful, equipment, supplies, and medications for such services must be available.

USAID should fund operations research to determine feasible, acceptable, and effective ways to provide linkages to appropriate reproductive health services. On an individual country basis, planners and managers should assess the strengths, weaknesses, opportunities, and barriers in the national program of reproductive health services. Strategically, which linkages should be stressed? For which services are equipment, supplies, and medications most essential? In Kenya, given the high HIV prevalence, the answer most likely would be STDs; in Kenya, for example, PAC planners and managers must realize that scarcity or stockouts of condoms or drugs for STDs is a PAC problem as much as a shortage of MVA equipment would be.

Appropriate Technologies for the Treatment of Complications

See section IV, Elements of PAC, for a discussion of appropriate technologies.

Technical Performance

High technical performance is the goal of all CAs and providers. In some countries, CAs stress competency-based training and providers do not move on to service provision unless they are judged and certified to be competent. The programs in both Nepal and Egypt stress competency. Training is conducted at tertiary sites with sufficient volume of clients to ensure competency. In other countries, there have been questions of clinical competence. In Ghana, where PAC training is decentralized and offered through regional resource teams through a safe motherhood clinical skills program, there have been questions of the technical performance of the PAC trainers as well as the trainees.66,67 The relevant CA recognizes the weaknesses and is attempting to deal with the issues, constrained both by the decentralization of training and by PAC’s being one element in a larger program.

Continued practice is essential to maintaining any skill. In Ghana, one challenge in maintaining high quality MVA technical performance is the low volume of clients for individual private practice midwives, who are the focus of training because they potentially have the skills to be safe and effective providers and thus expand access in areas where there are few doctors. In a baseline survey, the average number of incomplete abortion complications per private practice nurse-midwife was one client over 6 months.68 Data collected by the evaluation team indicated a higher volume of cases per private practice, but still very low volume, leading one to question the maintenance of clinical skills.
Training, supervision, rotation out of trained providers, and retraining, addressed in detail above, are essential for ensuring high-quality technical performance.

**STANDARDS AND PROTOCOLS**

Standards and protocols are the basis for defining quality. PAC standards, guidelines, and protocols usually focus on the treatment of complications and are complemented by detailed national standards, guidelines, and protocols for family planning. As indicated in section V, Policy Environment for PAC Services, Importance of Advocacy, at least 18 countries have developed PAC standards and protocols, often based upon the postabortion care manual developed by the Postabortion Care Consortium. These materials have been produced under the sponsorship of both the family planning division and the safe motherhood division. In Kenya, PAC is in the family planning/reproductive health guidelines; in Bolivia, it is in safe motherhood standards. The safe motherhood program of Egypt, where the management of bleeding in early pregnancy is part of EOC, has produced a series of high-quality manuals that define the level of care at different levels in the system and include household and community levels.

- **Household level**: recognize danger signs in the antenatal period;

- **Community level**: promote recognition of and early care seeking for danger signs;

- **Primary health care level**: diagnose and manage mild complications of pregnancy, according to protocols;

- **District hospital**: diagnose and manage complications of pregnancy; and

- **General hospital**: diagnose and manage complications of pregnancy.

The Egyptian protocols present appropriate procedures for dealing with bleeding in early pregnancy, bleeding after 20 weeks gestation, and procedures for admitting a bleeding patient to the hospital. The decision chart presents assessment and management decisions. Note that conservative treatment, suction curettage, and MVA are presented as appropriate care, depending upon assessment. The scope of work for this evaluation did not include a review of the protocols for treatment of abortion complications. It is
unknown, therefore, to what extent national protocols present (as do the Egyptian protocols) high quality of care for women with bleeding in early pregnancy and bleeding after 20 weeks gestation, as well as high quality care for women who have received a D&C, as well as those who receive MVA treatment. However, the global focus has been on MVA.

ACCREDITATION–LICENSING

Licensure, accreditation, and good standing with one’s professional organization are the primary means for government monitoring of quality of private health care providers who provide PAC services. While these mechanisms may serve as gatekeepers to limit service providers, no evidence was available to show that these have been used to improve low quality services except in the most egregious cases of abortion-related deaths. Training and periodic onsite supervision and monitoring are essential to developing and monitoring competencies.

No trained PAC for over half of most populations seems inherently worse than any care provided. When care is provided by government or government-trained personnel, however, it is held to a much higher standard of care than are traditional health care providers or than no care at all. On a positive note, there was no evidence of a fatality attributed to PAC services for women with incomplete abortion while there is wide documentation of fatalities in the absence of PAC. The quality of care provided and perhaps the desire to maintain privacy of the pregnancy experience apparently contribute to this excellent record.

PAIN MANAGEMENT

Pain management is frequently mentioned as a need in PAC programs that still needs improvement. This is supported by findings from the case studies, including observations of procedures, discussions with hospital staff, and review of service statistics. In Nepal and Ghana, verbicaine is the norm for pain management during MVA procedures; this means that women receive verbal counseling and reassurance but generally no medication to manage pain. In Bolivia, women treated with MVA were typically given paracervical block, but rarely were they given analgesics. Practices varied in Kenya. D&C procedures were usually performed under general anesthesia, which can expose women to unnecessary risk. PAC programs typically focused on improving treatment through the introduction of MVA; little attention has been given to improving D&C and fully incorporating this into improved PAC programs. Improving pain management practices requires looking at both undermedication and overmedication issues, for both MVA and D&C procedures.

There are a number of reasons for inadequate pain management, including the belief that pain medication is unnecessary if there is adequate counseling, insufficient training of providers, judgmental attitudes towards postabortion patients being translated into punitive treatment, unavailability of drugs, and unclear guidelines. There is a need for additional research to clarify pain management issues for the treatment of incomplete abortion, as most of the clinical research that has explored pain management and abortion has focused on induced abortion. Such high-quality research would obtain objective

1 Or, women with closed cervix who are threatening to abort and for whom no treatment is warranted.
evidence for the need to reduce pain, best methods to reduce pain, and costs and logistics of reducing pain. This research should be conducted in multiple countries to determine if cultural or provider variations affect perceived pain. Such research would be best conducted by WHO or another independent organization rather than as a study by a current provider organization.

However, there are also immediate steps that can be taken to modify and clarify existing guidelines, such as recommending the routine use of analgesics immediately before the procedure.

RECOMMENDATIONS

- The routine sensitization of providers, facility managers, and other staff as well as community leaders and other stakeholders, to increase support for the compassionate treatment of PAC clients should be seen as a priority and as the first step in all PAC programs (as much of a priority as MVA and other technical training).
- The importance of changing poor and often punitive provider attitudes towards women seeking postabortion care should continue to be emphasized in PAC programs.
- USAID should fund high-quality research on pain management, including the need to reduce pain, best methods to reduce pain, and the costs and logistics of reducing pain.
- USAID should support the clarification of existing guidelines on pain management for women with bleeding in early pregnancy receiving MVA. At a minimum, WHO guidelines should be promoted: “Provide emotional support and encouragement and give paracetamol 30 minutes prior to procedure. Rarely, a paracervical block may be needed.” Postprocedure care, according to WHO, should be: “Give paracetamol 500 mg by mouth as needed.”

RECORD KEEPING AND DATA

Data and records are important tools in assuring quality. Most facilities try to record a line list register of patients. These registers are usually the sole source of any evaluation of numbers of clients and their characteristics and services received. However, the contents of registers varied among sites visited and staff often changed the items recorded, often in response to suggestions by a supervisory or consultation visitor. Usually, they include evidence for choice of contraception or the reason contraception was not chosen (e.g., ‘wants a baby’). Rarely do they include documentation of screening, diagnosis, treatment, or referral for other reproductive health services, or indeed any other health problems. Record keeping is considered an essential part of high-quality health services but has not been systematically developed as part of health services in many countries.

1 WHO protocols for appropriate treatment for women with vaginal bleeding after 22 weeks depend upon diagnosis.

k The PRIME project in Kenya has collected data from nurse-midwife PAC registries and transferred them to the main office in North Carolina, enabling crosstabulation and research for those interested.
IX. SCALING UP AND SUSTAINABILITY

STATUS OF SCALING UP

As this report has indicated, scaling up of PAC programs is underway. Many countries have moved well beyond the pilot stage. Each country has scaled up differently, depending upon national strengths, weaknesses, opportunities, and barriers. Factors that have influenced the process of scale up include the following:

- **Strengths and Weaknesses**
  - Maturity of the family planning program
  - Maturity of the reproductive health and EOC programs
  - Health infrastructure and organization of services
  - Health personnel: cadres, numbers, skills, placement (facility, geographic)
  - Financial resources available

- **Opportunities and Barriers**
  - Policy environment
  - Geographic distribution of the population and population density
  - Physical terrain
  - Roles of three sectors (public, private, and NGO)
  - Social and cultural norms
  - Other important health issues, such as HIV/AIDS
  - Degree of civil and political unrest
  - Donor interests

The maturity of the national family planning program is a critical factor in scale up. A country such as Egypt, with a mature family planning program, has a stronger base for scale up than do countries where family planning has had less investment and less success. In Egypt, previous years of investment in family planning are inputs into the current drive for PAC.

- Public and NGO health providers have been trained in family planning counseling and clinical family planning skills, and are able to use those skills in the private sector.

- Excellent IEC materials are available and in use, including posters, flip charts, and client materials. The mass media promote family planning.

- A choice of family planning commodities is available in most facilities.

- The public knows, accepts, and demands family planning.

In postabortion counseling in Egypt, a trained and skilled family planning provider will encounter a woman who has had ample exposure to family planning. In countries without such previous investment, investment in basic family planning may be necessary before
high-quality family planning counseling and services after treatment of abortion complications can be expected.

National policy about the roles of three sectors (public, private, and NGO), the health care system, and social/cultural norms affect the way scale up occurs. The Egyptian model is public sector EOC, while the Kenyan model is multisectoral PAC. In Kenya, the government has been open to many stakeholders (national institutions, donors, and CAs) while the process has been more narrowly focused in Egypt. Both models are understandable in light of their national context.

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**Egypt: A Public Sector Scale Up of PAC in EOC and FP**

Egypt has a densely concentrated population, an extensive health infrastructure, a surplus of doctors, and an ample number of obstetricians/gynecologists. Nurses have counseling and support roles.

The public sector is dominant in maternal health, with two strong vertical Ministry of Health and Population (MOHP) programs supported by USAID: family planning (bilateral and core-funded population projects) and maternal health (safe motherhood and bilateral Healthy Mother/Healthy Child [HM/HC] projects).

**Stage 1:** 1994–95: With USAID population support, a pilot study was conducted in two MOH hospitals. Study demonstrated significant improvements in the care of patients and acceptance among providers.

**Stage 2:** 1996–97: Integration of operations research study results into the MOHP HM/HC project. Expansion to 10 more MOHP and university hospitals in both Upper and Lower Egypt. Series of operations research studies on PAC.

**Stage 3:** 1998–2001: HM/HC development of EOC protocols, including treatment of postabortion complications and development of MOHP package of essential services at service delivery levels, including postabortion care. Development and use of competency-based training modules, including pain control and linkages with family planning. HM/HC expansion to 15 more MOHP hospitals. Clinical studies showing effectiveness of MVA versus D&C.

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**Kenya: Public, Private, and NGO Scale Up of PAC**

Kenya has a dispersed population (80 percent rural) and a limited health infrastructure. There is a scarcity and poor distribution of doctors. Nurses have an important role and many nurse-midwives are in private practice.

Health sector reform and limited health resources lead to support for PAC in the private and NGO sectors. While FP has been a success, declining donor funding has led to a weaker program.

**Stage 1:** 1980s: Kenyans concerned about maternal mortality begin research, advocacy, and MVA with private CA funds.

**Stage 2:** 1990s: Support of providers/facilities in three sectors: private nurse-midwives, NGO providers and doctors, and nurses and clinical officers in public sector. Multiple donors, CAs, and private funds (for CAs) supporting program.

**Stage 3:** 2000+: Focused examination of gaps and plans for strategic analysis of future expansion in light of population densities.

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1 The series of Population Council operations research studies referenced in this section have been influential in garnering support for PAC. They included *Improving the Counseling and Medical Care of Postabortion Patients in Egypt* (1995), *An Exploratory Study of the Psycho-Social Stress Associated with Abortions in Egypt* (1995), *Postabortion Case Load Study in Egyptian Public Sector Hospitals* (1997), and *Scaling-Up Improved Postabortion Care in Egypt: Introduction to University and Ministry of Health and Population Hospitals* (1997).

2 Two sectors of the MOHP are involved. PAC began in the population sector with Population Council operations research. Scale up has occurred within the MCH sector through bilateral funding. The population sector currently is developing a program that would provide both FP training (IEC) and commodities to 42 hospitals to support postpartum and postabortion services. Both sectors are working on collaboration mechanisms at the central and hospital levels. Updates on the Egyptian program were provided in memoranda from the Population Council/Cairo, the director of the Healthy Mother/Healthy Child (HM/HC) project, and USAID/Cairo.
One challenge in scale up is estimating the coverage that a nation might realistically hope to achieve. PAC is, by its very nature, an emergency. What coverage for obstetric emergencies might a low resource country such as Nepal hope to achieve? What indicators are appropriate? (See section VI, Accessibility of PAC Services, Country Access, where indicators for access are presented.)

AN OPERATIONAL PAC MODEL

USAID has asked, “Do we have an operational PAC model that can be replicated in other settings?” At this point, the answer is no. There are effective and efficient elements to many PAC country programs: wise ways to avoid political inflexibility and gain political acceptance, and wise ways to build upon national strengths, minimize national weaknesses, seize opportunities, and surmount barriers. At this time, however, there is not only one model. An operational PAC model would have the following attributes, among others: a supportive policy environment, client-focused customer service, full attention paid to all three components and to all women, and leadership, advocacy, and education.

A Supportive Policy Environment

Political support is essential to building upon strengths, minimizing national weaknesses, seizing opportunities, and surmounting threats/barriers.

- Political support was essential in Ghana and Kenya for developing approval for the private nurse-midwives (who are a strength in both countries) to provide clinical PAC services.

- Political support is necessary in Egypt to gain approval for the commercial importation of MVA equipment (the lack of such approval is currently a weakness that is managed by continuing Packard donations).

- Political influence enabled Bolivia to include PAC in the national health insurance plan—an opportunity that was seized, enabling women to receive free care.

- Political support for PAC is necessary in Kenya to enable PAC to maintain funding in light of the overwhelming problem of the HIV/AIDS epidemic. In this case, HIV/AIDS is a threat to PAC and all other health programs.

Client-focused Customer Service (Holistic Care)

In an operational PAC model, PAC services would exist to serve the client. The facility’s management would reorganize the services within the hospital or clinic so that client satisfaction came first and quality was assured.

- MVA or D&C treatment would be provided shortly after the woman entered to meet her needs, rather than occurring at specific shifts during the day to meet doctor or training needs.
A woman’s pain would be managed as if she were one’s sister or mother.

Providers would give nonjudgmental, compassionate counseling, reaching out to the woman in a holistic way, with concern for any health problem she might care to address.

The facility would structure management and services so that high-quality care was assured.

Full Attention to All Three Components and to All Women

In an operational PAC model, managers and providers would give full attention to all three components of PAC. In the emergency treatment of complications, providers would give full attention to women who receive both MVA and D&C. Women receiving D&Cs as well as those having MVA would receive appropriate pain management, counseling and services for family planning, and linkages with other reproductive health care services, as appropriate.

Leadership, Advocacy, and Education

In an operational PAC model, leaders and managers would continue to provide leadership, advocacy, and education and would be strategic in their thinking. Depending upon the cultural context and sensitivities, PAC does not even have to be called PAC. In Bolivia and Indonesia, the three components are subsumed under the term bleeding in early pregnancy. In Egypt, management of bleeding in early pregnancy is part of EOC, and is not explicitly referred to as PAC.

SUSTAINABILITY

Key Elements of Sustainability

Many of the elements that foster sustainability of family planning or other health programs foster sustainability of PAC. The following are critical elements:

- **Political will and support** are reflected in the government’s taking responsibility for setting policy, establishing regulations, and providing services in ways that appropriately involve each sector—public, private commercial, and NGO. The impact of such support can be seen in Bolivia, which incorporated PAC into the national health insurance plan, thus offering free services for all women. Although ideal, free services may not be feasible or sustainable in many countries.

- **Strategic mapping of PAC services** would include mapping the need for services (geographically and by age groups) and the prevalence of unsafe abortion.

- **Cost and financing analyses** would address questions such as the cost of quality PAC services, health system costs of providing or not providing PAC
services, and the role of the private commercial sector in financing PAC services.

- **Institutionalization of training** would provide preservice training of providers. Training has been institutionalized in about 12 countries for doctors and in 8 countries for nurses. (See table 2.)

- **Quality services** need to be established and maintained. The maintenance of high-quality services needs to be a focus in cadre-neutral programs that are training new cadres for surgical procedures and thus serving as demonstrations that these cadres (nurses and nurse-midwives) can provide safe and effective services. Nepal’s slow but steady scale up seems wise; there are only four trainees in clinical training at one time to ensure that each receives sufficient time with models and patients.

- **Management and financial systems** that provide supervision, financial resources, and data for quality and evaluation are essential. As noted in this report, those systems should ensure that PAC includes family planning counseling and services and linkages with other reproductive health services, unless over time, PAC becomes simply treatment of abortion complications.

- **Community support and demand** are basic to PAC. A community’s demand for services is the basis of sustainability. First, the community must be aware of and support PAC. The community materials mentioned in section VIII, Quality of Care, Interactions between Women and Providers/Staff, can be very useful in building an understanding of postabortion care and support for PAC. Community demand for services must follow.

**RECOMMENDATIONS**

- **Countries without a strategic plan for national scale up** should develop such a plan.

- **USAID should continue to provide leadership from Washington and the Missions and to promote dedicated PAC staff within governments, CAs, and donors.**
X. FUNDING INVESTMENTS AND FUTURE NEEDS

INVESTMENT IN POSTABORTION CARE SERVICES BY USAID

To estimate USAID’s total investment over the past 10 years, the evaluation team contacted the major partners who are currently or have been involved in PAC delivery and training activities. Each partner was requested to estimate the funding in different programs that was directly related to PAC and to specify the period over which this money had been expended. These funds could then be added to estimate total PAC funding. This turned out to be a surprisingly difficult task for many of the partners, primarily because PAC is usually only one component of larger reproductive health or safe motherhood programs. Given that this required a thorough knowledge of programming which happened as much as 10 years ago and that many of the original project managers had moved on to other positions, it was not possible to obtain actual accurate figures, but estimates. (See tables 9 and 10 at the end of this section.)

It should also be noted that the numbers that are presented in this evaluation do not reflect direct bilateral support for PAC programming, although bilateral organizations do undertake significant PAC activities. Given the difficulty in obtaining information from Missions on the basis of ad hoc requests, as well as the fact that Missions also face the same problem of PAC being integrated with other activities, it did not seem to be realistic to try to quantify this source of PAC support. Any information gleaned from attempts of this type would likely be more misleading than helpful due to its piecemeal nature.

Gathering information from INTRAH/PRIME, the Population Council, Pathfinder, EngenderHealth, and others, USAID support was documented for PAC programs at $19.7 million since 1990. This figure is broken out between approximately eight CAs and does include some field support funds. Actual expenditures for PAC, including bilateral support, most likely exceeded $20 million.\[1\]

Positive Trends

While $19.7 million has been spent over the past 10 years, almost $15 million of that represents spending in the past 2 years (FY 2000 and 2001). Field support also seems to be rising as Missions increase their interest in PAC. The most striking example of this is the Indonesia Mission, which has committed $2 million in FY 2001 field support funds to maternal and neonatal health in order to support PAC services.

It should be noted that other donors, including the Packard Foundation, UNFPA, the Hewlett Foundation, DFID, and Sida, also support PAC activities in select countries. In Peru, DFID has a relatively large PAC program underway with almost no USAID involvement. Unfortunately, the scale of this support has not been documented in a consistent manner and it is impossible to determine how much other donor support is being provided to PAC on a global basis. One of the challenges that USAID faces in its future programming is both donor coordination and stimulating additional commitment and investment.

\[1\] For instance, the Egyptian PAC activities over the last three years cited in this report have been funded through a bilateral safe motherhood project.
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 DEVELOPMENT OF A NEW PAC PROGRAM

“Introducing PAC services is different from introducing an elective service or a new contraceptive. Providers and trainers must be prepared to provide a range of treatments—from performing an uncomplicated MVA to treating life-threatening emergencies.” Moreover, they must be prepared to provide family planning counseling and referral for services as appropriate, as well as linkages with other services.

In developing a new PAC program, a variety of considerations should be taken into account, including population, health system, political, and economic variables, to maximize effective start up. While data on maternal morbidity and mortality alone are often enough to convince the public health community of the need for PAC services, medical practitioners and political influences may need advocacy. JHPIEGO has written, “The most effective advocacy for PAC services is country driven, with partner agencies playing a facilitative role. Government authorities, the press and society at large must recognize that unsafe abortion takes a heavy toll on women’s health and lives. The introduction of PAC must be seen as improving existing services rather than something totally new—PAC is part of the ‘mainstream’ of healthcare services.”

Many successful PAC initiatives have been integrated into safe motherhood or emergency obstetric services initiatives that are more broad based and more politically palatable.

The evaluation scope of work asked, “What are the funding requirements for initiating postabortion care activities? What resources are required to scale up PAC activities to a national level?” The answer to those questions is that funding depends upon a number of variables. Beginning a new program in a developing country setting of constrained budgets and personnel entails good strategic thinking on behalf of country leaders and key stakeholders to respond to the following questions.

Population and Health Data

- What information is available on demographics and particularly on maternal morbidity and mortality? Are there particular areas where the numbers of deaths from complications from abortion are particularly high? Which indicators can and shall be used?

- Given the available data, what is the scale of the problem and how severe do the complications tend to be? Does PAC represent a cost-effective way to save a significant number of lives given the information available?

Social and Political Information

- Can it be demonstrated that unsafe abortion takes a heavy toll on women’s health and lives? Who must be convinced and how can it be done?

- Which sector—public, private, or NGO—should take the lead?
Health Care Structure Information

- Given the current strengths and weaknesses, which elements of PAC should be available at which level of the health system, from the community to the tertiary hospital?

- What percentage of the population has access to the health care system from a financial, geographic, and social perspective? How can that access be expanded?

Family Planning and Reproductive Health

- Does the current family planning program offer high-quality counseling and services? What support may be necessary to the family planning program to ensure strong PAC?

- What are the critical other reproductive issues in the country? Are services available to which linkages can be provided? Which of these should be identified as priority for PAC?
ENDNOTES

1 Sanghvi, Harshad, Medical Director JHPIEGO, Medical Treatment of Incomplete Abortion, MAC Mini-University.


8 CDC Reproductive Health Surveys.


10 Egyptian Fertility Care Society, Postabortion Case Load Study in Egyptian Public Sector Hospitals, Population Council, February 1997.


15 Egyptian Fertility Care Society, Postabortion Case Load Study in Egyptian Public Sector Hospitals, Population Council, February 1997.

16 Ibid.

17 Ibid.

18 Egyptian Fertility Care Center, Postabortion Case Load Study in Egyptian Public Sector Hospitals, The Population Council, February 1997.

19 Johns Hopkins University/Center for Communication Programs (JHU/CCP), Postabortion Care: Europe and Eurasia, presentation to the evaluation team, August 2001.

20 Ibid.

21 Ibid.


24 USAID Scope of Work.


40 Reported verbally twice to the PAC assessment team in Kenya by the MOH director of reproductive health.
43 Ibid.
46 Sanghvi, Harshad, Medical Director JHPIEGO, Medical Treatment of Incomplete Abortion, MAC Mini-University.
47 Ibid.
48 Westley, Elizabeth and Jacqueline Sherris, Assessment of Misoprostol Use in Four Countries, PATH and EngenderHealth.
50 Rogo, Khama, Bohmer, Lisa and Christine Ombaka, Community Level Dynamics of Unsafe Abortion in Western Kenya and Opportunities for Prevention, Pacific Institute for Women’s Health and Center for Study of Adolescence, no date.
52 Ibid.
53 Population Council, A Program of Integrated Postabortion Treatment and Family Planning Services at Three Hospitals in Bolivia, date unknown.
54 Egyptian Fertility Care Center, Postabortion Case Load Study in Egyptian Public Sector Hospitals, The Population Council, February 1997.
55 Deborah Billings et al., Training Midwives to Improve Postabortion Care in Ghana, Major Findings and Recommendations from an Operations Research Project, Ipas, 1999.
60 Memorandum from Sahar Hegazi, Population Council/Cairo to Laurel Cobb on the status of PAC in Egypt.
62 Kenya Service Provision Assessment (SPA).
64 Greensdale, Forrest and William Jansen, “Postabortion Care Services: An Update from PRIME,” Resources for Women’s Health, Volume 1, Number 2, March 1998.
66 Combary P., A. Muhawenimana, M. Luoma, and W. Jaskiewicz, Performance Needs Assessment of Safe Motherhood Regional Resource Teams in Upper East, Upper West and Northern regions of Ghana, April-June 2000, Prime II, INTRAH, School of Medicine, University of North Carolina at Chapel Hill.
68 Ibid.
69 Ministry of Health and Population, Arab Republic of Egypt, Basic Essential Obstetric Care: Service Standards, undated, and
Ministry of Health and Population, Arab Republic of Egypt, Essential Obstetric Care: Protocols for Physicians, April 2001, and
75 Ghosh, Anita, Enriquito R. Lu and Noel McIntosh, Establishing Postabortion Care Services in Low-Resource Settings, JHPIEGO Paper 7, October 1999.
76 Ibid.
APPENDICES

A: Scope of Work
B: Persons Contacted
C: References

CASE STUDIES

D: Bolivia
E: Kenya
F: Ghana
G: Nepal
APPENDIX A

SCOPE OF WORK
Scope of Work

Global Evaluation of USAID’s Postabortion Care Program
Contract to Population Technical Assistance (POPTech)

Contents:

I. Rationale
II. Evaluation Purpose and Objectives
III. Terms of Reference
IV. Critical Technical and Programmatic Issues
V. Methodology
VI. Duration, Timing and Schedule
VII. Team Composition
Annex 1
I. Rationale

For over thirty years, USAID has played a critical technical leadership role in family planning and reproductive health issues. Since 1994, USAID has been very engaged in the issue of postabortion care, in order to save women’s lives and link couples who have experienced unsafe abortion with needed family planning and reproductive health services. Unsafe abortion and complications from spontaneous abortions remain a major cause of maternal deaths in many countries. The World Health Organization (WHO) estimates that 13-15 percent of maternal mortality is due to the complications of abortion. In some countries, hospital-based studies document that up to 40 percent of pregnancy-related deaths are the result of unsafe abortion. Worldwide, this translates into an estimated 100,000–200,000 maternal deaths per year. Women’s lives can be saved by providing comprehensive postabortion care (PAC) services and this approach reduces reliance on abortion by linking women with needed family planning and reproductive health services.

The term, ‘postabortion care’ was developed in 1993 and is now widely used and understood to include three critical elements:

- emergency treatment for complications of spontaneous or induced abortion;
- postabortion family planning counseling and services; and
- referrals between emergency care and other reproductive health services, for example, STI management, etc.

For the first time in 1994, USAID authorized the use of population funds for postabortion treatment and postabortion family planning services. In addition to a more favorable political environment, two events led to the commitment to and mobilization of resources to address postabortion care. Domestically, the Postabortion Care Consortium was established by leaders within the CA community in order to advocate that bilateral and multilateral donors, particularly USAID and UNFPA, address the issue of unsafe abortion in their policies and programs. Internationally, this issue received considerable attention at the International Conference on Population and Development (ICPD) at Cairo. The Cairo Conference drew the attention of programmers and policymakers around the globe and facilitated the mobilization of resources to improve postabortion care. At Cairo, the following supportive policy statement was developed: “In all cases, women should have access to quality services for the management of complications arising from abortion. Post-abortion counseling, education and family planning services should be offered promptly, which will also help to avoid repeat abortions”. The Fourth World Conference on Women held in Beijing in 1995 also positioned PAC as a programmatic priority.

At USAID, the Office of Population, the Office of Health and Nutrition, the regional bureaus and field missions support postabortion care programs. Postabortion care is a programmatic priority for the Office of Population (SO1) and is a key intervention in the pathway to maternal survival (SO2). Over the past decade, USAID has supported various cooperating agencies implementing PAC programs in all four regions and in over thirty countries. Key technical components are in

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1 The PAC Consortium was established by Ipas, AVSC, Pathfinder and IPPF. Additional organizations such as the Population Council, Johns Hopkins University Center for Communication Programs, JHPIEGO, INTRAH/PRIME, FCI, ACNM and others have participated over time. USAID and the Packard Foundation are the funding agencies that regularly participate in PAC Consortium activities.
the areas of policy and advocacy, operations research, training, service delivery and health communication.

Recent policy and legislation has raised some questions about the permissibility of postabortion care activities for non-U.S. NGOs that receive USAID assistance for family planning activities. In an email addressed to all PHN Officers on August 2, 2000, Duff Gillespie, the Deputy Assistant Administrator for the Population, Health and Nutrition Center reiterated the Agency’s strong commitment to global Postabortion Care programs and clearly stated that its work on postabortion care would not be affected by the abortion-related restrictions affecting population-directed assistance that were included in the FY2000 appropriations act. More recently, President Bush’s reinstated of the Mexico City Policy that was in effect from 1985-1993 was accompanied by the White House statement that “The President’s clear intention is that any restrictions do not limit organizations from treating injuries or illnesses caused by legal or illegal abortions, for example, postabortion care.” The agreement clauses that direct the implementation of the Mexico City Policy clearly state that such activities are permissible under the policy. However, under the Helms amendment, which restricts the use of USAID population assistance “for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions” manual vacuum aspiration kits (MVA) may not be purchased with USAID population-directed funds.

Over the past seven years, USAID has gained a great deal of expertise regarding the design, implementation and evaluation of PAC programs. However, there are many outstanding issues that merit review and discussion in order to move forward. In order to strengthen its PAC programs USAID needs to conduct an in-depth and thorough review of the following technical and programmatic issues (expanded upon in greater detail in section IV):

- Attention to all three components of PAC;
- Accessibility of services by those most in need, including assessment of community approaches;
- Provider practices;
- Organization of services;
- Quality of care;
- Scaling up;
- Sustainability;
- Funding needs;
- Collaboration with other donors (within four case study countries)

Addressing these critical technical and programmatic issues now will help USAID to develop a strong and comprehensive strategy for the next 3-5 years that can be implemented through SO1 and SO2. Along with a programmatic and technical vision, we need to review financial investments and identify funding needs to support PAC program implementation over a 3-5 year period.

USAID is at a critical phase in the implementation of postabortion care programs around the world. The Office of Population and the Office of Health and Nutrition/Division of Nutrition and Maternal Health are very committed to conducting and actively participating in this evaluation,
which represents an important step to thoroughly review USAID’s strengths and limitations in PAC.

**Pre-Evaluation Preparations by USAID**

In preparation for the evaluation, USAID will be responsible for engaging CAs, key donors and Missions early in the process. More specifically USAID will:

- Contact CAs to explain the evaluation purpose and solicit their cooperation with the evaluation team on the program and financial review and assistance arranging logistics in Bolivia, Nepal, Ghana and Kenya (contingent upon Mission concurrence).
- Contact key donors with significant investments in PAC programming to inform them of the evaluation and indicate USAID’s interest in future collaboration/coordination once the evaluation is complete. Donors with activities in Bolivia, Nepal, Ghana and Kenya will be asked to inform their field staff (if applicable) that they will be contacted by the evaluation team and asked to describe their program(s) and collaboration/ complementarity with USAID’s program.
- Develop and conduct a survey of Mission activities, level of interest, perspectives and concerns with PAC programming.

Results and comments will be shared with the evaluation team as part of the background information for the evaluation.

**II. Evaluation Purpose and Objectives**

The purpose of this evaluation is to conduct a comprehensive and thorough review and analysis of the outstanding programmatic and technical issues in the current PAC portfolio. The evaluation will be used by USAID to develop a 3-5 year strategy to mainstream its PAC efforts and to direct its global and mission level PAC activities and programming.

Specifically, the objectives of the evaluation are to:

- Analyze the outstanding technical and programmatic issues
- Synthesize program strengths and weaknesses
- Identify significant global and regional achievements and needs/ gaps
- Document past investments of field and global support and make recommendations for the future

**III. Terms of Reference**

The evaluation will take place in the four phases described below.
Phase One: Review of PAC Programming and Investments

The reviews to be carried out in Phase one will provide a broad overview of USAID’s activities in PAC since 1994. This review will include the following specific components:

- Review USAID project reports and documentation considering the critical issues bulleted in Section I
- Review materials collected by USAID in Mission survey
- Conduct interviews with select Cooperating Agency PAC experts, in order to solicit lessons learned and challenges and assess financial investments
- Conduct interviews with PAC WG members and select USAID PHN and Regional Bureau staff
- Develop outline of evaluation report

Phase Two: Country Case Studies (Contingent upon Mission Approval)

After thoroughly reviewing documentation, interviewing USAID and CA staff and beginning the analysis process, the evaluation team will then visit four countries selected for their significant PAC program effort. This will allow the evaluation team the opportunity to explore technical and programmatic issues in greater depth, seeking information and perspectives from stakeholders at various levels. Case studies will be carried out in the following four countries: Bolivia, Ghana, Nepal and Kenya (contingent upon Mission concurrence). The evaluation team will:

- Identify gaps in data/information in Phase I
- Develop data collection approach and tools for field visits
- Present draft approach and report outline to PAC WG
- Conduct country visits according to the agreed upon methodology
- Debrief USAID on findings during country visits

Phase Three: Prepare Draft of Evaluation

- Write evaluation of critical issues and recommendations for future investments based on analysis of programming, investments and case studies, based on agreed upon outline
- Present evaluation findings to PAC WG and PHN Center leadership

- Submit draft evaluation

Phase Four: Completion and Presentation of Final Report

- Incorporate comments and revise report
- Present final published report to USAID
IV. Critical Technical and Programmatic Issues

Answers to the following questions are necessary to assist USAID in the development of a PAC strategy.

1. Attention to all three components of PAC

   Emergency treatment for complications of spontaneous or induced abortion

   To what extent is this component being emphasized to the exclusion of the other three components?
   Are women with all types of complications being treated?

   Postabortion family planning counseling and services

   To what extent do our programs ensure direct provision of family planning?
   Are programs designed to ensure adequate attention to counseling and family planning method provision?
   Are emergency treatment and family planning services organized to ensure effective PAC programs?

   Referrals between emergency care and other reproductive health services, for example, STI management, etc.

   Are programs designed to facilitate referral and/or linkages to other RH services? Are women using these referrals?
   What are the examples where this has been successfully implemented?

2. Accessibility of services

   How effective are decentralized programs in reaching underserved populations?

   Are there groups that are systematically excluded from PAC services, or simply not adequately linked to health services, for example, adolescents or indigenous populations? What are the reasons? What are the implications for future PAC program designs to reach such groups.

   What are programs doing to include community participation and perspectives, especially for reaching underserved groups? Are there examples of programs that have established and/or improved linkages with community services and organizations, including community knowledge and identification and referral of those in immediate need of services? What have been the benefits of these approaches? What efforts are made to educate the public to identify septic abortion complications and inform them of the availability of PAC services?

   Has the support that USAID has provided focused on those countries or areas where a significant proportion of maternal mortality and morbidity is due to unsafe abortion?

   Is it the case that a focus on MVA equipment has resulted in limiting access to PAC services because some women are MVA ineligible (based on complications or gestational age) or because MVA equipment is unavailable in some settings?
3. Provider practices
What have we learned about provider behavior (both technical and interpersonal)?

What, if any issues are there concerning treatment of clients, pain management, discrimination against particular clients, punitive behavior, etc. by providers?

Are providers more interested in MVA technology, and is it at the expense of the other elements of PAC, such as family planning counseling? What happens if MVA supplies run out?

In general, do those who are trained provide all PAC components?

4. Organization of services
Are the right people trained? And are they trained in the right way, that is, on all three PAC components? Are there issues with midwives/ doctors working with obstetrics versus gynecology- do two groups need to be trained?

What models are most successful for providing the family planning services and referral to other RH services?

What reorganization of existing services has been necessary to incorporate all three components of PAC? Which specific approaches have been more successful? Which have been less successful? By successful, we mean both working efficiently to provide all three components of PAC, as well as having some structural sustainability.

5. Quality of care
What has been done in field programs to ensure quality of care in PAC? For example, are services available 24 hours a day? Are providers technically competent? What provisions are made for pain management? Are clients treated respectfully and provided with appropriate information? What provisions are made for referrals for family planning and other reproductive health needs?

What quality issues need more attention in this area?

Is quality sustainable when the CA is no longer providing TA or support?

6. Scaling up
How do we go beyond pilot programs?

Do we know how to introduce, implement and scale up PAC on a national level?

What are the best practices and lessons learned for moving from a single, limited project to a national program?

What are the specific efforts that contribute to the process of scaling up? This might include attention to the health care system, policy makers, providers, etc.
7. **Sustainability**
What are the key elements to ensure sustainability? For example, how do we ensure that a pilot project will continue after the initial phase/demonstration efforts?

Are some of the components more sustainable than others? What strategies are needed to ensure that the entire PAC package is sustained?

8. **Funding Investments and Future Needs**
What has been USAID’s investment in dollar terms in PAC during the past 6-8 years? (Summarize information by country/region and technical focus)

What are the funding requirements for initiating postabortion care activities? What resources are required to scale up PAC activities to a national level?

Depending on the level of activity, what are the future needs for support in the area of PAC? Alternative scenarios should be presented.

Is there a need for more attention to policy issues in the design and implementation of PAC programs?

9. **Policy**
What if any medical barriers exist that prevent or restrict women from having access to PAC services?

What policies and restrictions are there concerning types of providers who can provide PAC (especially emergency treatment using MVA)?

V. **Methodology**

The evaluation will be conducted using two data collection approaches: 1) review and analysis of PAC programming and investments; and 2) country case studies. Each of these approaches will encompass multiple data sources and methods as described by phase. Prior to start of the evaluation, the team will be provided with:

- A summary of findings from a survey of USAID Missions describing current activities, successes, concerns and suggestions for future levels of support and technical assistance;

- A collection of reports, documents and materials from USAID’s PAC projects (a non-prioritized bibliography has already been submitted to Poptech).

**Phase One:**

After a review of the available documentation and consideration of the above technical concerns, the evaluation team will begin with interviews of select USAID/W personnel (listed in Appendix One). Interviews with USAID administrative and technical leaders involved in
programming or investment aspects of PAC should solicit attitudes and perceptions concerning past and current PAC programming strengths, weaknesses and gaps.

Once the team has become familiar with USAID’s overall PAC program (from reports and interviews with USAID personnel), the team will then seek input from 2 or more PAC technical experts within key cooperating agencies (listed in Appendix One). Interviews with key CA PAC technical experts will have two aspects. First, individuals will be asked to describe their agency’s history with PAC programs by country and project since ICPD. They will also be asked to describe successes, failures and gaps in PAC programming. Second, they will be asked to provide the evaluation team with estimated expenditures for these activities by country. These data should be gathered according to geographic reach and technical focus, so that the final analysis can provide a picture of how investments have been made, with recommendations for future investment. For those agencies that have conducted pilot programs, they will be requested to report the total cost for such an activity. Interviews should be standardized for comparability.

A preliminary analysis of programmatic and financial data gathered to date would inform the approach used for the phase two case studies.

Phase Two:

The evaluation team will then develop an approach to the case studies, which will allow for an in-depth examination of the issues identified in this SOW. The team should identify a common framework for the case studies to ensure comparability of similar technical issues. Some countries have been identified as having a particular aspect of interest (e.g., decentralized approaches, private and public partnerships) which will also affect data collection approaches. It is anticipated that each two-member team will interview a variety of individuals, from decision-makers and health service administrators to technical staff, providers and beneficiaries of the programs. They will also approach other donors in the four countries to understand program priorities and recommend possible synergies with USAID programs. This approach should be developed in close collaboration with the PAC WG. USAID will request that the CAs in the four countries will assist with planning and logistics for the evaluation team’s visit. The team will need to follow-up with in-country collaborators to ensure that logistics are well planned to ensure the best use of time. After the country visits are completed, the team will debrief both the USAID Mission in the countries visited and USAID/W on their findings.

Data Sources:

By the end of Phases One and Two, the team should have the following data sources from which to draw in preparing the final report:

- A collection of reports, documents and materials from USAID’s PAC projects (a non-prioritized bibliography has already been submitted to Poptech);

- A summary of findings from a survey of USAID Missions describing current activities, successes, concerns and suggestions for future levels of support and technical assistance;

- Interviews with USAID/W personnel;
- Interviews with CA personnel;
- Interviews, observations and perspectives from the field

VI. Duration, Timing and Schedule

The evaluation process will begin in July or August, 2001. A total of 12 weeks is needed to complete the requested activities with a total of 60 days for the team leader and 45 days for the other three team members.

The timeline by week and consultants is as follows:

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<th>Week One</th>
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<td>Draft report outline</td>
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<td>Develop interview instruments</td>
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<td>Meet with WG to discuss critical issues</td>
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<td>Prepare travel debrief</td>
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<td>Debrief WG on travel findings</td>
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<td>Present draft report to WG</td>
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<td>Week Nine</td>
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<td>Presentation of final report at USAID</td>
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* Publication should be available from Poptech by the second week of October, 2001

VII. Team Composition

It is critical for this team to have a range of skills and expertise in order to successfully complete this SOW. Members of the PAC Working Group will work closely with the team and travel to identified PAC countries.

The team will consist of 4 members with the following skills and expertise:

1. Team Leader with excellent writing and analytical skills, significant experience as a team leader, demonstrated success working with or on USAID projects and 10 years experience in the evaluation of FP/RH programs, with some experience with PAC.

2. 2 clinical PAC specialists who have worked on PAC training and service delivery in low resource settings. These two consultants need to have EXPERTISE in counseling in PAC settings and demonstrated expertise in interpersonal communication/counseling and linkages with other RH interventions.

3. Individual with strong PAC programming and service delivery skills, and demonstrated experience with counseling and interpersonal communications. Strong programming skills to examine and address the critical questions of sustainability, equipment issues, how to take demonstration projects to scale, etc are required.
Annex 1:  
Interview List for Phases One and Two

CA Interview List (to be updated during interview process) (25):

EngenderHealth  Sally Girvin  
Lorelei Goodyear  
Elizabeth Westley  
Kristina Graff  

Population Council   Emma Ottolenghi  
Dale Huntington  
Julie Solo (formerly with PC)  

PRIME II  Maureen Corbett  
Yvonne Sidhom  
Linda Ippolito  

JHPIEGO  Noel MacIntosh  
Jennifer Macias  
Harshad Sanghvi  

Pathfinder  Cathy Solter  
Edith Bowles  

Advance  Saul Helfenbein  
Lala Toure  

Catalyst  Marsha Townsend  

POLICY  Susan Settergren  

MNH  Kathy Jesensky  

MSH  Doug Huber  

Ipas  Joan Healy  
Barbara Crane  
Debbie Billings  
Janie Benson  

PAC Working Group Members (10):

Marge Horn  
Sarah Harbison  
Mary Ellen Stanton  
Nancy Engel  
Khadijat Mojidi  
Amanda Huber  
Mihira Karra  
Zeline Pritchard  
Monica Kerrigan  
Nicole Buono  
Barbara Seligman
Other key PHN staff (6):
Margaret Neuse
Joy Riggs-Perla
Jim Shelton
Patricia Stephenson
Miriam Labbok
Ellen Starbird
Sandra Jordan

Other Regional Bureau staff (2):
Gary Cook
Margarette Farrell
Joyce Holfeld
Mary Jo Lazear

Former USAID employees with PAC involvement (3):
Phyllis Gestrin
Sandra de Castro Buffington
Michelle Folsom
Annex 2: Case Study Countries, CA’s and Collaborators

**Bolivia** - Population Council, JHPIEGO, Pathfinder International, Ipas

**Ghana** - PRIME, MOH - Victor Ankrah, Joe Taylor

**Kenya** - Population Council, PRIME, Pathfinder International, POLICY Project

**Nepal** - JHPIEGO, EngenderHealth
APPENDIX B

PERSONS CONTACTED
PERSONS CONTACTED

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

Center for Population, Health and Nutrition (PHN)
Duff Gillespie, Deputy Assistant Administrator

Office of Population (POP)
Margaret Neuse, Director
Barbara Seligman
Nicole Buono

Research Division (R)
Marjorie Horn
Mihira Karra
Sarah Harbison

Family Planning Services Division (FPS)
Maureen Norton
Nancy Engel

Contraceptives Logistics Management Division (CLM)
Monica Kerrigan

Office of Health and Nutrition (HN)
Nutrition and Maternal Health Division (NMH)
Miriam Labbok
Mary Ellen Stanton

Bureau for Africa, Office of Sustainable Development (AFR/SD)
Khadijat Mojidi
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APPENDIX D

POSTABORTION CARE IN BOLIVIA: TREATMENT OF HEMORRHAGE DURING THE FIRST HALF OF PREGNANCY

CASE STUDY
Global Evaluation of USAID’s Postabortion Care Program was made possible through support provided by the United States Agency for International Development (USAID) under the terms of Contract Number HRN–C–00–00–00007–00, POPTECH Assignment Number 2001–024. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.
**ACRONYMS AND ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICAPA</td>
<td>Comité Interinstitucional de Coordinación en Atención Postaborto</td>
</tr>
<tr>
<td>CPR</td>
<td>Contraceptive prevalence rate</td>
</tr>
<tr>
<td>D&amp;C</td>
<td>Dilation and curettage</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td>FP</td>
<td>Family planning</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, education and communication</td>
</tr>
<tr>
<td>INE</td>
<td>National Statistics Institute</td>
</tr>
<tr>
<td>INOPAL</td>
<td>Operations Research in Family Planning and Maternal–Child Health for Latin America and the Caribbean</td>
</tr>
<tr>
<td>IUD</td>
<td>Intrauterine device</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MVA</td>
<td>Manual vacuum aspiration</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td>PAC</td>
<td>Postabortion care</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
</tr>
<tr>
<td>PRB</td>
<td>Population Reference Bureau</td>
</tr>
<tr>
<td>PROCOSI</td>
<td>Programa de Coordinación en Salud Integral</td>
</tr>
<tr>
<td>RTI</td>
<td>Reproductive tract infection</td>
</tr>
<tr>
<td>SBS</td>
<td>Seguro Básico de Salud (national health insurance program)</td>
</tr>
<tr>
<td>SEDES</td>
<td>Departmental Secretaries of Health</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually transmitted disease</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually transmitted infection</td>
</tr>
<tr>
<td>TFR</td>
<td>Total fertility rate</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
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- Other Reproductive Health Services ............................................... 16
I. BOLIVIA ENVIRONMENT

DEMOGRAPHIC AND HEALTH DATA

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate (TFR)</td>
<td>4.1 births per woman (1998)</td>
</tr>
<tr>
<td>Population</td>
<td>7.8–8.5 million (1998, Population Reference Bureau [PRB])</td>
</tr>
<tr>
<td>Annual growth rate</td>
<td>2.0 percent</td>
</tr>
<tr>
<td>Urban population</td>
<td>62 percent</td>
</tr>
<tr>
<td>Population under 15 years</td>
<td>40 percent</td>
</tr>
<tr>
<td>Infants 12 to 23 months, fully vaccinated</td>
<td>37 percent (1994 Demographic and Health Survey [DHS])</td>
</tr>
<tr>
<td>Births attended by trained professional</td>
<td>35.5–50 percent (National Statistics Institute [INE] 1995 and 1994 DHS)</td>
</tr>
<tr>
<td>Women in union using modern contraception</td>
<td>18–25.2 percent (1994 DHS and PRB)</td>
</tr>
<tr>
<td>Literacy</td>
<td></td>
</tr>
<tr>
<td>Males: 88 percent; females: 72 percent</td>
<td></td>
</tr>
<tr>
<td>Life expectancy</td>
<td></td>
</tr>
<tr>
<td>Males: 58 years; females: 62 years</td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td></td>
</tr>
<tr>
<td>63 per 1,000 live births</td>
<td></td>
</tr>
<tr>
<td>Maternal mortality rate</td>
<td></td>
</tr>
<tr>
<td>390 per 100,000 live births</td>
<td></td>
</tr>
<tr>
<td>Women who give birth by age 20</td>
<td>36.1 percent</td>
</tr>
</tbody>
</table>

Bolivia is divided into three regions: the Altiplano (mountainous region or high plains in the West), the Valle (valleys in the central region), and the Llano (plains in the East and North). Each region has a distinct climate, culture, and morbidity/mortality profile. Infant mortality is nearly half the rate in the Llano region (53) than it is in the Valle (96–101), and rates are lower in urban than in rural areas.

Approximately 55 percent of Bolivians are native Indian, 30 percent are of mixed race, and the remaining 15 percent are primarily of Spanish descent.

The TFR has declined by one third since 1970, when it was 6.5 births per woman, and it varies little between regions. The main difference is between urban (3.8) and rural (6.3) populations. However, Bolivia has one of the highest TFRs in all of Central and South America. In the Llano, the percentage of women in union using modern methods is 31 percent, twice that of women in the Altiplano (12 percent) and the Valle (16 percent).

Of the 6,000 women who die annually in Latin America due to pregnancy-related causes, approximately 450 deaths occur in Bolivia, with 390 maternal deaths per 100,000 live births. (For urban areas, the rate is 262 deaths per 100,000, but this increases to 563 deaths per 100,000 in rural areas.) Studies from the 1980s estimated that 27 percent of maternal mortality in Bolivia is attributable to complications of abortion; a more recent investigation placed the level at 35–50 percent, with government health officials in 1997–98 citing a figure of 35 percent.

Approximately 115 abortions a day occur in Bolivia, or between 40,000–50,000 per year. Incomplete abortion is one of the most prevalent complications treated at Bolivian hospitals. Health officials estimate that 47–50 percent of hospital beds on gynecology wards are occupied by patients admitted for abortion complications, and that
approximately 60 percent of the total obstetric/gynecologic expenditures in public hospitals are incurred on patients treated for abortion complications.\textsuperscript{8,9,10}

In one 12–month period (1992–93), Bolivia’s four largest cities recorded 21,500 official reports of violence against women—73 percent of which involved domestic violence.\textsuperscript{11}

**POLICY ENVIRONMENT**

**Legal Status of Abortion**

Article 266, adopted by the Bolivian Penal Code in 1973, classifies abortion as a crime except in certain cases. The article states that when abortion is the consequence of rape, abduction for sexual purposes not followed by marriage, statutory rape, or incest, there will be no sanction as long as legal action has been initiated. The article also states that abortion shall not be punishable if it is performed to protect the health or life of the mother and the threat cannot be avoided through any other means. In any of these cases, the abortion must be performed by a doctor, with the woman’s consent and judicial authorization.

After a police report and a medical examination, a suit is filed with a penal judge, who accepts the complaint and asks the public prosecutor for an evaluation of whether there are grounds for a trial. Then the penal judge can authorize the abortion under Article 266, or deny it if there is insufficient proof of rape or danger to life or health. Penalties for both the woman and the person who performs an abortion without legal approval range from one to three years of imprisonment. If the woman has not given her consent or dies as a result of an abortion, the maximum penalty for the provider is significantly higher.

Official government policy and discourse on the issue of abortion has changed significantly since 1989, when for the first time, reproductive health was officially recognized as distinct from maternal health through the establishment of a national reproductive health program. That same year, Bolivia witnessed the first public debate on abortion in the form of a seminar sponsored by the Ministry of Health (MOH). Reproductive health services, including family planning (FP), were made available as part of national public health services for the first time in 1992. In 1994, treatment of complications resulting from abortion was prioritized as a public health problem and presented in Bolivia’s Declaration of Principles on Population and Sustainable Development, developed in preparation for the International Conference on Population and Development (ICPD).\textsuperscript{12} (Figure 1 on the following page presents a summary of the key events in the evolution of postabortion care [PAC] in Bolivia.)
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>The film Yawar Mallcu (Blood of the Condor) premiered, accusing Peace Corps volunteers of sterilizing women in rural areas without their consent. No proof was ever found. However, the Peace Corps was forced to leave Bolivia, and family planning was largely banned.</td>
</tr>
<tr>
<td>1968–87</td>
<td>Access to family planning was severely limited for the majority of Bolivians due to the pronatalist policies of the Bolivian government. Family planning was not available in the public sector.</td>
</tr>
<tr>
<td>1987</td>
<td>The United Nations Population Fund (UNFPA), the Pan American Health Organization (PAHO), the World Health Organization (WHO), and the U.S. Agency for International Development (USAID) began providing technical and financial support in the area of reproductive health, primarily through nongovernmental organizations (NGOs).</td>
</tr>
<tr>
<td>1989</td>
<td>A national workshop, The Fight Against Abortion, was held. It was organized by the MOH with collaboration from the Episcopal Church and was financed by USAID.</td>
</tr>
<tr>
<td>1990</td>
<td>The national strategy for reproductive health was developed, along with a national reproductive health project, which was financed by USAID.</td>
</tr>
<tr>
<td>1991</td>
<td>Ipas began work in Bolivia, primarily in advocacy and information roles on reproductive health issues, including increasing awareness of the problem of abortion.</td>
</tr>
<tr>
<td>1993</td>
<td>Ipas conducted the first study on the information needs of women with incomplete abortions and the attitudes of the health personnel who attend them.</td>
</tr>
<tr>
<td>1994</td>
<td>A written objective to reduce the complications of abortion was incorporated into the MOH national plan vida. Abortion was recognized as a public health problem and presented as a priority for the Bolivian government at the ICPD.</td>
</tr>
<tr>
<td>1995</td>
<td>At the Beijing conference, the Bolivian government formally recognized the reproductive and sexual rights of women according to the Beijing framework.</td>
</tr>
<tr>
<td></td>
<td>The MOH PAC information manual, Women, Abortion… A Daily Event was published and distributed countrywide to health care providers and administrators.</td>
</tr>
<tr>
<td>1996</td>
<td>The MOH initiated an integrated PAC program to contribute to the reduction of maternal morbidity and mortality in Bolivia.</td>
</tr>
<tr>
<td>1997</td>
<td>A study was conducted and published by Rance on the impact of language used by health personnel in postabortion care in Bolivia.</td>
</tr>
<tr>
<td>1998</td>
<td>Cordova, de la Quintana, and Friedman conducted a study in public hospitals in La Paz, Cochabamba, Sucre, and Santa Cruz on the attitudes and opinions of health care providers and administrators on manual vacuum aspiration (MVA).</td>
</tr>
<tr>
<td></td>
<td>A study was conducted by Friedman, de la Quintana, Jove, and King on postabortion services in the Bolivian public health system.</td>
</tr>
<tr>
<td>1999</td>
<td>The Interinstitutional Coordinating Committee on Postabortion Care (CICAPA) was formed in March.</td>
</tr>
<tr>
<td></td>
<td>Ipas conducted three PAC advocacy and counseling workshops for NGO members of Programa de Coordinación en Salud Integral (PROCOSI).</td>
</tr>
<tr>
<td></td>
<td>PAC (including MVA) was included in the national Seguro Básico de Salud (SBS) through Ministry Resolution No. 133 in March.</td>
</tr>
<tr>
<td>2001</td>
<td>The distribution and sale of MVA equipment was officially authorized by the government through a local distributor under specified conditions in March.</td>
</tr>
<tr>
<td></td>
<td>Written norms and protocols for PAC were developed by CICAPA in collaboration with the MOH.</td>
</tr>
</tbody>
</table>

**STRUCTURE OF HEALTH SERVICES**

An estimated 20–30 percent of the population have difficulty in accessing any kind of public or private health care services (with the exception of traditional healers) because of various barriers to access, including the following:
- **cultural:** poor treatment by doctors and nurses, particularly toward the indigenous population;

- **economic:** private services are too expensive for a large percentage of families, and free public services are often nonexistent or of poor quality, particularly in rural areas;

- **geographic:** lack of roads and transportation; and

- **linguistic:** most health providers do not speak Aymara, Quechua, or Guaraní, the indigenous languages.

The public health system is a decentralized, participatory system comprised of a network of services organized into three care levels—health center/health post, district hospitals, and general/specialty hospitals—that are administered locally and jointly by the community and the department and municipal governments. The system is funded through the national treasury and the municipalities. The public sector provides health care for approximately 40 percent of the population. The public sector infrastructure is as follows:

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Posts</td>
<td>1,210</td>
</tr>
<tr>
<td>Health Centers</td>
<td>896</td>
</tr>
<tr>
<td>District Hospitals</td>
<td>63</td>
</tr>
<tr>
<td>General Hospitals</td>
<td>81</td>
</tr>
<tr>
<td>Specialty Hospitals</td>
<td>29</td>
</tr>
</tbody>
</table>

Workers in the formal sector (such as companies and organizations) are covered by Cajas de Salud, an insurance plan that covers approximately 20 percent of the population (4 percent rural and 16 percent urban). Cajas mainly provides hospital care to the urban population. Waiting times for health services are usually long and the quality of the services is often less than adequate. International and local NGOs play an important role in the Bolivian health care system. An estimated 10 percent of the population uses health services provided by NGOs; a 1994 government registry found that there were 141 NGOs working in the health sector.

Traditional medicine (herbalists, traditional healers, midwives) is widely used by Bolivians, particularly by the indigenous populations and often in conjunction with modern medicine.

For the period from 1989 to 1995, 63 percent of the overall amount committed to the health sector came from external cooperative funding. In 1996, hospitals, which consume the highest percentage of national health resources, had an overall occupancy rate of 41 percent. This figure however, may be significantly higher since the July 1996 inauguration of the basic health insurance program, the Seguro Básico de Salud (SBS).

In March 1999, Resolution Ministerial No. 133 was passed to include, free of charge, attention for hemorrhages in the first trimester of pregnancy in the SBS (which provides basic health insurance for women of reproductive age and children under the age of 5).
The stated rationale for incorporating PAC and MVA into the SBS was to improve the quality of services and reduce the costs and length of stay for women with hemorrhages in the first trimester of pregnancy. The basic insurance health care coverage plan also covers medications and supplies needed by women during pregnancy, labor, delivery, and the postpartum period. The SBS reimburses health facilities 270 bolivianos (B) ($40) for dilation and curettage (D&C) and 60 Bs ($8) for MVA. Figure 2 shows a large SBS sign posted near the emergency room, proclaiming, “Salud, derecho de todos” (Health, a right for everyone), and listing both the treatment for bleeding during the first half of pregnancy and MVA as services.

Baseline data collected in 12 sites in the Bolivian public system indicated that PAC services for treatment of incomplete abortion, known as first trimester hemorrhage in Bolivia, are not consistently available, are expensive, and are underutilized by the population. Providers working in primary-level health facilities, including health posts and health centers, are not generally trained or equipped to provide safe treatment for incomplete abortion; therefore, women are generally referred to district or regional hospitals. As a result, secondary- and tertiary-level facilities are the primary providers of emergency care.

**SOURCES OF INFORMATION FOR CASE STUDY**

Sources of information for this case study include interviews with staff from the MOH, USAID, Pathfinder International, Ipas, JHPIEGO, the Department for International Development (DFID), and the eight facilities visited that provide PAC services (see appendix A for a list of persons contacted).
II. KEY STAKEHOLDERS

NATIONAL INSTITUTIONS

Interagency Coordination/Stakeholder Participation

In 1999, CICAPA was formed as a result of recommendations from the series of advocacy workshops carried out by Ipas in collaboration with Pathfinder/JHPIEGO in 1997. At the request of the MOH, the 29 CICAPA representatives from each region of the country named a small working group to develop the MOH norms, protocols, and technical procedure guidelines, under the auspices of Ipas. The MOH, the Departmental Secretaries of Health (SEDES), NGOs, teaching hospitals, faculties of medicine, and the Bolivian obstetricians/gynecologists society all participate in PAC activities.

Ministry of Health and Social Provision (MOH)

The MOH has taken a central role in the evolution of PAC in Bolivia. PAC is included in the national reproductive health strategy, a ministerial resolution introduced MVA into the public health system in 1999, and MVA is incorporated into the SBS. An interinstitutional technical committee, led by the MOH and including Pathfinder and Ipas, was formed in August 2000. These agencies are implementing PAC as a coordinated effort, and have developed a standardized curriculum, a format for hospital registers to collect data on PAC, and a national manual of norms, *Manual de Normas y Procedimientos Técnicos para el Manejo de las Hemorragias de la Primera Mitad del Embarazo* (which was published in August 2001). This committee meets every 2–3 months to report on activities and work on specific issues, such as reviewing information, education and communication (IEC) materials.

PROCOSI

PROCOSI is a health network of 24 national and international NGOs working throughout Bolivia “to improve the health of the neediest population, particularly children and women.” In 1994, USAID funded PROCOSI to implement and scale up a new community-based methodology (Warmi) for reducing obstetric and neonatal deaths. Since then, the methodology has been expanded nationwide. PROCOSI has not been formally involved in PAC activities; however, with its extensive community base, it offers PAC planners and managers the opportunity to bring PAC to the community.

USAID, KEY AGENCIES, AND OTHER DONORS

USAID Role

USAID first funded PAC activities in Bolivia under the Population Council’s Operations Research in Family Planning and Maternal–Child Health for Latin America and the Caribbean (INOPAL) project in 1995. Its support of PAC increased in 1997, primarily through funding to Pathfinder and Ipas. In 2000, it designated Pathfinder as the sole NGO recipient of USAID funds to conduct PAC in Bolivia.
Activities of Key Agencies

Pathfinder International

Pathfinder began providing PAC in Bolivia in 1998 and is currently working in La Paz, Santa Cruz, Oruro, Cochabamba, and Beni, after having divided the regions with Ipas to avoid duplication of effort. It conducts training, facility upgrading, and follow-up activities.

Ipas

Ipas has provided PAC in Bolivia since 1991, when it held the first workshop on MVA and postabortion FP with funding from private foundations. Since then, it has done significant work in advocacy and sensitization around PAC, training of providers, and conducting research, including projects funded by INOPAL and FRONTIERS (described below). A study tour to Peru’s PAC program was important in raising awareness among key decision-makers. Ipas is currently continuing PAC work with DFID funding in La Paz, Tarija, Potosi, and Pando. It has trained 533 providers in 32 public sector health facilities, including 4 third-level hospitals, 7 second-level hospitals, and 21 primary-level health centers.

Population Council

The Population Council has been involved in PAC in Bolivia through the operations research projects INOPAL and FRONTIERS. Two projects were funded under INOPAL: a program of integrated postabortion treatment and FP services at three hospitals in Bolivia (October 1995 to December 1998 in La Paz, Santa Cruz, and Sucre); and a feasibility study for the introduction of MVA (1997–98). The FRONTIERS project conducted by Ipas (1999–2001), “Testing a Model for the Delivery of Emergency Obstetric Care and FP Services in the Bolivian Public Health System,” was conducted in the same three hospitals as the INOPAL study. Although this work laid a foundation for later success, not all of it was sustainable.

JHPIEGO

JHPIEGO conducted sensitization workshops in 1994 and MVA training in Tarija in 1995 with four gynecologists. It has also developed various preservice training curricula, but none has been adopted nationally, and USAID funding for this work has ended.

Comite Interinstitucional de Coordinación en Atención Postaborto (CICAPA)

CICAPA was formed in 1999 with 29 members under a project funded by PRIME. A smaller group was given the task of developing national standards and norms, which were printed in August 2001 after about two years of development.
PAC Investment

The principal funding for PAC has been to Pathfinder and Ipas. Ipas, in turn, has had subcontracts for research and other activities with the Population Council and with PRIME.

Table 1
Bolivia PAC Funding, 1997–2001
(in US $)

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathfinder</td>
<td>2,051</td>
<td>15,028</td>
<td>38,538</td>
<td>143,990</td>
<td>199,607</td>
<td></td>
</tr>
<tr>
<td>Ipas</td>
<td>11,740</td>
<td>39,503</td>
<td>45,853</td>
<td>60,137</td>
<td>36,476</td>
<td>193,709</td>
</tr>
</tbody>
</table>

Other Donors

Other donors include the following:

- **DFID**, which is currently providing support to Ipas’s work;

- **Private foundations**, including the Flora Foundation, which provides funds to Pathfinder for three small projects in community mobilization; and

- **PAHO**, which funded sensitization workshops and training by JHPIEGO.
III. ACCESS TO SERVICES

SOCIAL AND CULTURAL ACCESS

Until recently there have been a number of social and cultural barriers to accessing public and private reproductive health services in Bolivia. These barriers include the strong role of the Catholic Church, which prohibits modern FP methods and induced abortion; a pronatalist society coupled with the belief that Bolivia is underpopulated; lack of decision-making power for women; poor attitudes and treatment of providers toward women seeking postabortion care; and traditional indigenous beliefs and health practices.

Cultural and social barriers to access have decreased since the mid–1990s, when a decision was made to call postabortion care “treatment of hemorrhage in early pregnancy.” The name change appears to have significantly decreased the stigma attached to postabortion care for both women and providers and has contributed toward a more positive attitude on the part of providers.

GEOGRAPHIC ACCESS

Many Bolivians have limited access to health services due to mountainous and jungle terrain and lack of adequate roads for vehicles. As indicated in table 4 on the following page, 39 percent of women in rural areas have an unmet need for family planning. The contraceptive prevalence rate (CPR) for modern methods is 11 percent, exceeded significantly by a traditional use of 19 percent.

AGE

Hospital statistics show that the majority of women seeking postabortion care are in their twenties and early thirties. The Japanese Hospital, the regional referral center in Santa Cruz, reports that 20 percent of all pregnant women seeking care are adolescents. This should not be surprising since, as table 3 indicates, the unmet need for FP is 34 percent among adolescents.

SEVERITY OF COMPLICATIONS

At all the PAC sites visited by the evaluation team, physicians reported that they have noticed a significant decrease in the number and severity of complications from abortion (uterine perforation, cervical lacerations, and severe hemorrhage) in recent years that they believe is due to the availability and widespread use of Cytotec (misoprostol) in the community to induce bleeding.

OTHER BARRIERS TO ACCESS

The lack of public and private reproductive health care services (FP was largely unavailable in Bolivia until the 1990s, especially in the public sector) in general has been a barrier to access. Although the private sector has grown significantly in the past 10 years and public sector services have improved, lack of a health care infrastructure and services remain a problem in Bolivia. The following tables illustrate the problem.
### Table 2
Percentage of All Women Using Family Planning

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Method</td>
<td>31.4</td>
</tr>
<tr>
<td>Modern Methods</td>
<td>16.5</td>
</tr>
<tr>
<td>Pill</td>
<td>2.5</td>
</tr>
<tr>
<td>Intrauterine device (IUD)</td>
<td>7.0</td>
</tr>
<tr>
<td>Injection</td>
<td>0.8</td>
</tr>
<tr>
<td>Local</td>
<td>0.1</td>
</tr>
<tr>
<td>Condoms</td>
<td>2.0</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>4.1</td>
</tr>
<tr>
<td>Traditional</td>
<td>15.0</td>
</tr>
</tbody>
</table>

*Source: Bolivia DHS, 1998*

### Table 3
Percentage of Women with an Unmet Need for Family Planning, by Age and Intent

<table>
<thead>
<tr>
<th>Age</th>
<th>Intent: To Space</th>
<th>Intent: To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–19</td>
<td>21</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>20–24</td>
<td>17</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>25–29</td>
<td>8</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>30–34</td>
<td>7</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>35–39</td>
<td>3</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>40–44</td>
<td>1</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>45–49</td>
<td>&lt;1</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>19</td>
<td>26</td>
</tr>
</tbody>
</table>

*Source: Bolivia DHS, 1998*

### Table 4
Percentage of Women with an Unmet Need for Family Planning, by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Intent: To Space</th>
<th>Intent: To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>7</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Rural</td>
<td>7</td>
<td>32</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>19</td>
<td>26</td>
</tr>
</tbody>
</table>

*Source: Bolivia DHS, 1998*

Financial barriers to accessing postabortion care have decreased since the incorporation of PAC services into the SBS in 1999. All PAC sites visited reported a large increase in the number of postabortion cases treated since the 1999 MOH decree.
IV. INFORMATION, COUNSELING, AND LINKAGES

APPROACH TO PAC

Pathfinder and Ipas use a conceptual framework that emphasizes an integrated approach to PAC, which includes information, counseling, equipment, supplies, medications, appropriate technologies, client-provider relationships, and technical skills.

Four Phases for Quality Care

1. Negotiation and coordination with local-, district- and central-level decision-makers to understand their needs, interests, and priorities, as well as their availability to implement a PAC program jointly with Ipas and Pathfinder.

2. Needs assessment, which includes the infrastructure, services offered, human resources, technical skills, and resources (includes interviews with clients).

3. Planning and implementing the PAC program (intervention), using a combination of theory and practice. The course is usually 5 days. Also included is provision of necessary equipment, medications, supplies, and related needs.

4. Supervision of staff trained in the PAC program. The usual schedule is 1 month after the training, then every 2–3 months, depending on the needs of the institution. The information from the supervisory visits is shared with the directors of the service, district health staff, and the MOH.

Local, volunteer PAC coordinators are being recruited for all training sites. The coordinators follow written guidelines that outline their roles and responsibilities, as well as a supervision checklist.

The PAC program in Bolivia has focused on the need to improve information provision and counseling for postabortion patients. Interestingly, both Pathfinder and Ipas have hired psychologists to assist in the training for counseling, in recognition of the psychological needs of postabortion patients. Although there have been significant improvements, many challenges remain.

An operations research study conducted by Ipas under the FRONTIERS project found increases in the proportion of women receiving information on a variety of issues, including their health status and where to seek care in case of problems. However, in the case of the latter, while one site increased from 33 to 68 percent, another showed only a modest increase from 2 percent preintervention to 11 percent postintervention.

FAMILY PLANNING

Much of the focus of information provision has been on FP counseling and services. Most sites have shown an increase in the proportion of women receiving FP counseling. However, a much smaller proportion actually leave the facility with a contraceptive
method, although research findings show that a high proportion of women report that they would have liked to have received a method. The site that seems to have the best results in providing methods to women is one in which methods are regularly available on the ward where counseling is performed. Generally, FP services are more common for women treated with MVA than D&C. Some providers reported that it was because the women were sleeping during D&C. Discussion with providers at a number of sites also highlighted the importance of training several people to provide counseling. As has been shown in earlier PAC work at some hospitals, if only one person is responsible for counseling, it is unlikely that it will happen regularly.

There is a lack of IEC materials regarding PAC, although Ipas is currently printing materials developed under FRONTIERS. The purposes of these materials were twofold: as a product that providers could use as a guide and support during counseling, and as materials that women could take home. Some sites have put up various posters with specific information regarding information provision before, during, and after the procedure, while other sites have also put up more general signs about patient rights and the need for quality, compassion, and humane treatment.

Findings from the FRONTIERS study indicated that information and counseling are still weak because of a lack of personnel, recognition that patients have a right to such services, commitment to providing such services, and incorporation into the general medical culture during both formation and practice.

OTHER REPRODUCTIVE HEALTH SERVICES

There are no data on PAC providers enabling linkages with other reproductive health services in Bolivia. This does not mean that such linkages do not exist. Providers report that they sometimes refer women for other reproductive health services, but this information is neither routinely recorded nor included on the standardized register form. In part, this is probably because this element is still quite nebulous and in need of being more clearly defined. The protocols for PAC mention only ‘referral to other services if needed,’ with no additional detail.
V. INTERACTIONS BETWEEN WOMEN AND PROVIDERS

Poor treatment of clients, particularly women, in the public sector is legendary in Bolivia (see articles by Susanna Rance). Ipas and Pathfinder have systematically and consistently emphasized the sensitive and respectful treatment of women by providers during the training and supervision of professionals in PAC, as well as in a series of PAC sensitization workshops. The results of these efforts are impressive. It appears from interviews and observations that the attitudes and treatment of clients have improved considerably due to the focus on provider/client interaction (two of the three PAC evaluation team members have been observing client/provider interactions in the Bolivian public sector since the late 1980s). Many of the providers interviewed mentioned that treatment of clients had improved due to the PAC program. When discussing the advantages of MVA, one provider reported that because the woman is awake, they have to talk with her: “Before it was like we were working with an object, now we have to talk with them.” The walls of the inpatient ward in the PAC site in the Oruro Hospital had posters (made by the students) listing what a provider should say and do during, before, and after the procedures. The hospital hallways in Tarija were lined with signs (made by the nurses) about treating clients with compassion and providing quality and caring treatment.

The improved treatment of women during PAC by providers in the public sector in Bolivia should be noted as a major achievement of the program. One of the reasons for the program’s success in changing provider attitudes and behavior, difficult to accomplish in most settings, could be due to the fact that both Ipas and Pathfinder use psychologists for PAC training. This innovative approach could be tested in other countries.

The provision of adequate privacy for women during counseling and the procedure appears to need more emphasis. At one site, two procedures were being conducted at the same time in the same room with not even a screen to provide at least visual privacy, although the clients did not seem to object to the lack of privacy.
VI. TECHNICAL PERFORMANCE

TREATMENT OF COMPLICATIONS

The competence of the providers during the four observed procedures appeared to be adequate, and the interactions between the trainer and providers demonstrated good training and supervisory skills. However, during two of the procedures observed, it appeared that the provider would have benefited from more practice on a model during training. There is a problem at some PAC training sites with ensuring an adequate number of clinical cases for PAC trainees. The availability of the inexpensive and homemade Pathfinder/Peru uterine models at every PAC site would allow trainees to practice procedures repeatedly, in order to improve their skills before performing procedures on clients. Increased use of models for training would also allow providers to sustain and transfer their skills, if necessary.

Based on the site observations, infection prevention practices are considered a priority during PAC training, and appropriate guidelines appear to be in place and are followed in Bolivia. Turnover in nursing staff (a common problem) in one hospital led to the mistaken use of high heat sterilization and resultant melting of the cannulae. This ruined equipment could be used during training to demonstrate to staff what could happen when the PAC instruments are not sterilized according to protocols.

Shaving women prior to MVA is not only unnecessary and painful, but can lead to increased infections. While shaving women was absolutely prohibited at the Oruro Hospital PAC site (there was a large sign on the wall in large red letters), women at Percy Boland Hospital in Santa Cruz are still being shaved before the procedure.

The management of pain during PAC varies among institutions. MVA is typically being performed with paracervical block (most often xylocaine); very rarely do providers give patients anything else (e.g., analgesics or anxiolytics). Pathfinder has an interesting training technique of arranging instruments into metal and plastic as a way to wait for the paracervical block to take effect. For D&C, general anesthesia remains the norm, although at one hospital, a paracervical block is used because of the lack of availability of an anesthesiologist. From the limited observations of four MVA procedures, it was clear that women would benefit from more pain relief, and pain management merits further attention in the PAC program.

FAMILY PLANNING

The quality of FP counseling is a concern. One of the problems is that nurses do not receive any FP counseling training in preservice training and have no prior experience or training in FP counseling. There is clearly a need for more extensive training in this aspect of PAC. There also seemed to be some confusion over information provision versus actual counseling. Additionally, it is important to ensure informed consent in postabortion FP. No problems with this were noted during site visits.
The PAC program in Bolivia has commendably emphasized that PAC does not mean MVA. However, in a number of settings there has been reluctance on the part of physicians, especially the older and more experienced practitioners, to use MVA when appropriate. Several comments were made during interviews that physicians prefer to do a D&C, particularly in settings where women are given general anesthesia because they do not have to deal with the patient if she is asleep. Another factor is probably due to older physicians’ resistance to learning and adopting new technologies if there is little incentive to do so. The physicians who were supportive of MVA emphasized that it is faster, the women spend much less time in the hospital, and there are fewer complications. The fact that MVA is an ambulatory procedure means that hospital stays for treatment of hemorrhages during the first trimester of pregnancy have been reduced from 24 hours to 6–8 hours, according to some hospital service statistics.
TREATMENT OF COMPLICATIONS

As part of the process of introducing and improving PAC services, both Pathfinder and Ipas provide basic equipment. This includes items such as a gynecological table, lamp, stool, cabinet, stethoscope, sphygmomanometer, and IUD insertion kits. Both organizations also provide funds to renovate rooms for treatment. Renovating the physical facilities at the hospitals is important for improving the morale and motivation of staff as well as for facilitating the reorganization of services and improving privacy.

The primary equipment challenge is the long-term provision of MVA kits. For now, Pathfinder and Ipas provide an adequate supply of MVA kits. However, the future mode of supply is unclear. Doctors at several hospitals were asked where they would get MVA kits in the future; many answers are summed up in the words of one doctor, “That’s a good question. I haven’t thought about that.” Because of the decentralization of the health system, the municipality should provide funds from the SBS to purchase equipment in the future, but it remains unclear whether this will work in practice.

On March 8, 2001, Ipas obtained the authorization of the Sanitary Registration for the distribution and sale of MVA kits through a local distributor, CORMESA. This distributor requests the kits directly from Ipas headquarters in North Carolina. The process began with discussions more than three years ago, with the official procedure taking about 9 months. The cost for a private provider to obtain an MVA kit (double-valve syringe, cannulae, and other small parts) is US $70. Replacement parts will also be available, thus avoiding the purchase of an entirely new kit if a small piece is lost or damaged.

FAMILY PLANNING

There were family planning methods (pills, condoms, Depo-Provera, and IUDs) on the ward, although women often were referred elsewhere for services.

OTHER REPRODUCTIVE HEALTH SERVICES

Other reproductive health services are very weak in Bolivia. The largest maternity referral hospital in the capital city of La Paz, ostensibly the national maternal reproductive health referral center, does not even have the most basic laboratory services for diagnosis and treatment of sexually transmitted diseases (STDs) and reproductive tract infections (RTIs) (microscope, culture mediums) and therefore relies on syndromic management for these conditions.
IX. SUMMARY OF ELEMENTS OF PAC

Postabortion care has been defined as combining three elements:

- emergency treatment services for postabortion complications,
- provision of FP information and services, and
- linkages to other reproductive health services.

Recently, many organizations and individuals working on PAC programs have argued for the inclusion of a fourth element: involvement of the community. The work on PAC in Bolivia has focused on the idea that PAC is not simply a technology, the addition of new services such as FP, or the creation of new linkages. Rather, it emphasizes humane treatment and requires a fundamental change in the way providers interact with patients seeking treatment for incomplete abortion and other postabortion complications.

In Bolivian hospitals, PAC is provided in obstetric/gynecology wards. Introduction of PAC at each site has typically included needs assessment, provision of equipment, and upgrading or renovation of PAC rooms, training, and supervision.

The extent of attention to each of the three elements can be assessed by examining service statistics from hospital registers, training materials, and supervision forms.

SERVICE STATISTICS

Service statistics gathered by Ipas and Pathfinder in eight hospitals show that MVA is meeting with mixed success (see tables 5 and 6 on the following page). Similarly, although a significant proportion of women seem to be receiving FP counseling, a much lower proportion leave with a family planning method. There are no data regarding the third element—linking to other services.

Provision of FP could potentially be enhanced by including the name of the counseling provider. The doctor who performs the MVA notes her/his name, but this is not the case for FP counseling. Adding a column on the register form for this information could enhance accountability, give staff credit for this important activity, and help to further emphasize its importance.

PAC TRAINING MATERIALS

The training curriculum developed by the MOH, Ipas, Pathfinder, and JHPIEGO entitled, *Modelo Integral de Calidad Para el Tratamiento a Mujeres con Hemorragias de la Primera Mitad del Embarazo*, contains 10 modules, as outlined in the following section. Only one of these 10 modules covers postabortion FP, with an estimated 90 minutes to implement (it was learned that, in practice, there is scheduling flexibility within the curriculum). Given that FP is not a part of preservice training, this is probably not adequate time. Although the third element of PAC is mentioned in the general definition given early in the training, there are no details on creating linkages and referrals to other reproductive health services.
Table 5
Ipas Service Statistics from Hospital Registers

<table>
<thead>
<tr>
<th>Site and Period Covered</th>
<th>MVA</th>
<th></th>
<th>D&amp;C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Cases</td>
<td>FP Counseling</td>
<td>FP Method*</td>
<td>No. of Cases</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sucre (Apr–Dec)</td>
<td>184</td>
<td>n= 565</td>
<td>0%</td>
<td>398</td>
</tr>
<tr>
<td>Tarija (Oct–Dec)</td>
<td>55</td>
<td>87%</td>
<td>22%</td>
<td>75</td>
</tr>
<tr>
<td>El Alto (Nov–Dec)</td>
<td>18</td>
<td>0%</td>
<td>0%</td>
<td>19</td>
</tr>
<tr>
<td>Potosi (Oct–Dec)</td>
<td>54</td>
<td>100%</td>
<td>17%</td>
<td>33</td>
</tr>
<tr>
<td>La Paz (Feb–Dec)</td>
<td>464</td>
<td>100%</td>
<td>3%</td>
<td>293</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>775</strong></td>
<td><strong>73%</strong></td>
<td><strong>6%</strong></td>
<td><strong>818</strong></td>
</tr>
<tr>
<td>2001 (Jan–June)</td>
<td>n=783</td>
<td>n=135</td>
<td></td>
<td>n=231</td>
</tr>
<tr>
<td>Sucre</td>
<td>116</td>
<td>50%</td>
<td>0%</td>
<td>241</td>
</tr>
<tr>
<td>Tarija</td>
<td>268</td>
<td>87%</td>
<td>34%</td>
<td>109</td>
</tr>
<tr>
<td>El Alto</td>
<td>75</td>
<td>9%</td>
<td>4%</td>
<td>39</td>
</tr>
<tr>
<td>Potosi</td>
<td>114</td>
<td>98%</td>
<td>11%</td>
<td>48</td>
</tr>
<tr>
<td>La Paz</td>
<td>435</td>
<td>86%</td>
<td>6%</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,008</strong></td>
<td><strong>78%</strong></td>
<td><strong>17%</strong></td>
<td><strong>495</strong></td>
</tr>
</tbody>
</table>

*Proportion of women counseled who left the hospital with a family planning method

Source: Ipas

Table 6
Pathfinder Service Statistics from Hospital Registers
May–August, 2001

<table>
<thead>
<tr>
<th>Site</th>
<th>MVA</th>
<th>D&amp;C</th>
<th>Total Cases</th>
<th>Percent MVA</th>
<th>FP Counseling</th>
<th>FP Method*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cases</td>
<td>Percent</td>
</tr>
<tr>
<td>Montero</td>
<td>44</td>
<td>109</td>
<td>153</td>
<td>29%</td>
<td>41</td>
<td>27%</td>
</tr>
<tr>
<td>Oruro (to July)</td>
<td>59</td>
<td>34</td>
<td>93</td>
<td>63%</td>
<td>50</td>
<td>54%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>392</td>
<td>722</td>
<td>1,114</td>
<td>35%</td>
<td>1,075</td>
<td>96%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>495</strong></td>
<td><strong>865</strong></td>
<td><strong>1,360</strong></td>
<td><strong>36%</strong></td>
<td><strong>1,166</strong></td>
<td><strong>86%</strong></td>
</tr>
</tbody>
</table>

*Number and percentage of those counseled

Source: Pathfinder International

Key Themes of PAC Training (Theoretical Portion of Training)

- Introduction/Background: 1 hour
- Communication Skills/Treatment of Women: 3 hours
- Infection Prevention: 1 hour
- Procedure/Technical Approach: 1 hour
- Evaluation of Woman: 2 hours
- Pain Management: 2 hours
- Procedures for Management of Hemorrhage: 2 hours
- Management of Complications: 2 hours
- Family Planning: 1½ hours
- Organization and Administration of Services: 1½ hours
SUPERVISION FORMS

The supervision forms used by both Pathfinder and Ipas are standardized, and are designed to be easy to use and promote quality PAC services.

COMMUNITY INVOLVEMENT

There is very little attention paid to the community aspect of PAC. In discussing this issue, one doctor in Oruro said, “We are working as firemen putting out the fire because the problem is outside.” Some believed that it was essential to improve the supply side of services before creating more demand.
X. SCALING UP AND SUSTAINABILITY

The MOH is moving forward with scaling up PAC services, with assistance provided by Ipas and Pathfinder. The overall plan is to begin with the tertiary-level hospitals, then move to the secondary level, and finally bring PAC services to the primary care level. However, Ipas is already working with 21 primary-level health centers with DFID funding. The current goal of the MOH is to extend PAC to 89 hospitals by 2003. It is recommended that efforts proceed at a pace that does not compromise quality of care.

As mentioned previously, the MOH has shown its support for PAC through a number of national-level policies that greatly enhance sustainability. However, there is still a need for PAC training to be institutionalized into preservice medical and nursing curricula. Currently, training is conducted at each facility, or in the case of health centers, staff from multiple centers are trained together. Although this is effective in the short term, long-term sustainability requires that PAC be part of preservice training. In the meantime, it is important to support onsite transfer of skills to ensure continuity of services even when there are staffing changes. The 1995–98 INOPAL study found that hospitals in which the staff remained stable after training showed more improvement in services than those where personnel left soon after training.

Sustainability of services at the facility level requires support from the management at each site in the form of continuing advocacy. Additional education on the inclusion of PAC in national policy documents, standards and norms, and basic health insurance would facilitate sustainability.

Supervision is an essential part of creating continuity of quality services. Both Ipas and Pathfinder have acknowledged this and have increased their efforts in supervision by adding more visits. Ipas also identifies program coordinators at each facility who ensure the daily provision of services, maintain the MVA equipment, supervise the MVA technique, and ensure the adequacy of contraceptive supplies. These coordinators are volunteers but are given incentives in the form of educational materials and attendance at occasional workshops or meetings. Pathfinder also has recently hired local supervisors in each department where it works to increase the level of supervision at each facility. It will be important to incorporate PAC into existing national supervision systems for long-term sustainability.

At this point, PAC is not sustainable without outside resources. Although MVA is included in the SBS, the issue of financing problems remains, due to general economic problems. In many cases, the reimbursement provided through SBS is not sufficient to cover the actual costs incurred by the hospital. For example, reimbursement for MVA is 60Bs ($8.96 at an exchange rate of $1 = 6.7Bs); for D&C with hospitalization, reimbursement is 270Bs.

Although the 1995–98 INOPAL study showed high rates of FP counseling and contraceptive acceptance at three public hospitals, baseline data from the FRONTIERS study in the same three hospitals showed a significant reduction in the proportion of women receiving any FP information. This calls attention to the difficulties in sustaining PAC services. Many of the services observed had only recently begun, but it is hoped
that with the changes in national policy in the last few years and with increased efforts in supervision, current services will be more successful in their continuity.
XI. CONCLUSIONS AND LESSONS LEARNED

Extensive advocacy and sensitization to gain support for PAC is essential. This has been done effectively in Bolivia, and it has helped to create support at both the national and facility levels, which is of primary importance for the long-term success of PAC. Advocacy messages have focused on PAC as an important intervention in addressing the public health problem of maternal mortality and morbidity as a cost-saving program and as a human rights issue. This remains a continuing need, both at new facilities and at some of the hospitals that have been less effectively implementing PAC programs.

Success is due to a coordinated effort, with the MOH in the lead and multiple agencies bringing diverse skills to improve PAC. Both USAID and DFID are actively involved in funding PAC in Bolivia. The program could benefit from additional coordination between these two donors as well as other donors currently funding or interested in funding PAC in Bolivia.

National-level policy changes are the key to sustainability. In a relatively short period, Bolivia’s PAC program has had tremendous success in developing agreed-upon national standards and norms, in incorporating MVA into the basic health insurance plan, and in having a government decree supporting MVA. However, there is still an urgent need to incorporate PAC (including family planning) into preservice training for medical professionals.

Bolivia, with its pro–NGO policy environment and strong health network of NGOs (PROCOSI), offers the opportunity to model the role of the community in PAC.

Family planning counseling and method provision needs to be strengthened. Training needs to give more time and attention to FP. The recording of service statistics should emphasize the importance of FP by having a column to note the name of the person providing the counseling. Methods should be made available on the ward, if possible. Supervision forms should also include more detail regarding FP. FP should be an integral part of preservice training for medical and nursing students.

The neglected third element, linkages to other reproductive health services, needs to be addressed. It is necessary to more clearly define this element and those services that should be emphasized, such as linkages to services for infertility, domestic/sexual violence, sexually transmitted infections (STIs), and Pap smears. These linkages need to receive more attention in training and supervision and should be included in register books of service statistics. If services are not available for referral onsite, then potential linkages to the private/NGO sectors should be explored and the information given to women. IEC materials could be developed to meet this need.

Privacy and pain management are important aspects of quality of care that still need improvement.

Supervision is key to the provision of successful, high-quality services. Both Ipas and Pathfinder have increased their efforts in supervision, but there is a need to explore ways
for long-term sustainability of supervision of PAC services by incorporating it into existing supervisory structures/systems.

Rather than putting the MVA technology at the center, the Bolivia PAC program has focused on humane treatment, a patient rights perspective, and changing attitudes. The innovative use of psychologists for PAC training by both Ipas and Pathfinder should be tried in other countries when feasible.

Improved PAC takes patience and commitment. The changing of attitudes and behavior is a long process. Investment in PAC must recognize and acknowledge this fact when planning and budgeting for PAC programs.
APPENDICES

A. PERSONS CONTACTED

B. REFERENCES
APPENDIX A

PERSONS CONTACTED
PERSONS CONTACTED

LA PAZ

U.S. Agency for International Development/Bolivia
Dr. Susan Brems, Health, Population and Nutrition Director
Dr. Rocio Lara, Health, Population and Nutrition Activities Manager

Pathfinder International
Dr. Gladys Pozo, Country Representative
Lic. Ana Argondoña, Program Officer
Dr. Carmen Cornejo, Medical Services Director
Lic. Ximena Calle, Psychologist, PAC and Adolescent Program
Lic. Carmen Castro, Psychologist, PAC and Adolescent Program

Ministry of Social and Public Health (MSPS)
Dr. Jaime Telleria, Director of Patient Services
Dr. Oscar Landivar, Director of Reproductive and Sexual Health Program
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Lic. Alfredo Barrientos, Administration–Finance Director
Lic. Guadalupe Garray, Chief of Nursing Services
SEDES, Prefectura, La Paz Department, Departmental Health Services Division
Dr. Rene F. Sahonero, Technical Director
Dr. Jaime Perez Lara, SRS Program Director

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Lic. Wilbur Bautista, Municipality Health Representative
Dr. Ermongenes Cejas, Chief of Obstetrics/Gynecology Services
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APPENDIX B

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APPENDIX E

POSTABORTION CARE IN KENYA

CASE STUDY
Global Evaluation of USAID’s Postabortion Care Program was made possible through support provided by the United States Agency for International Development (USAID) under the terms of Contract Number HRN–C–00–00–00007–00, POPTECH Assignment Number 2001–024. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.
ACRONYMS AND ABBREVIATIONS

AMKENI Current USAID/Kenya bilateral health project
CA Cooperating agency
CHAK Christian Health Association of Kenya
CPR Contraceptive prevalence rate
CS Child survival
D&C Dilation and curettage
DANIDA Danish International Development Agency
DIC Disseminated intravascular coagulation
ESAF Enhanced Structural Adjustment Facility (IMF)
FP Family planning
FPIA Family Planning International Assistance
GOK Government of Kenya
HIV/AIDS Human immunodeficiency virus/acquired immune deficiency syndrome
IEC Information, education and communication
IMF International Monetary Fund
IMR Infant mortality rate
IR Intermediate Results
IUD Intrauterine device
JHU/CCP Johns Hopkins University/Center for Communication Programs
JSI John Snow, Inc.
K Sh Kenyan shillings (currency)
KDHS Kenyan Demographic and Health Survey
KMET Kenyan NGO
KNH Kenyatta National Hospital
MCH Maternal and child health
MMR Maternal mortality ratio
MOH Ministry of Health
MVA Manual vacuum aspiration
NCK Nursing Council of Kenya
NCPD National Council for Population and Development (Kenya)
NGO Nongovernmental organization
NNAK National Nurses Association of Kenya
PAC Postabortion care
PAFP Postabortion family planning
PRB Population Reference Bureau
REDSO/ESA Regional Office for East and Southern Africa (USAID)
RH Reproductive health
Sida Swedish International Development Authority
SO Strategic Objective
SPA Service provision assessment survey
STD Sexually transmitted disease
STI Sexually transmitted infection
TFR Total fertility rate
UNHCR United Nations High Commission on Refugees
USAID United States Agency for International Development
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I. KENYAN ENVIRONMENT

DEMOGRAPHIC AND HEALTH DATA

Country Context

Kenya, covering an area of 582,000 square kilometers, is a country of diverse geography, climates, ethnic groups, cultures, and languages. It borders Ethiopia in the north, Sudan in the northwest, Uganda in the west, Tanzania in the south, and Somalia in the east. There is coastal plain on the Indian Ocean, mountain ridges and plateaus in the center of the country, and arid plains and desert to the north. Only about 20 percent of the land is arable; the Government of Kenya (GOK) has set aside a large proportion of the arid and semiarid land for wildlife conservation. About 75 percent of the work force is engaged in agriculture, principally subsistence farming. Per capita income is US $270.

There are significant regional differences among the country’s seven provinces, which affect both the need for postabortion care (PAC) and the ability to successfully implement PAC programs.

Table 1
Kenyan Provincial Differences on Key Indicators

<table>
<thead>
<tr>
<th>Province</th>
<th>TFR*</th>
<th>CPR* (Modern Methods)</th>
<th>Unmet Need for FP* (%)</th>
<th>IMR*</th>
<th>Under 5 Mortality</th>
<th>HIV* Prevalence</th>
<th>Percentage of Facilities in which all MCH/FP/STI* Services are Offered</th>
<th>Percentage of Facilities with Community Outreach Programs</th>
</tr>
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<tbody>
<tr>
<td>Nyanza</td>
<td>5.0</td>
<td>25</td>
<td>26</td>
<td>135</td>
<td>199</td>
<td>22</td>
<td>70</td>
<td>26</td>
</tr>
<tr>
<td>Western</td>
<td>5.6</td>
<td>22</td>
<td>32</td>
<td>64</td>
<td>122</td>
<td>12</td>
<td>77</td>
<td>52</td>
</tr>
<tr>
<td>Coast</td>
<td>5.1</td>
<td>20</td>
<td>30</td>
<td>70</td>
<td>96</td>
<td>10</td>
<td>89</td>
<td>26</td>
</tr>
<tr>
<td>Eastern</td>
<td>4.7</td>
<td>36</td>
<td>22</td>
<td>53</td>
<td>78</td>
<td>16</td>
<td>74</td>
<td>27</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>5.3</td>
<td>26</td>
<td>27</td>
<td>50</td>
<td>68</td>
<td>11</td>
<td>72</td>
<td>30</td>
</tr>
<tr>
<td>Nairobi</td>
<td>2.6</td>
<td>47</td>
<td>13</td>
<td>41</td>
<td>66</td>
<td>16</td>
<td>69</td>
<td>15</td>
</tr>
<tr>
<td>Central</td>
<td>3.7</td>
<td>55</td>
<td>11</td>
<td>27</td>
<td>34</td>
<td>13</td>
<td>82</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>4.7</td>
<td>31</td>
<td>24</td>
<td>71</td>
<td>105</td>
<td>13.5</td>
<td>75</td>
<td>27</td>
</tr>
</tbody>
</table>

*TFR: total fertility rate; CPR: contraceptive prevalence rate; FP: family planning; IMR: infant mortality rate; HIV: human immunodeficiency virus; MCH: maternal and child health; STI: sexually transmitted infection

Population and Mortality

Kenya’s population has soared over the last 50 years, from 5.4 million in 1948 to an estimated 29.8 million today. With an annual crude birth rate of 34 births per 1,000 population and a crude death rate of 14 deaths per 1,000, the population increases naturally by about 607,000 persons each year. Most of the population lives in rural areas. Only 18 percent live in urban areas; the population is concentrated mostly in 46 towns with a population of 10,000 or more (1989). Population density is highest near Lake Victoria, in the central highland area, and on the Indian Ocean coast. The arid northern provinces are sparsely settled.
Infant and child mortality are increasing in Kenya, after significant success in lowering rates in the 1980s. The 1998 Kenyan Demographic and Health Survey (KDHS) indicates that both infant and under-5 mortality declined steadily through the late 1980s, after which the rates plateau and then begin to rise so that mortality rates were higher in 1998 than they were in the early 1980s. In 1998, about 75,000 infants died, leading to an infant mortality rate (IMR) of 74 infant deaths per 1,000 live births (Population Reference Bureau). This is an increase from a stable rate of 60–64 infant deaths per 1,000 live births between 1974 and 1993. Increases are believed to be due to human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), in combination with malaria and other diseases.

The dominating factor in the Kenyan health environment is HIV/AIDS. It is estimated that 2.2 million Kenyans are now living with HIV infection, including 200,000 with AIDS. In 2000, about 300,000 Kenyans were infected with HIV, while 200,000 developed AIDS and 180,000 people died due to AIDS. Nationwide, based upon data from a sentinel surveillance system operating in 12 urban and 8 periurban or rural areas, Kenya estimates HIV prevalence to be 13.5 percent, ranging from a low of 4 percent to a high of 35 percent in both Kisumu and Mombasa.

According to the 1989 census, life expectancy for males was 57.5 years and for females, it was 61.4 years. The Central Bureau of Statistics estimates that without AIDS, life expectancy at birth would be about 65 years; however, due to AIDS deaths, it is actually only about 48 years.

Maternal Mortality

Like most developing countries, Kenya lacks a source for routine national maternal mortality data. Despite including postabortion care in the national health strategy, the Ministry of Health (MOH) lacks a surveillance capability of abortion deaths or morbidity to monitor patterns or trends in the health problem it seeks to ameliorate. In the following discussion, national and hospital sources are used to estimate maternal and/or abortion mortality, leading to the conclusion that while maternal and abortion mortality remain high, they may have recently declined in Kenya’s urban areas.

The 1998 DHS used the sisterhood method to estimate a maternal mortality ratio (MMR) of 590 maternal deaths per 100,000 live births for 1989–98. Maternal deaths represented 27 percent of all deaths to women aged 15–49.

Additional maternal mortality data comes from Kenyatta National Hospital (KNH) for 1995–99 (see figure 1). Compared with 27,455 live births during this period, 253 women died from complications of pregnancy. The MMR is 921 per 100,000 live births. During 1996–99, the number of deaths and MMR declined steadily from 66 deaths in 1995 and 80 in 1996 to 50 in 1997, 36 in 1998, and 21 in 1999. Accordingly, the MMR declined from 1,309 deaths per 100,000 live births in 1995 to 300 deaths per 100,000 live births in 1999.
Of the 203 maternal deaths from 1995 to 1999 for which KNH records were located, 75 occurred postpartum, 72 postabortal, 34 antepartum, 17 intrapartum, and 5 resulted from ectopic pregnancies. Twenty-seven percent of the women who died had been referred from another hospital. Most (63 percent) had not attended antenatal care. Of the 144 direct obstetric deaths, 72 (50 percent) were due to complications of abortion. Of the 72 deaths from abortion, 52 (72 percent) resulted from sepsis, 7 (10 percent) resulted from hemorrhage, and 13 did not have the cause specified in the thesis. Abortion was the most common cause of death from sepsis and the second-most common cause of death from hemorrhage. Septic abortion is the most common cause of death for single women and the sole cause of maternal death for the three widows in this period. The mean duration of hospital stay for those who died of postabortal sepsis was 11.4 days. Some required major surgery. “In one of the abortion-related deaths the patient was noted to have disseminated intravascular coagulation (DIC) and even after subtotal hysterectomy, her death could not be prevented.”

Several possible explanations for the decline in maternal mortality include the following:

- During the past five years, the number of private nursing and maternity homes has increased—possibly reducing the need for referral of severe obstetric emergencies.

- The training of physicians, clinical officers, and nurse-midwives to provide postabortion care at KNH and private homes may have reduced abortion morbidity and mortality and opened up more health care resources to care for other obstetric problems.

- The recent departure of physicians and nurses to other countries may have led to reduced access to health care services and increased maternal mortality occurring in poorer communities.

- Safer provision of abortion services has also been postulated, but there is no evidence that this has contributed to the decline in maternal mortality.

From the perspective of evaluating the impact of postabortion care on maternal mortality, it would seem useful to determine the pace of abortion mortality decline at KNH and other hospitals and through community assessments to determine if women are dying from abortion in communities without receiving medical care.
The Kiambu district hospital reported an MMR of 183 deaths per 100,000 live births (40 deaths/21,891 live births) from 1997 to 2000. Staff reported no abortion deaths at the hospital and stated that women may die from abortion complications in the community without being treated at the hospital. However, a PRIME supervisory visit to a private clinic in March reports that a woman with septic abortion referred to the hospital died 2 days later.

The Koibatek district hospital reported no abortion deaths in the past two years. The district reported 4,300 antenatal visits in 2000, 739 deliveries at the district hospital, and 556 deliveries at Mercy Hospital. Staff reported three maternal deaths (all arrived late after hemorrhage) in the last two years, an MMR of about 200 per 100,000 live births.


**Figure 2**

Hospital Admissions for Abortion Complications, Rift Valley Provincial General Hospital, 1995–2001

<table>
<thead>
<tr>
<th>Year</th>
<th>Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>928</td>
</tr>
<tr>
<td>1996</td>
<td>826</td>
</tr>
<tr>
<td>1997</td>
<td>1352</td>
</tr>
<tr>
<td>1998</td>
<td>738</td>
</tr>
<tr>
<td>1999</td>
<td>469</td>
</tr>
<tr>
<td>2000</td>
<td>583</td>
</tr>
<tr>
<td>2001</td>
<td>457</td>
</tr>
</tbody>
</table>

**POLICY ENVIRONMENT**

There are at least five policy areas that have an impact upon the care women receive after an abortion or miscarriage: health sector reform, HIV/AIDS as a national disaster, abortion, family planning, and PAC itself.

**Health Sector Reform**

Kenya has embarked upon a program of health sector reform, as identified in the 1994 health policy framework paper and the national health sector strategic plan (1999–2004). It has done so within a national context of great challenge:

- About 18 percent of Kenya is arable, providing the main livelihood for 80 percent of the population.
- The population is 18 percent urban and 82 percent rural.
A skewed income distribution results in the bottom 20 percent of the population, expending only 3 percent of total expenditures, while the top 20 percent expends 60 percent.

Government of Kenya (GOK) per capita expenditures on health have been declining; a large proportion of those expenditures are for curative health in the major hospitals. In 1997–98, Kenyatta National Hospital accounted for 1.5 billion Kenyan shillings (K Sh) (21 percent) and the seven provincial hospitals K Sh 1.3 billion (19 percent) of the K Sh 7 billion GOK expenditures on health care. District hospitals accounted for K Sh 3.2 billion (46 percent) and rural health facilities for K Sh 1 billion (14 percent). Fifty-six percent of total expenditures in rural areas are used for salaries and benefits.

One donor described the outcome of GOK financing of health care: “Such an expenditure pattern that favours the hospitals and higher level facilities, at the expense of lower level facilities that have lower per capita costs, leads to inefficiency and nonfunctioning of the referral system. As services are not available at the right level of facilities, people delay seeking treatment or get admitted to hospitals for conditions that could have been prevented much earlier.”

The goal of the health sector policy through 2010 is to “promote and improve the health status of all Kenyans through the deliberate restructuring of the health sector to make all services more effective, accessible and affordable.” The policy presents the following strategic imperatives:

- regulatory role of the government in all aspects of health care provision;
- decentralization, transfer of responsibility, and authority of planning, implementation, monitoring, and supervision to the provinces and districts;
- strengthening the role of the district health management board and team;
- increased cost-effectiveness and efficiency of resource allocation and use;
- increased and diversified per capita financial flows to the health sector;
- equitable allocation of government resources to reduce disparities in health status;
- an enabling environment for increased private sector involvement;
- prevention and control of HIV/AIDS and sexually transmitted diseases (STDs);
- continued management of population growth; and
- community participation in health service provision and finance.
Health facilities now collect fees for services. Seventy-five percent of the income collected remains at the hospital for its use; 25 percent is forwarded to the higher level. Funds collected at the facility level could be used to purchase equipment and supplies for PAC.

**HIV/AIDS as a National Disaster**

In 1999, President Daniel arap Moi declared HIV/AIDS a “national disaster:”

AIDS is not just a serious threat to our social and economic development, it is a real threat to our very existence. AIDS has reduced many families to the status of beggars… no family in Kenya remains untouched by the suffering and death caused by AIDS… the real solution of the spread of AIDS lies with each and every one of us.

In 1996, the GOK had begun to develop a national HIV/AIDS policy; that work led to *Sessional Paper No. 4 of 1997 on AIDS in Kenya*, the goal of which was “to provide a policy framework within which AIDS prevention and control efforts will be undertaken for the next 15 years and beyond.” Specific targets were established: to reduce HIV prevalence by 20–30 percent by the year 2005, to increase access to care and support for the people infected and affected by HIV/AIDS, and to strengthen institutional capacity and coordination at all levels.

The National AIDS Control Council has responsibility for coordinating a multisectoral response to the epidemic. The GOK, donors, and the public, private, and NGO sectors are to work together to implement the strategic plan.

**Abortion**

Abortion is illegal in Kenya except to save a woman’s life. Both those who would assist a woman to induce an abortion and the woman herself are guilty of felonies and are liable to be imprisoned.

**Family Planning**

Kenya has a national population policy for sustainable development that seeks to improve the quality of life and well-being of all Kenyans. The goals are to

- improve standards of living and quality of life,
- improve health and welfare through information and education,
- reduce further fertility and mortality rates,
- encourage Kenyans to adhere to small family size,
- promote family stability while recognizing the rights of women and children, and
- eliminate social and cultural practices that have a negative impact upon women.
POSTABORTION CARE (PAC)

The MOH Reproductive Health Guidelines and Standards for Service Providers (1997) state, “the prompt treatment of postabortion complications is an important part of health care that should be available at every district-level hospital.” While in writing, the MOH identifies the district hospital as the minimum level of service, in practice, the MOH has been supporting efforts to move PAC service delivery closer to the community and women in need.

After documenting that clinical officers and nurse-midwives can competently and economically provide safe, quality PAC services, the MOH has supported their inclusion in the national program.

MOH support for expanding the cadres of PAC service providers has been a wise policy decision, based upon the knowledge that doctors, who are primarily in urban hospitals, could not adequately provide PAC services to a population that is 80 percent rural and at some distance from hospitals.

Supportive PAC policies are reinforced by PAC standards and protocols. Although originally many cooperating agencies (CAs) trained service providers using their own standards and protocols, these CAs are now working together through the Kenya PAC Working Group to develop a standard curriculum.

STRUCTURE OF HEALTH SERVICES

There are approximately 3,500 health care facilities in Kenya that are operated by the public, private, and nongovernmental sectors. The government is the largest health care provider, with the majority of hospitals, health centers, and dispensaries. Nongovernmental and religious groups operate about one third of the hospitals and one fourth of the dispensaries. There are also many privately owned maternity facilities and clinics.

The Sida project document on support to the health sector in Kenya (2000–2003) presents the following statistics (citing Schwartz 1996). In 1996, the total number of health personnel within the government, nongovernmental organization (NGO), and private sector was nearly 80,000, of which 45 percent were administrative and subordinate staff, 31 percent were nurses, 4 percent were doctors, 3 percent were clinical officers, 8 percent were clinical support staff, and 7 percent were public and promotional staff. At that time, there were estimated to be 15,000 community-based distributors and 8,000 community health workers, traditional birth attendants, herbalists, and traditional healers. Table 2 presents information on the location of clinical providers who could provide postabortion care, according to data from the 1999 Kenya Service Provision Assessment Survey.

Kenyans indicate that in the last five years, there has been a massive emigration of trained clinical providers, particularly doctors from Kenya. Doctors have always been located principally in hospitals in urban areas; however, the recent emigration leaves even some hospitals in urban areas short staffed for physicians, as the above table confirms. Note that 19 percent of hospitals even lack a doctor; the scarcity of doctors in the Rift Valley, Eastern, and Central provinces should also be noted.
### Table 2
1999 Kenya SPA Facility Inventory and Staffing Patterns

<table>
<thead>
<tr>
<th>Facility Characteristic</th>
<th>Percentage of Facilities With at Least One:</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Doctor</td>
<td>Clinical Officer</td>
<td>Registered Nurse</td>
<td>Enrolled Nurse</td>
<td>Medical Staff Available at Night</td>
</tr>
<tr>
<td>Facility Type</td>
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</tr>
<tr>
<td>Hospital</td>
<td>81</td>
<td>61</td>
<td>88</td>
<td>97</td>
<td>91</td>
</tr>
<tr>
<td>Maternity/Nursing Home</td>
<td>71</td>
<td>43</td>
<td>52</td>
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<td>Province</td>
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<td>Nairobi</td>
<td>27</td>
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<td>62</td>
<td>94</td>
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<tr>
<td>All Facilities</td>
<td>17</td>
<td>28</td>
<td>32</td>
<td>93</td>
<td>52</td>
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</tbody>
</table>

The public sector health facilities, staffed primarily with enrolled nurses, are the principal source of health care for those who seek health care. The public sector is the source of supply of 58 percent of users of modern methods of contraception.
II. KEY STAKEHOLDERS

NATIONAL INSTITUTIONS

Ministry of Health

The MOH operates on three levels:

- MOH headquarters sets policies, coordinates health activities, and manages, monitors, and evaluates policy implementation. At the headquarters level, the director of reproductive health has been a strong supporter of PAC and of expanding access through nurse-midwives.

- The provincial tier acts as an intermediary between MOH headquarters and the district and oversees operations of health activities at the district level.

- The district level focuses on the delivery of health services and budget plans and requirements, based upon guidelines from the MOH. At this level, personnel are clearly able to see the benefits of PAC to their facilities: shorter hospital stays (thereby reduced costs) and a more pleasant work environment due to more timely treatment.

Kenyatta National Hospital (KNH)

KNH led the way for PAC in Kenya and in countries throughout the region through its research, publications, and advocacy on abortion and maternal mortality, beginning in the early 1980s.

Nursing Council of Kenya (NCK)

NKC gave its support to the National Nurses Association of Kenya (NNAK), which, with MOH support, enabled NKC, NNAK, the MOH, and PRIME to work together so that private nurse-midwives might include PAC services in their practice.

National Nurses Association of Kenya (NNAK)

NNAK, working with its partners NKC, MOH, PRIME, and the POLICY Project, undertook a series of activities that led to MOH endorsement of nurse-midwives as PAC providers and to the sustainability of the initiative.

- A baseline needs assessment was performed that confirmed that private nurse-midwives had facilities that would enable them to provide quality PAC services at the community level.

- Advocacy activities were designed to raise awareness and build policy support for PAC.
Efforts were made to strengthen the capacity of public health nurses to support and supervise private nurse-midwives.

Training of nurse-midwives was conducted.

Support supervision to trained nurse-midwives was created through systematic follow-up visits.

A seminar to disseminate results was held.

KMET

KMET is an NGO that originated in Kisumu, Nyanaza Province. It has been a proponent of PAC from the beginning, has trained significant numbers of providers in the public and private sectors, and has an innovative community-based PAC initiative that is considered a model of enabling community participation in PAC.

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

USAID Leadership

USAID has supported activities in the population sector in Kenya for more than 25 years through a series of USAID/Kenya, USAID/Washington, and USAID Regional Office for East and Southern Africa (REDSO/ESA) projects. USAID has been the lead bilateral donor in population and family planning. From 1983 to 1998, due to USAID, other donors, and the GOK’s efforts, the contraceptive prevalence rate (CPR) has more than tripled (from 10 to 32 percent) and the total fertility rate (TFR) declined from 8.1 to 4.7 children.

In the current USAID/Kenya Integrated Strategic Plan, 2001–2005, Strategic Objective (SO) 3 is to “reduce fertility and the risk of HIV/AIDS transmission through sustainable, integrated family planning and health services.” Three Intermediate Results (IRs) contribute to that SO:

- improved enabling environment for the provision of health services,
- increased use of proven, effective interventions to decrease risk of transmission and mitigate the impact of HIV/AIDS, and
- increased customer use of family planning, reproductive health, and child survival (FP/RH/CS) services.

USAID specifically identifies postabortion care under IR 3: “Facilities will be encouraged to provide a complete range of family planning/reproductive health services, including permanent and long-term FP methods and postabortion care, as well as HIV/AIDS/STI prevention and selected child survival services.” An indicator in the strategic plan is the number of facilities offering PAC services; from a baseline of 44 facilities in 1999, the target for 2005 is 144. USAID’s approach to expanding access to
PAC in Kenya is through the development of services at the primary provider level: nurses, nurse-midwives, clinical officers, and NGO facilities in selected districts.

With reduced USAID/Kenya funding, challenges loom in addressing continuing issues and the HIV/AIDS epidemic. USAID funding levels between 1996 and 2001 were reduced from a 1993–95 annual average of $20 million to a level one third less, despite an increasing need for investments in HIV/AIDS, family planning, and PAC.

USAID has played a leadership role in PAC through the Mission and through REDSO/ESA. In 1995, REDSO/ESA established a PAC Working Group for East and Southern Africa to “enhance communication, coordination and sharing of lessons learned in postabortion care programming in the region.” REDSO/ESA provided assistance to countries in the region through its postabortion care initiative to

- advocate for better programming in postabortion care;
- conduct situation analyses and design appropriate activities;
- share lessons learned;
- strengthen the PAC network of USAID Missions, other donors, NGOs, cooperating and implementing agencies, and host country collaborators;
- facilitate links between program initiators and technical assistance providers; and
- forge partnerships and mobilize resources for PAC.

About 20 institutions participated in the postabortion care initiative and, with them, REDSO/ESA developed advocacy materials, supported country assessment (in Malawi, Uganda, and Zambia, as well as Kenya), enabled study tours, and led conferences.

CA Activities

USAID has funded many CAs over the years to implement projects that enable successful PAC activities, such as family planning logistics supply, as well as to implement specific PAC activities and programs. Other donors have also funded CA postabortion care activities. The following matrix (table 3) presents a sample of key PAC activities as well as activities that can be considered inputs into a successful PAC program (such as family planning logistics supply and family planning information, education and communication [IEC] materials development).
### Table 3
A Sample of Recent CA Projects That Have Contributed to the Kenyan PAC Program

<table>
<thead>
<tr>
<th>CA/Project</th>
<th>Source of Funding</th>
<th>Program Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIME</td>
<td>USAID/Kenya</td>
<td>PAC training of private sector nurse-midwives and nurses in 6 districts of 3 provinces (Rift Valley, Central, and Nairobi)</td>
</tr>
<tr>
<td>EngenderHealth</td>
<td>USAID/Washington, Sida</td>
<td>PAC training of public sector nurses and clinical officers in 4 of the 6 districts above, to enhance supportive supervision as well as services</td>
</tr>
<tr>
<td>POLICY</td>
<td>USAID/Washington</td>
<td>Works with PRIME on community advocacy for PAC</td>
</tr>
<tr>
<td>FRONTIERS (Population Council)</td>
<td>USAID/Washington</td>
<td>Operations research on hospital models on organization of FP services for PAC clients</td>
</tr>
<tr>
<td>FRONTIERS (Population Council)</td>
<td></td>
<td>Testing feasibility, impact, and cost of interventions addressing the RH needs of adolescents in selected locations in Western province</td>
</tr>
<tr>
<td>AMKENI Project (EngenderHealth)</td>
<td>USAID/Kenya</td>
<td>Seeks to achieve a sustainable increase in the demand for, utilization, and quality of integrated FP/RH/CS services in 6 districts of 2 provinces (Coast and Western). Three strategies are service delivery, behavior change communication, and training and supervision in the public and private sectors.</td>
</tr>
<tr>
<td>Family Planning International Assistance (FPIA)</td>
<td>Private funds</td>
<td>Collaborates with Maria Stopes and KMET</td>
</tr>
</tbody>
</table>
| JHPIEGO                           | REDSO                     | Development of on-the-job-training materials  
Training of district training centers in PAC counseling skills, contraception technology, infection prevention, and FP  
Assisted Department of Obstetrics/Gynecology, University of Nairobi, to introduce and incorporate PAC into preservice training for medical students |
| Pathfinder                        | USAID and private funds   | Runs high-risk adolescent clinic in Nairobi: expansion of adolescent RH services to Mombasa, Eldoret and Machakos                               |
| Ipas                              | USAID, Sida, private funds| Training in PAC, including a pilot study to assess the feasibility of having clinical officers provide manual vacuum aspiration (MVA) services (in 3 districts)  
Development of regional standards and guidelines  
Introduced PAC services in Kakuma and Dadaab refugee camps  
Responsible for importation and supply of MVA equipment into Kenya |
| DELIVER project John Snow, Inc. (JSI) | USAID/Washington     | Building on the 10–year Family Planning Logistics Project in Kenya, DELIVER’s mandate was expanded beyond FP commodities to include drugs, vaccines, STI/HIV test kits and drugs, and other medical equipment |
| Social Marketing                  | USAID/Washington          | Social marketing to promote adoption of safer sexual practices among youth aged 15–24, and to increase use of oral and injectable contraceptives |
| Center for Study of Adolescence   | Private                   | Study on community-level dynamics of unsafe abortion in western Kenya and opportunities for prevention (in collaboration with Pacific Institute for Women’s Health)  
Findings from the preintervention research have been published and are being disseminated using drama in communities. Community-level interventions based upon these findings are being developed. |
Additionally, USAID has supported the PAC Working Group that was formed to improve coordination and collaboration among CAs. In the early years of PAC, there had been many activities with little coordination. This has changed in recent years with the formation and recent strengthening of the PAC Working Group. This group has recently identified five key objectives as its terms of reference:

- to advise the MOH reproductive health advisory board on PAC,
- to bring together stakeholders,
- to reduce duplication of effort,
- to harmonize IEC and training materials, and
- to develop a national PAC strategy.

**PAC Investment**

The PAC program presented in this case study has received funding from many sources, both public and private, over many years. USAID has funded PAC work through USAID/Kenya field support and currently through a bilateral, USAID/Washington has provided core funds, and REDSO/ESA has provided funding.

Many activities critical to the success of PAC have been funded by CAs with private funds, or funded by non–USAID recipients. For example, in the 1980s, Pathfinder helped pave the way for later success through its work with Kenyatta National Hospital, with private funds. The Pacific Institute for Women’s Health supported (with Rockefeller funds) the Kisumu KMET community-based study on abortion.

**OTHER DONORS**

USAID/Kenya describes the problem of donor funding in Kenya as follows:

Donor support to the health sector has gradually declined over the past seven years due to dissatisfaction with Kenya’s progress on governance and economic reforms. The International Monetary Fund’s (IMF) Enhanced Structural Adjustment Facility (ESAF) is currently suspended and Danish International Development Agency (DANIDA) funding has been in abeyance for the past year. As part of its efforts to refocus its development assistance in priority countries, the Netherlands Government recently reduced assistance to Kenya, maintaining limited support only for tuberculosis and leprosy programs. Other donors remain on a limited funding status. For example, the United Kingdom is currently reviewing its “low case” scenario. Resumption of aid to higher levels will depend upon reinstatement of the ESAF. The channels for donor financing in health have also changed. Due to the difficulties of tracking donor funds through the public sector, particularly at the national level, in many cases, donor support has shifted towards NGOs or toward district level activities. Although this shift is consistent with the GOK’s privatization and decentralization policies in the health sector, donor financing for national support programs, such as reproductive health training, have been negatively affected.

Despite the problems of donor funding, there is support for PAC in the donor community. Sida has supported the development of PAC services in four district MOH hospitals through funding the work of EngenderHealth and Ipas.
III. ACCESS TO SERVICES

SOCIAL AND CULTURAL ACCESS

Many social and cultural factors affect access to PAC services, from both client and provider perspectives. One factor, consistently noted in Kenya and throughout the world, has been a woman’s fear or expectation that providers will treat her poorly when they learn that she is suffering from complications of an abortion. Research on such factors quotes one adolescent: \[16\]

If complications occur, the only place for treatment is the public hospital because private hospitals are very expensive and most cannot afford. Everyone knows that girls in public hospitals are treated very badly by nurses once they discover they tried to abort.

Recognizing that service providers may have such biases, CAs have included attitudinal change modules in their PAC training. One resource used in Kenya has been the Johns Hopkins University/Center for Communication Programs (JHU/CCP) video, “Put Yourself in Her Shoes,” that develops empathy for PAC clients among service providers.

While collecting data for this case study, service providers related that before they had received PAC training, they did not understand women suffering from complications as well as they do now—they believe that they are able to be more compassionate as a result of the training. This change in provider attitudes has been documented in operating room (OR) studies in Kenya and other countries.

Recognizing that community participation is essential to the success of a PAC program, providers (particularly nurse-midwives) note that they are reaching out to the community on a regular basis with IEC on PAC services. Facilitating such outreach is essential; as indicated previously in table 1, only 27 percent of facilities surveyed by the Kenyan Service Provision Assessment (SPA) survey had community outreach programs. KMET has facilitated such outreach through work with community health workers who were already active in their communities in a variety of other maternal and child health issues.

GEOGRAPHIC ACCESS

Many CAs and institutions have trained and equipped PAC providers and facilities. Information on this training is an indicator of the location of PAC services. The matrix in appendix B presents these data, as developed by the PAC Working Group in September 2001. However, information on recent PAC training is only one indicator of geographic access. There are other provider-related factors: CA–trained staff may have been transferred, other providers may have developed MVA skills on their own, and/or hospital management may or may not continue to provide support so that staff, equipment, and supplies are available for PAC. Moreover, there are client-related factors that influence geographic access, notably access to transportation.

A survey of PAC records in MOH facilities (conducted for this case study) indicated that many women came a long distance for PAC services—often 20–30 kilometers, but as much as 60–70 kilometers to some hospitals, and up to 90 kilometers to the Masai-served hospital of Kajiado. Private nurse-midwives, on the other hand, appeared to serve women...
from their local community. PAC providers have even been trained and equipped in refugee camps, with limited success due to staff turnover (both service providers and managers who must support PAC).

The Kenyan PAC Working Group recognizes the need to better gauge national access to PAC services. They are beginning a mapping exercise to lay out both where facilities have been developed and where facilities are currently providing services, together with population data to provide indicators of geographic access to services.

The availability of maternal and child health (MCH) personnel at night (see table 2) is a good indicator of a facility’s ability to handle emergency treatment of complications on a 24–hour basis. Data from the 1999 Kenya SPA indicate that about half of all facilities surveyed had medical personnel available at night.

**AGE (ADOLESCENTS)**

PAC data indicate that PAC clients come at all points in a woman’s reproductive years, from early adolescence to the approach of menopause. In various studies, adolescents (ages 15–19) have made up 16 percent of the PAC caseload for private nurse-midwives and 17–18 percent for MOH provincial and district hospitals. Case study data collected from PAC registers indicated lower percentages.

In Kenya and around the world, there is a question about whether adolescents are being adequately served. In Kenya, there is ample evidence of the vulnerability of adolescents:

- Age for first sexual intercourse is 16 years.
- Ninety-eight percent of girls are sexually active by age 19.
- Thirty percent of sexually active, unmarried women aged 15–19 use contraception: 11 percent use condoms, 9 percent practice periodic abstinence, 6 percent use oral contraceptives, and 2 percent use injectable contraceptives.
- Despite the fact that 98 percent are sexually active by age 19 and only 11 percent of sexually active, unmarried adolescents use condoms, 80 percent of adolescents perceive their risk of getting AIDS to be small or none.
- By 17 years of age, 19 percent of Kenyan girls are mothers or are pregnant, and 45 percent are either mothers or are pregnant by age 19.

Moreover, national surveys report that 23 percent of Kenyan adolescents have been physically abused in childhood—and that this abuse “is the most important predictor of adolescent reproductive health problems in Kenya.” These problems include accidental premarital pregnancy, STIs, and drug use and abuse. Nearly one fourth (24 percent) of children under 13 have been sexually propositioned. Most of these advances occur at home or at school. Those sexually abused early in life are more likely to have multiple sexual partners, accidental premarital pregnancy, STIs, and HIV/AIDS. In two provincial studies, 20–23 percent of girls reported being coerced into first sexual intercourse.
Given the vulnerability of adolescents, where are they going for services and are they being adequately served? Pathfinder has a high-risk clinic for adolescents in Nairobi that receives many clients after treatment for abortion in Kenyatta National Hospital. Three NGOs have significant adolescent programs with broad RH programs as well as postabortion care: Marie Stopes with 19 clinics in Kenya, Family Planning Association of Kenya with 12 clinics, and KMET in Kisumu. The Population Council is testing the feasibility, impact, and cost of multifaceted interventions that address adolescent RH needs.

**FINANCIAL ACCESS**

There is a considerable range of prices for PAC services. Prices in the public sector have risen due to health sector reform; they include uterine evacuation, basic supplies (gloves, Jik [a brand of bleach]), and drugs. Prices appear to range from K Sh 700 ($9.33) to 1,500 ($20); prices are higher in the private sector. Providers in both the public and private sectors indicated that the ability to pay was never a barrier to service; however, no research has been undertaken to determine to what extent it may be a barrier, or to what extent fear of such expenditures delays seeking care. There is a good deal of anecdotal evidence that PAC patients faced a delay in receiving care because they had to first purchase a number of consumable supplies, such as gloves and Jik.

**SEVERITY OF COMPLICATIONS**

While most patients have incomplete abortions at less than 12 weeks gestation, some PAC providers see patients with incomplete abortions greater than 12 weeks gestation. If the fetus has already been expelled, some PAC providers treat the bleeding with MVA and oxytocin. Others stabilize the patient with intravenous fluids and send them to the hospital. In addition to seeing patients with incomplete abortion, clients have asked PAC providers to care for obstetric problems, including inevitable abortion, passing presumed molar pregnancies, and to terminate unwanted pregnancies. They deny termination services to the women—sometimes the woman comes back with severe infection and dies. Others continue the pregnancy to term.
IV. INFORMATION, COUNSELING, AND LINKAGES

POSTABORTION CARE

Counseling women to take care of themselves after treatment for postabortion complications is part of PAC training. Some PAC providers have client materials for clients to take home after treatment for reference on appropriate care; other providers have materials for the community. In general, these materials are offered in the NGO and private sectors.

FAMILY PLANNING

Over the last 25 years, USAID has invested globally in developing excellent materials for informing, educating, and counseling women and men about family planning. Major effort has gone into developing these materials in collaboration with host country institutions and into training service providers to counsel women and men on the number and spacing of children. USAID and its partner CAs have provided training on IEC, counseling, and the use of specific materials (flip charts, posters, client materials) that have been developed specifically for family planning in a national or regional context. In Kenya, USAID funded the Family Planning IEC Support Project for a number of years to promote excellent IEC and counseling. Yet, in Kenya, unmet need for family planning is 24 percent; in some provinces, as table 1 indicated, it is more than 30 percent.

PAC presents special challenges and opportunities for family planning counseling. To determine how to best provide family planning with emergency treatment of complications, in 1996 the MOH Division of Primary Health Care undertook an operations research study in collaboration with the Population Council and Ipas. Three models were tested:

- provision of postabortion family planning (PAFP) in the gynecology ward by ward staff,
- provision of PAFP in the gynecology ward by MCH/FP clinic staff, and
- provision of PAFP at the MCH/FP clinic by MCH/FP staff.

“Overall, Model I was considered to be the most effective at ensuring that all women treated for abortion complications receive the required information and services. It was the easiest to set up, the most effective and most acceptable to both clients and staff.”

In as much as the team did not encounter any PAC clients during visits to service delivery sites, there was no opportunity to observe family planning counseling of PAC patients. However, numerous sites at which that counseling was to take place were visited. In the public sector (provincial and district hospitals), there were two types: a small room near the MVA room and/or a family planning clinic at some distance from the MVA room. The MOH adjacent rooms generally lacked the elements considered basic for good counseling: two chairs for seating, counseling flip charts, wall charts, and client materials. Method choice often was limited. In general, the main hospital family planning clinic was better equipped for counseling, although the materials were old and in limited
supply. In contrast, the private clinics of nurse-midwives and NGOs were appropriately and pleasantly set up, equipped, and supplied for IEC, counseling, and method choice.

**LINKAGES WITH OTHER REPRODUCTIVE HEALTH SERVICES**

For linkages with other RH services to be effective, there are several requirements. Service providers need to

- have adequate time to ensure quality care and treatment of postabortion complications;
- be skilled at diagnosing problems, whether STIs or violence;
- be skilled at counseling on these problems; and
- know about services to which the PAC client can be referred or linked.

Linkages for PAC clients in the public sector were not apparent; linkages in the private sector with nurse-midwives are more likely. Nurse-midwives must have a customer focus to stay in business. They have the time and incentive to provide adequate care and additional services, minimizing the need for outside referrals. Nurse-midwives reported that they did diagnose and treat additional RH and other problems for women who came to their clinic for postabortion care. PRIME data indicate that 13 percent of 366 women in the pilot nurse-midwife study received other RH services.

Several facilities had innovative locations for free condom dispensers—one was in the hallway outside the clients’ rest rooms, one was in a telephone booth outside the clinic, and another was publicly available outside the facility. The free condoms seem very popular—some dispensers have to be refilled daily with 500–2,000 condoms.

**Figure 3**
**Telephone Booth Condom Dispenser**

![Telephone Booth Condom Dispenser](image-url)
V. INTERACTIONS BETWEEN WOMEN AND PROVIDERS/STAFF

As indicated previously, the PAC community has worked to enable compassionate provider attitudes that would lead to good interactions between women and providers. Provider roles within any one clinical site also affect these interactions. In Kenya, in the private nurse-midwife practice, the nurse-midwife assumes all roles: MVA, family planning counseling, and discussion of other problems. In provincial and district hospitals, despite the training of nurse-midwives for MVA, doctors performed the MVA, while nurse-midwives performed the counseling. In training hospitals visited, women received MVA during certain established MVA shifts, enabling training of doctors and clinical officers at established times. Unfortunately, women seeking care at these facilities had to wait for the MVA hours.

Hospital management practices, whether to facilitate clinical staff training or to safeguard hospital equipment (locking MVA up overnight), impede the ideal of PAC services being available 24 hours a day, 7 days a week. In most MOH facilities visited during development of this case study, most women spent at least one night in the hospital, even though they did not have serious complications. Women who sought care from a nurse-midwife were more likely to return home within a few hours.
VI. TECHNICAL PERFORMANCE

INSERVICE

The main focus of the PAC CA community has been on developing technical competence through inservice training of doctors, clinical officers, and nurse-midwives. CAs have supported this training in a variety of ways to enhance performance and the sustainability of quality performance (in addition to training). This includes orientation meetings for facility managers so that they would be supportive of new PAC service (and providers) despite rotation, turnover, supervision, and follow up of recently trained providers.

PAC CAs have worked hard to assure quality. Low caseload volume during training and posttraining is an issue. Some trainees do not receive sufficient clinical practice to become competent during training due to low caseload volume at their training site. Some nurse-midwives that may have achieved competence during training, however, return to practice with only a few PAC clients. Follow-up supervision is critical for such providers.

PRESERVICE

Preservice training for doctors and clinical officers includes PAC (perhaps with a focus on MVA); the training for nurse-midwives does not.
VII. APPROPRIATE TECHNOLOGIES FOR TREATMENT OF COMPLICATIONS

Gradually, hospitals across Kenya are able to choose the appropriate technology for treating complications. A dilation and curettage (D&C) had been standard procedure. The MOH director of reproductive health estimates that at this point, about 30 percent of all treatment of complications is by MVA. MVA would be the appropriate technology for a larger percentage of women; however, not all providers in hospitals have been trained. For some women (late gestation age or other complications), a D&C will remain the appropriate technology. Collecting data on these women has not been a routine part of PAC records nor is it clear that they have been a part of the PAC program of family planning counseling and linkages with other services. Kenyatta National Hospital estimates that 30 percent of women may receive a D&C.

JHPIEGO is seeking support (MOH and USAID) for an additional way to treat women with complications. JHPIEGO believes the continuing exodus of physicians makes it urgent to study whether midwife provision of misoprostol can reduce hospitalizations from complications of incomplete abortion and is seeking to evaluate the use of misoprostol in clinical studies. A proposal for MOH and USAID is under development.

Pain management is a critical part of appropriate treatment. Verbacaine with paracetamol is supposedly the norm, although providers state that they use their clinical judgment in deciding how to manage pain. In MOH facilities, the woman’s family, or whoever attended the woman when she arrived, is responsible for purchasing drugs for relieving pain before treatment. The cost of drugs may be a factor in how much pain relief a woman receives.
VIII. EQUIPMENT, SUPPLIES, AND MEDICATIONS

EMERGENCY TREATMENT

Equipment for a D&C is no problem; equipment for an MVA is a problem over the long term. For the short term, MVA equipment, which is approved for commercial import into Kenya and is available in the commercial market, has been donated or purchased with non–USAID funds. For the long term, the MOH must ensure a supply. Some hospitals indicate that they consider MVA equipment a priority and have purchased it with hospital funds. Not all hospitals will do so; the MOH contemplates a large bulk order. The MOH expresses a problem with such a purchase; however, it has experience with only one MVA supplier/manufacturer whose price is considered too high. Although there are reports in Africa of equipment manufactured by other companies, little is known of their products and there is insufficient information to enable competitive bidding for MVA equipment.

FAMILY PLANNING

Two data sources indicate that, generally, most family planning commodities are in fairly good supply in most facilities. There is considerable variation between facility type (hospital, maternity facility, health center, dispensary, and clinic), operating institution (public, mission, or other private), and between the seven provinces. The 1999 Kenya SPA indicated that the combined pill and injectable contraceptive were the best stocked; mission institutions were consistently the least stocked for all methods except Norplant.

### Table 4
**Availability of Specific Family Planning Methods in Kenyan Clinical Facilities**

<table>
<thead>
<tr>
<th></th>
<th>Average for Facilities</th>
<th>Facilities with Greatest Availability</th>
<th>Facilities with Least Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Pill</td>
<td>86%</td>
<td>Clinics (93%), public and private institutions (92%), Central and Nairobi (90%)</td>
<td>Dispensaries (81%), mission institutions (56%), Rift Valley (78%)</td>
</tr>
<tr>
<td>Progestin-only Pill</td>
<td>77%</td>
<td>Health centers (81%), private institutions (87%), Nairobi (93%)</td>
<td>Maternities (65%), Mission institutions (55%), Western and Coast provinces (62%)</td>
</tr>
<tr>
<td>Injectable Contraceptives</td>
<td>89%</td>
<td>Clinics (100%), private institutions (99%), Nairobi (97%)</td>
<td>Hospitals (82%), mission facilities (56%), Rift Valley (83%)</td>
</tr>
<tr>
<td>Condoms</td>
<td>88%</td>
<td>Maternities (94%), private institutions (97%), Coast (100%)</td>
<td>Hospitals (79%), mission institutions (53%), Rift Valley (78%)</td>
</tr>
<tr>
<td>Intrauterine Device (IUD)</td>
<td>51%</td>
<td>Hospitals (71%), private institutions (64%), Nairobi (77)</td>
<td>Dispensaries (28%), mission institutions (31%), Coast (33%)</td>
</tr>
<tr>
<td>Norplant</td>
<td>8%</td>
<td>Hospitals (43%), private institutions (17%), Coast (12%)</td>
<td>Dispensaries (1%), public (5%), Nyanza and Eastern (7%)</td>
</tr>
</tbody>
</table>

The DELIVER project, which has responsibility for assisting the MOH with logistics supply to the district level only, indicates that contraceptive supplies are generally in full supply, although there was a shortage of progestin-only pills. The project noted, however,
that “demand for condoms in family planning has been low and therefore their usage for STI/HIV prevention will need more marketing and alternative strategies for reaching clients.”

Data collected for this case study present a similar picture. Most MOH clinics (at provincial and district hospitals) visited had the combined pill and injectable contraceptives. Data showed low use of the IUD; indeed one doctor commented, “Today no one in Kenya knows how to insert IUDs.” Many PAC providers had not been trained in Norplant insertion and removal. Most MOH PAC providers expressed a reluctance to discuss dual protection with their PAC clients, even in Kisumu where HIV prevalence was 35 percent.

**LINKAGES WITH OTHER REPRODUCTIVE HEALTH SERVICES**

For PAC linkages with other RH services to be effective, those services have to have appropriate equipment, supplies, and drugs. The most critical linkage in Kenya, given the HIV/AIDS epidemic, would be to prevent, diagnose, and treat STIs. Drugs are currently a problem. The DELIVER project wrote in May 2001 that, “Despite the major World Bank project on HIV/AIDS prevention, no donor, including the GOK itself, has committed to the procurement of STI drugs at present, and supplies will run out by June 2001.”

Adequate supplies of condoms in some communities may be a problem. The MOH is responsible for the transfer of condoms from the district storehouse to the facility level. There are some reports of primary health units forgoing carrying bulky condoms in favor of less bulky, more revenue-generating supplies when they picked up supplies from district warehouses for their facilities. Reportedly, one truck carrying condoms to an area where there had been stock outs in Kisumu, where HIV prevalence is 35 percent, was mobbed by a group of villagers who pleaded for the condoms; elderly village leaders said, “We must have condoms; our people are dying.”
IX. SCALING UP AND SUSTAINABILITY

OPPORTUNITY COSTS

Scale up of PAC programming will take place in a national context of high opportunity costs, given the HIV prevalence, reduced donor funding, and health sector reform. USAID has indicated that it will be carefully weighing the impact of investing in PAC versus the impact of investing that sum in an even larger HIV/AIDS program.

A STRATEGIC PLAN FOR SCALE UP

Given the opportunity costs and the PAC Working Group’s commitment to effective and efficient scale up, a strategic plan would seem very wise. It would include

- a mapping of where there are currently operational PAC programs and an estimation of their current catchment areas,
- targets for coverage and expansion,
- plans for scale up in the MOH, including plans for reaching the primary level, weighing both effectiveness and efficiency of expansion to underserved, low population density areas,
- plans and indicators for strengthening the family planning counseling component, and
- a definition of what the third component (linkages with other RH services) might realistically comprise and plans and indicators for developing that component.

There are several significant, unanswered questions that should be answered and results incorporated in a scale up plan:

- Are women who receive D&C for treatment of complications receiving complete PAC services? If not, what must Kenya do to assure that they receive family planning counseling and services and linkages to other RH services to the greatest extent possible?
- Are adolescents being adequately served?
- How will the MOH assure a sustainable supply of MVA kits for its facilities?

Given the high opportunity costs in Kenya, sustaining the PAC program will be a challenge. Essential steps will be to ensure that PAC is three elements, not just MVA, and that treatment of complications includes all women, not just MVA patients. The equipment supply difficulties must be resolved.
X. SUMMARY OF PAC MODEL

EMERGENCY TREATMENT

Kenya is moving to the adoption of MVA as a less invasive, more appropriate treatment of complications for the majority of women in the public and private sectors. Perhaps 30 percent of treatment is now through MVA; expansion is planned for the rest of the country. Of those women, perhaps 20–30 percent of total PAC patients for whom MVA is not the most appropriate technology, little data are available about counseling for family planning or linkages with other services; they appear not to be included in the PAC program.

A sustainable supply of MVA equipment remains an unresolved issue.

FAMILY PLANNING COUNSELING AND SERVICES

Research has shown that the most successful way to provide family planning to PAC patients is on the ward through ward staff. Learning from this example, some hospitals have developed family planning mini-clinics near the MVA room; in general, however, these clinics are not set up to facilitate good client-provider interaction, lack good IEC and counseling materials, and have limited method choice.

LINKAGES WITH OTHER REPRODUCTIVE HEALTH SERVICES

With HIV prevalence of 13.5 percent, linkages with other RH services would seem essential. Nurse-midwives appear to make such linkages. Overburdened MOH facilities have a harder time, with few resources for treatment should RH problems such as STIs be diagnosed.
XI. LESSONS LEARNED

Kenya presents a valuable example of a country that has had strong commitment for PAC from host country nationals, donors, and CAs for 20 years. The depth of the program in three sectors is a result of those many years with investment by USAID/Kenya, USAID/Washington, USAID REDSO/ESA, GOK, Sida, many CAs (with USAID and non–USAID support), and Kenyan institutions.

The Kenyan PAC program illustrates the importance of foundation funding for innovation. CAs supported many of the innovative activities in Kenya with their private funds. Pathfinder began support to Kenyatta Hospital 20 years ago with private money. Today, KMET is assisted by Family Planning International Assistance (FPIA), using private funds. The Packard Foundation supports the purchase of MVA equipment.

Kenya highlights the opportunity costs of investing in any program; fighting the HIV/AIDS epidemic could absorb all national and international funding.

The Kenyan PAC program illustrates the importance and challenge at scale up of careful strategic planning, highlighting such factors as high opportunity costs and important questions of effectiveness, efficiency, and equity.

The Kenyan program also highlights the importance of good coordination and clear strategic planning from the beginning.
APPENDICES

A. MATERNAL MORTALITY FOR DIRECT AND INDIRECT CAUSES BY CAUSE OF DEATH, KENYATTA NATIONAL HOSPITAL, NAIROBI, 1995–99

B. PAC TRAINING IN KENYA

C. PERSONS CONTACTED

D. REFERENCES
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MATERNAL MORTALITY FOR DIRECT AND INDIRECT CAUSES
BY CAUSE OF DEATH
KENYATTA NATIONAL HOSPITAL, NAIROBI, 1995–99
# Maternal Mortality for Direct and Indirect Causes

**By Cause of Death**

**Kenyatta National Hospital, Nairobi, 1995–99**

<table>
<thead>
<tr>
<th>Direct Causes</th>
<th>Deaths</th>
<th>Cause-specific MMR</th>
<th>Indirect causes</th>
<th>Deaths</th>
<th>Cause-specific MMR</th>
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<tbody>
<tr>
<td>Postabortal Sepsis</td>
<td>52</td>
<td>189.4</td>
<td>Pneumonia and Pulmonary Tuberculosis [HIV: 7+/8 tested]</td>
<td>19</td>
<td>69.2</td>
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<tr>
<td>Puerperal Sepsis</td>
<td>35</td>
<td>127.5</td>
<td>Malaria</td>
<td>13</td>
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<tr>
<td>Hemorrhage</td>
<td>22</td>
<td>80.1</td>
<td>HIV</td>
<td>8</td>
<td>29.1</td>
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<tr>
<td>Hypertension</td>
<td>19</td>
<td>69.2</td>
<td>Anemia</td>
<td>6</td>
<td>21.9</td>
</tr>
<tr>
<td>Ruptured Uterus</td>
<td>6</td>
<td>21.9</td>
<td>Cardiac Disease</td>
<td>3</td>
<td>10.9</td>
</tr>
<tr>
<td>Ectopic Pregnancy</td>
<td>5</td>
<td>18.2</td>
<td>Others</td>
<td>10</td>
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<tr>
<td>Anesthetic Complication</td>
<td>4</td>
<td>14.6</td>
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<tr>
<td>Pulmonary Embolism</td>
<td>1</td>
<td>3.6</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td>144</td>
<td>524.5</td>
<td><strong>Subtotal</strong></td>
<td>59</td>
<td>214.9</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>203</td>
<td>739.4</td>
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*Live births, 1995–99: 27,455*
APPENDIX B

PAC TRAINING IN KENYA
## PAC TRAINING IN KENYA

<table>
<thead>
<tr>
<th>Province</th>
<th>District/Site</th>
<th>Organization(s)</th>
<th>Activity Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Western</td>
<td>Bungoma, Vihiga, Butere/Mumias, Kakamega, Busia</td>
<td>KMET</td>
<td>Training and support: 18 providers</td>
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<tr>
<td></td>
<td>Busia</td>
<td>KMET/FPIA</td>
<td>250 CBDs in Kakamega forest 50 in Shamakhubu</td>
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<td></td>
<td>Lugulu, Maseno</td>
<td>EngenderHealth/CHAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Busia, Vihiga</td>
<td>AMKENI</td>
<td>Public nurse-midwives (16 trained)</td>
</tr>
<tr>
<td></td>
<td>Kakamega, Busia</td>
<td>Ipas/Sida/MOH</td>
<td>Plans underway</td>
</tr>
<tr>
<td>2. Nyanza</td>
<td>12 districts</td>
<td>KMET</td>
<td>Training and support: 82 providers</td>
</tr>
<tr>
<td></td>
<td>Kehancha, Rongo, Migori</td>
<td>KMET/FPIA</td>
<td>50 CBDs in Kisumu 100 CBDs in Kisii/Homa Bay</td>
</tr>
<tr>
<td></td>
<td>Siaya, R’onyo, Suba, Nyando, H’Bay</td>
<td>PRIME</td>
<td>9 Private/nurse-midwives</td>
</tr>
<tr>
<td></td>
<td>Kisumu, Kisii</td>
<td>Ipas/WHO</td>
<td>Public nurse-midwives</td>
</tr>
<tr>
<td></td>
<td>Kisii, Nyamira, Suba, Migori, R’onyo</td>
<td>Ipas/FPAK</td>
<td>Nurses training and support</td>
</tr>
<tr>
<td>3. Central</td>
<td>Kiambu, Thika, Nyeri</td>
<td>PRIME</td>
<td>64 (19 PRIME I, 45 PRIME II) private nurse-midwives</td>
</tr>
<tr>
<td></td>
<td>Kiambu, Thika, Nyeri</td>
<td>EngenderHealth/MOH</td>
<td>Public nurse-midwives, clinical officers (31 trained)</td>
</tr>
<tr>
<td></td>
<td>Kikuyu, Kijabe</td>
<td>EngenderHealth/CHAK</td>
<td>Doctor/nurse teams</td>
</tr>
<tr>
<td></td>
<td>Gatundu</td>
<td>EngenderHealth/MOH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kiambu, Nyeri</td>
<td>Ipas/Sida/CHAK</td>
<td></td>
</tr>
<tr>
<td>4. Coast</td>
<td>Mombasa, Kwale, Bamburi, Kisauni</td>
<td>PRIME</td>
<td>7 private nurse-midwives</td>
</tr>
<tr>
<td></td>
<td>Coast PGH</td>
<td>EngenderHealth/MOH</td>
<td>Doctor/nurse teams</td>
</tr>
<tr>
<td></td>
<td>Malindi Nursing Home</td>
<td>EngenderHealth</td>
<td>Private doctor/nurse team</td>
</tr>
<tr>
<td></td>
<td>Kwale, Kilifi, Malindi</td>
<td>AMKENI</td>
<td>Plans underway</td>
</tr>
<tr>
<td></td>
<td>Mombasa</td>
<td>Ipas/FPAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kilifi</td>
<td>Ipas/Sida</td>
<td></td>
</tr>
<tr>
<td>Province</td>
<td>District/Site</td>
<td>Organization(s)</td>
<td>Activity Details</td>
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<td>-----------------</td>
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<tr>
<td>5. Nairobi</td>
<td>Nairobi slums, Karen, Githurai, Kasarani</td>
<td>PRIME</td>
<td>73 (23 PRIME I, 50 PRIME II) private nurse-midwives</td>
</tr>
<tr>
<td></td>
<td>Alice Nursing Home</td>
<td>EngenderHealth/CHAK</td>
<td>Private nurse/doctor team</td>
</tr>
<tr>
<td></td>
<td>Nairobi</td>
<td>Ipas/Sida</td>
<td></td>
</tr>
<tr>
<td>6. Eastern</td>
<td>Maua, Chogoria</td>
<td>EngenderHealth/CHAK</td>
<td>Doctor/nurse teams</td>
</tr>
<tr>
<td></td>
<td>Kitui</td>
<td>EngenderHealth/MOH</td>
<td>Doctor/nurse teams</td>
</tr>
<tr>
<td></td>
<td>Meru, Embu</td>
<td>Ipas/FPK</td>
<td>Nurse-midwives</td>
</tr>
<tr>
<td>7. Rift Valley</td>
<td>Kitale, Eldoret, Nakuru, Molo, Kajiado</td>
<td>KMET</td>
<td>Training and support: 15 providers</td>
</tr>
<tr>
<td></td>
<td>Kajiado, Nakuru</td>
<td>KMET/FPK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kajiado, Nakuru</td>
<td>PRIME</td>
<td>55 (17 PRIME I, 38 PRIME II) private nurse-midwives</td>
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<td>Kajiado, Koibatek, Kapsabet</td>
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<td>Public nurse-midwives, clinical officers (COs) (21 trained)</td>
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<td>Litein, Tenwek</td>
<td>EngenderHealth/MOH/Sida</td>
<td>Public nurse-midwives (33 trained)</td>
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<td></td>
<td>Brooke Bond</td>
<td>Engender</td>
<td>Private nurse/doctor team</td>
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<tr>
<td></td>
<td>Kajiado, Nandi, K’batek, Kericho, Nakuru</td>
<td>Ipas/Sida/MOH</td>
<td>Public doctors, nurses, COs (training of trainers)</td>
</tr>
<tr>
<td></td>
<td>Nakuru, Kitale, Eldoret</td>
<td>Ipas/FPK</td>
<td>Nurses support</td>
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<tr>
<td>8. North Eastern</td>
<td>Eldoret</td>
<td>Ipas/Sida</td>
<td>No coverage, apart from activities in Garissa General Hospital and UNHCR/Ipas work with nurses in refugee camps such as Dadaab.</td>
</tr>
</tbody>
</table>
APPENDIX C

PERSONS CONTACTED
PERSONS CONTACTED

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Dr. Rupani
Dr. Esther Ogara
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Dr. Grace Kihindas

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Joyce Riungu

NATIONAL NURSING ASSOCIATION OF KENYA
Evelyn Mutio
Janet Mwamuye
Danny Mungia
Heme Ndungu
Donald Epaalat

MARIE STOPES INTERNATIONAL
Cyprian Awiti

ENGENDERHEALTH
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Isaal Aschwal
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Job Obwaka
Karanja Mbigua

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Dorothy Andere

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Dr. Philip Mwalali
Dr. Onyango Simeon

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DELIVER/JSI
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Leah Wanjana

PATHFINDER INTERNATIONAL
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Charles Thube

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Susan Kaman
Mary Nzomo
NAKURU PROVINCIAL GENERAL HOSPITAL
Dr. Ndede

KOIBATEK DISTRICT HOSPITAL
Grace Ruto
Madira Owino

SHAMACUBU HEALTH CENTER
Community Volunteers

KENYATTA NATIONAL HOSPITAL/HIGH-RISK CLINIC
Omondi Ogutu

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Anne Malinga, Kasarani Nursing Home

KENYA OBSTETRICS AND GYNEACOLOGY SOCIETY (KOGS)
Dr. Joseph Karanja
Dr. Joseph Mati, formerly at University of Kenya

TEKLINK
Isaac Mwangangi
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8 Ibid.
9 Ibid.
10 A carefully designed, implemented, and documented pilot study laid the foundation for MOH support.
11 Ministry of Health and ORC Macro, 1999 Kenya Service Provision Assessment Survey, October 2000
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16 Rogo, Khama, Lisa Bohmer, and Christine Ombaka. Community Level Dynamics of Unsafe Abortion in Western Kenya and Opportunities for Prevention, Pacific Institute for Women’s Health and Center for Study of Adolescence (Undated)
18 Julie Solo et al. Creating Linkages Between Incomplete Abortion Treatment and Family Planning Services in Kenya, Studies in Family Planning, Number 1, March 1999
19 EDHS
21 Ibid.
24 Ibid.
25 Personal communication, Steve Kinzett
APPENDIX F

POSTABORTION CARE IN GHANA

CASE STUDY
<table>
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ENDNOTES
I. GHANA ENVIRONMENT

Ghana lies in the center of the West African coast and shares borders with three French-speaking nations: Togo to the east, Côte d’Ivoire to the west, and Burkina Faso to the north. The climate is tropical. The eastern coastal belt is warm and comparatively dry, the southwest corner is hot and humid, and the north is hot and dry. The economy is largely agricultural and employs a majority of the labor force. More than 100 languages and dialects are spoken, with English as the official language. Women of childbearing age are predominantly Christian (79 percent) or Muslim (11 percent); they belong to more than nine major ethnic groups.

After independence in 1957, Ghana experienced 35 years of political rule and economic instability marked by alternating military and civil rule. On January 7, 2001, a new government took office in the first democratic transfer of power in 19 years. The political transition has proceeded peacefully and is widely regarded as a major achievement for Ghana and for the region. However, the macroeconomic situation inherited by the new administration is worse than could have been anticipated. In the past 18 months, Ghana has suffered two major shocks: plummeting prices for cocoa export and the tripling of costs for oil importation. Looser fiscal and monetary policies in the period before the presidential elections accelerated inflation to about 40 percent annually and reduced foreign reserves to less than 1 month of imports by the end of 2000.

DEMOGRAPHIC AND HEALTH DATA

Regional Differences in Key Indicators

There are significant regional differences in indicators relevant to women’s health status and postabortion care (PAC). Three regions—Northern, Upper West, and Upper East—are particularly notable.

<table>
<thead>
<tr>
<th></th>
<th>Women with No Education</th>
<th>CPR*: Modern Methods</th>
<th>Women with Unmet Need for Family Planning (FP)</th>
<th>Under 5 Mortality Rate</th>
<th>Antenatal Care by Doctor or Nurse-midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>28%</td>
<td>8.7%</td>
<td>26%</td>
<td>110</td>
<td>89%</td>
</tr>
<tr>
<td>Central</td>
<td>25%</td>
<td>13.1%</td>
<td>25%</td>
<td>142</td>
<td>90%</td>
</tr>
<tr>
<td>Greater Accra</td>
<td>15%</td>
<td>17.4%</td>
<td>19%</td>
<td>62</td>
<td>92%</td>
</tr>
<tr>
<td>Volta</td>
<td>24%</td>
<td>12.1%</td>
<td>28%</td>
<td>98</td>
<td>86%</td>
</tr>
<tr>
<td>Eastern</td>
<td>16%</td>
<td>19.6%</td>
<td>24%</td>
<td>89</td>
<td>90%</td>
</tr>
<tr>
<td>Ashant</td>
<td>21%</td>
<td>14.0%</td>
<td>23%</td>
<td>78</td>
<td>86%</td>
</tr>
<tr>
<td>Brong Ahafo</td>
<td>30%</td>
<td>14.8%</td>
<td>22%</td>
<td>129</td>
<td>90%</td>
</tr>
<tr>
<td>Northern</td>
<td>83%</td>
<td>5.6%</td>
<td>19%</td>
<td>171</td>
<td>68%</td>
</tr>
<tr>
<td>Upper West</td>
<td>72%</td>
<td>9.1%</td>
<td>18%</td>
<td>156</td>
<td>69%</td>
</tr>
<tr>
<td>Upper East</td>
<td>74%</td>
<td>7.5%</td>
<td>21%</td>
<td>155</td>
<td>75%</td>
</tr>
</tbody>
</table>

*CPR: Contraceptive prevalence rate

Source: Demographic and Health Survey (DHS) 1998
Population Data

On March 26, 2000, the census of Ghana indicated a population of about 19.5 million, a 50 percent increase over the last census in 1984. This represents a growth rate of 2.5 percent—a rate that doubles the population every 27 years. The estimated population for 2001 is 19.9 million. The 1998 population pyramid reflects the high proportion of children under age 15 and the effect of lower fertility in the past five years.

Infant mortality has been significantly declining, dropping from 133 per 1,000 in 1957 to 66 per 1,000 in 1993. The 1998 DHS reported an infant mortality rate of 61 per 1,000 for the 10 years preceding the survey, with a lower rate for urban areas (42.6) than rural areas (67.5). Concurrently, life expectancy at birth increased from about 45 years in 1960 to 57 years in 1998.  

The total fertility rate (TFR) for Ghana has sharply declined, leading to a study entitled, *Greater Than Expected Fertility Decline in Ghana: An Examination of the Evidence*. The TFR ranged from 6 to 7 between 1960 and 1988 and then declined from 6.4 in 1988 to 5.5 in 1993 to 4.6 in 1998. During the five years preceding the 1998 survey, the TFR was 2.96 for urban areas and 5.41 for rural areas. The northern region had a 6.98 TFR, and greater Accra had a 2.66 TFR. The primary proximate determinants of declining fertility in Ghana include:

- a rising age at first marriage, especially in urban areas;
- 51 percent of women have tried some method of contraception;
- continued postpartum sexual abstinence and breastfeeding;
- a high rate of induced abortion (suggested by one recent study);
- a lower rate of recent sexual experience than people in neighboring countries;
- the proportion of women abstaining nonpostpartum exceeds the proportion of women abstaining postpartum;

- the proportion of men reporting not having intercourse in the last 4 weeks is high: 36 percent of men in monogamous unions, 25 percent of those in polygamous unions; and

- 58 percent of never-married men have never had sexual intercourse.

Recent trends suggest an increasing level of dissatisfaction with contraceptive methods. The 1998 DHS showed a marked increase in the proportion of women who were not using contraception because they were opposed to family planning, and a decline in the proportion who were not using contraceptives because they wanted another child. Modern method use is 13 percent. In the following tables, it is informative to note the high unmet need among adolescents and remarkably little difference in unmet need between rural and urban areas.

### Table 2
Percentage of Married Women Using Family Planning in Ghana

<table>
<thead>
<tr>
<th>Method</th>
<th>% Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>3.9</td>
</tr>
<tr>
<td>Intrauterine device (IUD)</td>
<td>0.7</td>
</tr>
<tr>
<td>Injectable Contraceptive</td>
<td>3.1</td>
</tr>
<tr>
<td>Local</td>
<td>0.9</td>
</tr>
<tr>
<td>Condom</td>
<td>2.7</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>0.6</td>
</tr>
<tr>
<td>Traditional</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22.0</strong></td>
</tr>
</tbody>
</table>

*Source: DHS 1998*

### Table 3
Percentage of Married Women with an Unmet Need for Family Planning, by Age and Intent

<table>
<thead>
<tr>
<th>Age</th>
<th>Intent: To Space</th>
<th>Intent: To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–19</td>
<td>24</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>20–24</td>
<td>20</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>25–29</td>
<td>17</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>30–34</td>
<td>9</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>35–39</td>
<td>6</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>40–44</td>
<td>4</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>45–49</td>
<td>1</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td><strong>All Women</strong></td>
<td><strong>11</strong></td>
<td><strong>12</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

*Source: DHS 1998*

### Table 4
Percentage of Married Women with an Unmet Need for Family Planning, by Region

<table>
<thead>
<tr>
<th>Area</th>
<th>Intent: To Space</th>
<th>Intent: To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Rural</td>
<td>12</td>
<td>12</td>
<td>24</td>
</tr>
</tbody>
</table>

*Source: DHS 1998*
Maternal and Abortion Mortality Data

“Defining the magnitude of the public health problem of unsafe abortion is a first step toward allocating resources to programs that will improve postabortion services.” The primary mortality indicator supporting the need for postabortion care has been abortion mortality, which is often reflected in high maternal mortality rates. Like most developing countries, Ghana does not yet have an effective vital registration system for monitoring births and deaths. No valid national estimates of maternal or abortion mortality have been developed. The 1993 DHS used the sisterhood method to estimate total maternal mortality for Ghana as 214 maternal deaths per 100,000 live births in the past 10 years, but acknowledged that this underrepresented the maternal mortality rate.

A safe motherhood survey in 1997 in four regions (Central, Eastern, Volta, and Greater Accra) of Ghana provides valuable data on pregnancy and abortion. Of 1,689 pregnant women, 317 women obtained an abortion for an overall rate of 17 induced abortions per 1,000 women of childbearing age, or 27 abortions per 100 live births. Of 353 pregnancy losses, 90 percent were due to induced abortion. Only 11 women used contraceptives before becoming pregnant. All 317 women had had a previous abortion and 115 had no previous live births. Recourse to abortion was more common among educated women, higher parity women, and the main Christian groups than among their counterparts. This study identified the deaths of nine of the pregnant women before 42 days postpartum. If these deaths were all attributable to pregnancy, the maternal mortality rate would be 758 per 100,000 term births. Of 317 women who obtained abortions, 34 were self-induced, and one of those 34 died.

Table 5
Number of Institutional Maternal Deaths and Their Causes During a 12–month Period, per Facility and Region

<table>
<thead>
<tr>
<th>Description of Obstetric Complications</th>
<th>Northern, Upper East, and Upper West Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regional Hospitals (n=3)</td>
</tr>
<tr>
<td>Hemorrhage</td>
<td>11</td>
</tr>
<tr>
<td>Prolonged/Obstructed Labor</td>
<td>4</td>
</tr>
<tr>
<td>Postpartum Sepsis</td>
<td>11</td>
</tr>
<tr>
<td>Abortion Complications</td>
<td>11</td>
</tr>
<tr>
<td>Preeclampsia/Eclampsia</td>
<td>2</td>
</tr>
<tr>
<td>Ectopic Pregnancy</td>
<td>2</td>
</tr>
<tr>
<td>Ruptured Uterus</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: Safe Motherhood Assessment, April–June 2000

Dr. Ahiadeke, the lead author, estimated the overall maternal mortality rate for Ghana to be about 550, and the percent of deaths due to abortion as 21 percent. He based this on data from the health ministry, district hospitals, and his own research. He indicated a desire to develop national estimates of maternal mortality and abortion mortality using a national prospective sampling and follow-up of pregnant women.

The 1998 DHS asked for information on ‘loss of pregnancy,’ which was intended to include both induced and spontaneous abortion. Overall, 12 percent of pregnancies in the previous 10 years had been lost. The youngest age group (15–19 years) and urban dwellers reported the highest loss rate (38.9 percent). The DHS researchers did not
attempt to distinguish induced from spontaneous abortion, nor did they ask for information on medical or hospital care because of the pregnancy loss.

One local population has conducted population-based maternal mortality studies. Researchers at Kassena-Nankana District in the Upper East region estimate that the maternal mortality ratio has declined from about 800 maternal deaths per 100,000 live births for 1983–97 to about 600 for 1995–96. The study report provides no data on pregnancy outcomes.

For 1998, national surveillance of maternal deaths in hospitals identified 813 maternal deaths among 325,265 supervised deliveries, or 250 per 100,000 live births. If the Ministry of Health (MOH) assumption that this represents 43 percent of all deliveries is accepted, then the annual number of maternal deaths is about 1,869—but this assumes that the maternal mortality ratio is the same for deliveries inside and outside hospitals. The calculated regional maternal mortality ratios per 100,000 live births vary widely: Central, 492; Volta, 429; Upper East, 348; Western, 295; Northern, 279; Eastern, 259; Brong Ahafo, 218; Ashanti, 194; and Greater Accra, 73.

- The hospital-based maternal mortality ratio for the Upper East region (348) is about 50 percent of the population-based data from Kassena-Nankana District (600–800) in the Upper East region—suggesting that the maternal mortality ratio may be twice as high for deliveries occurring outside rather than inside hospitals in that region.

- The maternal mortality ratios are lowest in the regions that first received PAC services (Greater Accra, Ashanti, Brong Ahafo, Eastern), and they are highest in the regions that still have received no attention to PAC services (Central, Volta).

- The MOH did not report the causes of these maternal deaths—if the proportion due to abortion is about 20 percent, then about 374 abortion-related deaths occur each year.

During site visits to health facilities, local statistics and case reports were obtained that augment reported national data, because they sometimes include pregnancy outcome and/or cause of death.

- During 2000, the one large general hospital provided 3,325 deliveries and had 30 maternal deaths—a ratio of 693 maternal deaths per 100,000 live births. That district reported 93 maternal deaths in 1998, 34 in 1999, and 63 in 2000.

- During 2000, one district hospital had 35 maternal deaths: 8 due to abortion (6 sepsis, 1 hemorrhage, 1 sickle cell anemia); 7 from hemorrhage; 3 from eclampsia; 3 from postpartum sepsis; 2 from pneumonia; 5 from anemia; and 7 from other causes. During January–July of 2001, 25 percent of maternal deaths were due to abortion. During 2000, the same hospital admitted 241 women for complications of incomplete abortion. During the same year, the hospital staff treated other women with incomplete abortion as outpatients and referred them to the family planning clinic.
Of 241 women treated for complications of incomplete abortion at a district hospital, the staff counseled 90 percent on family planning, and 84 percent accepted 1 of 7 different contraceptive methods.

Of 63 maternal deaths that occurred within medical institutions in the northern three regions during a recent 12-month period, 19 percent were due to abortion.

HIV and Reproductive Tract Infections

In 1990, the Ministry of Health instituted human immunodeficiency virus (HIV) sentinel serosurveillance in antenatal clinics; by 1999, there were 22 sites. The regional average percent positive by region for 2000 ranged from 5.3 percent in the Eastern region to 1.3 percent in the Upper East. The rate at various clinics ranged from 7.8 to 2.8 percent. Testing 500 women at each of 22 surveillance sites identified 43 women at antenatal clinics with syphilis. Nine sites identified no cases; five sites identified one case only, and eight sites identified from two to nine cases each.

POLICY ENVIRONMENT

In 1969, only 12 years after becoming an independent nation, Ghana established a national population policy. In 1992, the National Population Council (NPC) was created to raise awareness on population issues, foster collaboration between family planning organizations, and improve the population policy environment. Ghana began revising its population policy to include broader reproductive health issues before the 1994 International Conference on Population and Development (ICPD). Two years later, the MOH formulated a national reproductive health service policy and standards document. The four priorities of reproductive health (RH) in the national policy include family planning, safe motherhood, prevention and management of sexually transmitted diseases (STDs) and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS); and postabortion care (PAC). Moreover, reproductive health is one of the MOH’s six health priorities; the top priorities include HIV/AIDS, malaria, tuberculosis, and endemic diseases, such as guinea worm.

The summary of the RH service policy and standards describes the prevention and management of unsafe abortion and PAC as having four objectives:

- to manage and/or refer complications,
- to create public awareness on the dangers of unsafe abortion,
- to educate clients on the complications of abortion, and
- to prevent unwanted pregnancies through family planning counseling and services.

The policy and standards document also defines the categories of health workers allowed to provide PAC. Midwives, in addition to doctors, were included in that revision in 1996. PAC is not covered in the nurse-midwife training curriculum (PST), but postabortion family planning is explicitly included. Despite the message within the national protocols
that health care providers should not be “judgmental or moralistic,” women seeking PAC are vulnerable to stigmatization.

In 1985, the Ghanaian law was amended to reflect the following provisions. Abortions are generally unlawful unless performed by a registered medical practitioner specializing in gynecology or any other registered medical practitioner in a hospital or clinic for one of the following reasons:

- the continuance of the pregnancy would involve risk to the life of the pregnant woman or injury to her physical or mental health;
- the pregnancy is the result of rape, defilement of a female who is unaware of the consequences of sex, or incest; or
- there is substantial risk that if the child were born it may suffer from or later develop a serious physical abnormality or disease.

Reportedly, hospitals and other facilities perform a high volume of abortions to protect the physical and mental health of women; however, unsafe abortion continues to occur in Ghana.

**STRUCTURE OF HEALTH SERVICES**

**Public and Private Sectors**

In Ghana, the MOH has both policy and service delivery roles. Recently, there was a reorganization of the functions of the MOH at the national level. The MOH was divided into two parts; the Ghana Health Service (GHS) is responsible for the implementation of health service delivery. The divisions within the GHS include public health, family health, institutions, research, and nutrition. The MOH retains its name but has a policy role. The reorganization and division of responsibilities between these two institutions as well as the MOH’s relation to the NPC on population issues remains in flux.

Within the MOH, primary health care services are divided into national-, regional-, and district-level health service delivery institutions. At the national level, teaching hospitals in urban areas are staffed by specialized doctors, general practitioners, nurses, and nurse-midwives. Each of the 10 regions has a regional hospital, which have fewer specialized doctors and more general practitioners, nurses, and nurse-midwives. Within the administrative districts, the district hospitals are staffed by a few doctors and a relatively greater number of medical assistants, nurses, and nurse-midwives. The maternal and child health and family planning (MCH/FP) clinics are sometimes combined, but often are separated within hospitals (separate from the maternity and/or obstetric/gynecologic wards, if they exist). At the subdistrict level, health posts have very limited staff—usually a community health nurse (whose training does not include obstetrics or gynecology) or a community agent or health education worker. There are 1,049 health facilities within the public sector.

Traditionally, local staff divides responsibilities for reproductive health services: midwives provide antenatal and delivery services, the family planning nurse provides family planning services, and the medical assistant provides care for sexually transmitted
diseases. The MOH 1999 annual report estimates that 3,453 public sector nurses are in Ghana, including professional nurses, midwives, and auxiliary nurses.

The MOH estimates that it provides 30 percent of health services; these services tend to be concentrated in urban areas. The 1998 DHS indicates that the public sector is the source of supply for 47.3 percent of users of modern methods; it is the primary provider of injectable contraceptives, intrauterine devices (IUDs), female sterilization, and Norplant. Latest data indicate that government health facilities provided 64 percent of antenatal care.

As of 1995, Ghana’s decentralized health system had about 177 hospitals (including 2 teaching hospitals, 8 regional hospitals, 85 public hospitals, 41 mission hospitals, and 51 private hospitals). Of 733 health centers, 404 were public, and of 869 clinics, 267 were public. There is one clinic for every 10,512 persons. As of 1995, Ghana had approximately 1,100 registered physicians and 12,600 registered nurses.

The private sector, which includes physicians, pharmacists, chemical sellers, midwives, and NGOs, provides 40 percent of the health services in Ghana. The majority of private hospitals and clinics are in the Ashanti region and Greater Accra; the underserved Northern region, where 11 percent of Ghana’s population reside, has no private hospitals and only one private clinic. About 36 percent of women use the private sector for antenatal care: the Christian Hospital Association of Ghana (CHAG), 18 percent; private midwives, 10 percent; traditional birth attendants, 7 percent; and other sources, 10 percent.

Supply of Health Facilities Offering PAC–related Services

In 1993 and 1996, Ghana undertook situational analyses of family planning service delivery in Ghana. The following two tables present data from the 1996 sample of health facilities. Although clients can receive family planning and postabortion care from pharmacies or drug stores, traditional birth attendants, and private clinics, these sources were not included because of the difficulty in obtaining a complete list of those facilities.

<table>
<thead>
<tr>
<th>Type of Service Delivery Point</th>
<th>Number of Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>114</td>
</tr>
<tr>
<td>MOH Clinics</td>
<td>707</td>
</tr>
<tr>
<td>PPAG* Clinics</td>
<td>44</td>
</tr>
<tr>
<td>Private Maternity Facilities</td>
<td>313</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,178</strong></td>
</tr>
</tbody>
</table>

*Planned Parenthood Association of Ghana

Note that in table 7, while reportedly 97 percent of facilities offered family planning, only 13 percent offered diagnosis of STDs, and only 21 percent provided management of

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*In the DHS, unlike other countries, nongovernmental organizations (NGOs) are not listed as a separate source of supply for contraceptives; they are subsumed in “private medical.”*
abortion complications. That same study noted that only 32 percent of facilities had the capability to conduct laboratory testing. Only 23 percent had a copy of the guidelines for the management of STDs.

### Table 7
**Percentage of Health Facilities Offering Components of PAC and Other RH Services, 1997**

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Hospital</th>
<th>MOH Clinic</th>
<th>PPAG Clinic</th>
<th>Private Maternities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Planning</td>
<td>98</td>
<td>95</td>
<td>100</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Maternity Care/Delivery Services</td>
<td>25</td>
<td>45</td>
<td>3</td>
<td>96</td>
<td>42</td>
</tr>
<tr>
<td>HIV/AIDS Counseling/IEC*</td>
<td>52</td>
<td>47</td>
<td>73</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>Other STD Counseling/IEC</td>
<td>52</td>
<td>55</td>
<td>78</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Other STD Diagnosis</td>
<td>8</td>
<td>12</td>
<td>18</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Other STD Treatment</td>
<td>10</td>
<td>16</td>
<td>23</td>
<td>29</td>
<td>17</td>
</tr>
<tr>
<td>Management of Abortion Complications</td>
<td>15</td>
<td>21</td>
<td>23</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Menstrual Regulation</td>
<td>23</td>
<td>22</td>
<td>18</td>
<td>16</td>
<td>21</td>
</tr>
</tbody>
</table>

*IEC: Information, education and communication

### Health Professionals

One senior government physician estimated that only 70–80 of 110 registered obstetricians are practicing in Ghana. Reportedly, about 50 percent of physicians are in Accra and 25 percent are in Kumasi (Eastern region). There are reportedly about 2,000 midwives in Ghana; most are in the public sector. They are an important source of maternal and reproductive health services in Ghana, being dispersed more widely than other health professionals in rural areas.

Both doctors and nurses are reportedly decreasing in number as they leave the public sector for higher salaries within the private sector or leave the country entirely.

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b. Although 97 percent reportedly offered family planning, the study cites many weaknesses in the national program and noted in a number of areas that the program was weaker than it had been in 1993, at the time of the previous survey.

c. These data were collected before President Bush’s reinstatement of the Mexico City Policy.
II. KEY STAKEHOLDERS IN POSTABORTION CARE

NATIONAL INSTITUTIONS

Ministry of Health (MOH)

PAC is a component of the safe motherhood program of the MOH. (See section I, Ghana Environment, Structure of Health Services, Public and Private Sectors, and section II, Important PAC–related Activities, National Safe Motherhood Program, for discussion of the MOH.)

Ghana Registered Midwives Association (GRMA)

About 50% of Ghana’s midwives, two thirds of them in the private sector, belong to the GRMA, a professional association that focuses on skills improvement and promoting midwives in Ghana. GRMA indicates that about one fifth of them are in the Ashanti region, 10 percent are in Accra, and only 30 GRMA members are located in the three most underserved regions combined.

Given the national shortage of doctors, the skills of midwives, and their community-based position throughout the country, the MOH and donors are asking midwives to play an increasingly important role in health services. GRMA has five donor-funded projects; it receives support from the U.S. Agency for International Development (USAID) to strengthen its institutional capability by upgrading midwife skills and training maternity home assistance to provide family planning information and to distribute contraceptive commodities in their communities.

Planned Parenthood Association of Ghana (PPAG)

PPAG, an International Planned Parenthood Federation (IPPF) affiliate, was established in 1967 by a group of physicians and demographers with the goal of decreasing infant and child mortality and abortion. At the time, it offered limited family planning services. The organization today operates in 9 of Ghana’s 10 regions within 12 clinical sites and community-based workers located in 55 districts. In addition to the 12 clinical sites in urban and semiurban areas, there are teenage centers and outreach by peer educators. A wide variety of RH services is offered, including pregnancy tests and screening and counseling for sexually transmitted infections (STIs) and HIV.

While PPAG has a role in the primary prevention of abortion complications as providers of family planning, it has a limited role as providers of postabortion care. Last year, in all 12 sites offering PAC services nationwide, only 125 PAC clients were served. This observation is consistent with the 1996 finding that 35 percent of PPAG service delivery points (SDPs) reported demand for treatment of abortion complications. Only one PAC client was served this year in the PPAG clinic visited in the Eastern region.

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d In the team’s interviews, the GRMA estimated that there were about 500.

e The DHS does not break out PPAG as a source of supply for family planning. The team is not citing PPAG contraceptive distribution and couple year of protection (CYP) data due to the inconsistencies in the data reported to the team.
Ghana Social Marketing Foundation (GSMF)

GSMF is a private, nonprofit organization that began in 1985 and became incorporated in 1993 with support from USAID. GSMF continues to receive funding from various donors and organizations. GSMF collaborates with several local and international organizations, such as the United Nations Children’s Fund (UNICEF), the Joint United Nations Programme on HIV/AIDS (UNAIDS), the World Health Organization (WHO), the United Nations Population Fund (UNFPA), PPAG, Muslim Family Counseling Services, and the Johns Hopkins University/Center for Communication Programs (JHU/CCP). Currently, GSMF’s program includes HIV/AIDS prevention campaigns, insecticide-treated bednets, oral rehydration therapy, family planning, and adolescent reproductive health. Since 1999, GSMF has been engaged in generating demand for family planning in general, as well as promoting its socially marketed contraceptives. Through the effort of GSMF, the private sector market for contraceptives has grown in Ghana. GSMF markets and distributes a variety of contraceptives through 4,000 retail outlets nationwide. In 1998, GSMF sold more than 6 million condoms; USAID attributed most of the increase in CYPs to the social marketing program. UNFPA has supported GSMF physicians’ association meetings to overcome such myths as not approving hormonal contraception before the first pregnancy.

Since 1997, GSMF has been the Ipas distributor of manual vacuum aspiration (MVA) equipment. To date, it has acquired 500 MVA kits. It reported that it recently ran out of stock and was ordering 100 more kits (50 double valve and 50 single valve). According to GSMF, distributing MVA equipment is difficult to sustain because it has to purchase MVA equipment with foreign exchange money and does not want high inventory. It has low profit margins (10 percent mark up) and low demand. The high inflation rate in Ghana led GSMF to lose money on MVA. But it has also sold MVA equipment to Burkina Faso physicians.

GSMF has not adequately met recent MVA needs for Ghana, but that is attributed to a lack of clarity about the acceptability to USAID of a foreign NGO distributing MVA equipment and concurrently receiving USAID funds for family planning, and because it expected that the MOH would purchase MVA equipment for PRIME training.

IMPORTANT PAC–RELATED ACTIVITIES

National Safe Motherhood Program

In 1990, the MOH and GRMA, in collaboration with the American College of Nurse-Midwives (ACNM), began a life-saving skills (LSS) pilot program with funding from the Carnegie Corporation. The goal of the program was to reduce high maternal mortality and morbidity by training, equipping, and supporting public and private sector midwives in the prevention and management of obstetric complications and pregnancy-related diseases.

In 1995, the MOH launched a national safe motherhood program with the aim of improving the availability and quality of reproductive and maternal health services throughout the country. Regional resource teams (RRTs) were established in each of Ghana’s 10 regions to achieve the program objectives. Each RRT is composed of five to six service providers, including physicians and midwives, with responsibilities for
training in and supervision of reproductive and maternal health services. The RRTs work to expand and improve services and are responsible for implementing the national RH service policies, standards, and protocols in their region.21

At that time, there was a documented demand for PAC services. Fifty-two percent of MOH clinics reported demand for treatment of incomplete abortion complications. An even greater percentage (67 percent) of nurse-midwives reported demand for treatment of abortion complications. However, only 42 percent of the providers interviewed reported receiving basic training for the management of abortion complications, and a mere 14 percent reported having received refresher training.22

**Beginnings of PAC: Operations Research**

In 1996, Ipas, in association with the MOH and GRMA, conducted an operations research study (funded by the MotherCare project) that demonstrated and documented the acceptability, feasibility, and safety of midwives providing postabortion care. The study was conducted in four districts (two intervention and two control) in the Eastern region. The intervention included comprehensive training of midwives and doctors in comprehensive postabortion care. Interviews were also conducted with clients, physicians and nurses, community leaders, and policymakers.

During the baseline period, the weaknesses of the current standard of care were evident. Doctors treated women with complications of abortion almost exclusively with sharp curettage at hospitals and subsequently released them. Among 29 clients, 93 percent had not been told about danger signs for which they should return to the hospital, 86 percent were not told that they could become pregnant as soon as they resumed intercourse, and 90 percent reported that no one had spoken with them about family planning. Moreover, no woman chose a method before leaving the hospital—although the majority thought that it was important.

During the study period, between July 1996 and July 1998, one of the trained providers treated a total of 323 women for incomplete abortion with MVA. Overall, midwives managed 67 percent of all the women treated for incomplete abortion in primary-level facilities—public health centers or private maternity homes (in the operations research sites). Among these clients, no procedure-related complications were recorded. More than 90 percent of the women treated in maternity homes received family planning counseling; 55 percent received a method at the time of their treatment. The final report noted, however, “that even after the research, in district hospitals, family planning methods are still not offered systematically on the ward to women after the MVA procedure. In part, this is due to the fact that many of the midwives trained in PAC did not have prior family planning training and felt that they needed to strengthen their skills before offering methods to women.”23

**Inclusion of PAC within Safe Motherhood**

In 1997, in collaboration with PRIME, the MOH established a strategy to reinforce the RRTs and to integrate PAC into safe motherhood clinical skills in three regions (Eastern, Ashanti, and Brong Ahafo). This initiative built on the results, recommendations, and lessons learned from the operations research, which demonstrated the acceptability, feasibility, and safety of midwives providing PAC services. In 1998, PRIME began
working with the MOH, GRMA, and PPAG to decentralize and integrate PAC and LSS training and services to the primary level in three regions in Ghana. The program involved upgrading regional training and support teams, equipping training sites, establishing supervision systems and tools, and training primary providers. In 2000, PRIME began the expansion of this program to the three northern regions.

**USAID LEADERSHIP**

USAID is the prime donor supporting PAC activities in Ghana. USAID has supported population and family planning activities in Ghana since the late 1960s through various bilateral, global, and regional projects. USAID/Ghana’s current priorities are for child survival, family planning/reproductive health, HIV prevention, and malaria and other infectious diseases. The indicators are CYPs, HIV prevalence, condom distribution, and immunization coverage. The total health sector funding in fiscal year (FY) 2001 (including food aid) was $31 million.

Within family planning/reproductive health, USAID/Ghana focuses on quality improvement, demand generation, increasing access, and improving policies (see Strategic Framework on the following page). It works through three national NGOs (GRMA, PPAG, and GSMF) and multiple international CAs (EngenderHealth, PRIME, JHU/Population Communication Services, JHPIEGO, Linkages, the POLICY Project, the Population Council, and the Centre for Development and Population Activities [CEDPA]/Enable). The current program is supported through a Strategic Objective agreement developed in 1999, which extends through 2003. USAID also supports the aforementioned organizations through a significant amount of field support. In FY 2001, the total population budget was $7.25 million.

**PAC Investment**

Postabortion care activities in Ghana have been supported through a combination of core and field support funds from USAID/Washington and USAID/Ghana. Early USAID support for PAC was given to the MotherCare project for operations research conducted by Ipas; a total of almost $300,000 was spent. Later, USAID funded PAC as part of a larger maternal health initiative focused on improving the life-saving skills (LSS) of doctors and nurse-midwives. During PRIME I (1995–99), a total of $400,000 from core support and $200,000 from field support was spent. Under PRIME II (1999 to present), PAC has received greater amounts of field support. Total field support allocations for this period are $950,000 and total core to PRIME II for PAC has totaled $665,000. Additionally, there is support to GRMA for the training of midwives and to JHPIEGO for preservice and inservice training. Total support for PAC over time is likely to be about $2 million, recognizing that in Ghana it is not possible to distinguish between PAC and the larger LSS program.
OTHER DONORS

Although currently USAID provides primary donor support for PAC activities, other international donors that have contributed to PAC include UNICEF, IPPF, the Packard Foundation, the Carnegie Foundation, and possibly, the Japanese International Cooperation Agency (JICA). The Carnegie Foundation assisted the MOH with support from ACNM for safe motherhood. The Packard Foundation has provided a drawdown account for MVA kits. UNICEF purchased MVA kits for safe motherhood PAC training. JICA reportedly offered to provide MVA kits. UNFPA has provided assistance to Ghana since the early 1970s. For the period 1996–2000, UNFPA contributed $25 million to improve RH policy and service delivery.

Early in the establishment of the PAC program, UNICEF supported the training and monitoring of nurse-midwives and funded the acquisition of MVA equipment. This support ended in 1996.

More broadly, international funding for population activities in Ghana has come from both bilateral and multilateral agencies. The multilateral agencies with programs in the health and education sector include UNFPA, UNICEF, the United Nations Development Program (UNDP), and WHO. UNICEF focuses on providing immunization programs for children; RH, including safe motherhood and HIV/AIDS prevention; and community
mobilization and participation. UNDP support has focused on poverty reduction, 
HIV/AIDS prevention, and the promotion of gender equity and women’s empowerment. 
In addition to supporting HIV/AIDS prevention activities, the World Bank, Department 
for International Development (United Kingdom) (DFID), Denmark, the European 
Union, and the Netherlands are funding the health sector through their participation in the 
sector wide approach (SWAp). Other donors include the World Food Program, JICA, 
the IPPF, the German Technical Cooperation (GTZ), the Japanese Organization for 
International Cooperation in Family Planning (JOICFP), and the government of China.

\footnote{The main objective of the health SWAp (sector wide approach), which became operational in 1997, is to 
coordinate donor activities within the MOH to minimize vertical programming and improve budgetary 
efficiency. USAID does not currently allocate funds through the SWAp system.}
III. DEMAND FOR AND ACCESS TO SERVICES

DEMAND FOR SERVICES

The 1996 situational analysis provides information on demand for abortion-related services at different SDPs. As table 8 indicates, there is obviously demand at all SDPs. Moreover, as the report on that analysis commented, “There was greater demand for advice on the termination of an unwanted pregnancy than for medical treatment of incomplete abortion complications.”

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Hospitals</th>
<th>MOH Clinics</th>
<th>PPAG Clinics</th>
<th>Private Maternities</th>
<th>All SDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice on Abortion</td>
<td>61%</td>
<td>61%</td>
<td>63%</td>
<td>80%</td>
<td>64%</td>
</tr>
<tr>
<td>Treatment of Incomplete Abortion</td>
<td>59%</td>
<td>52%</td>
<td>35%</td>
<td>67%</td>
<td>54%</td>
</tr>
</tbody>
</table>

ACCESS TO SERVICES

No systematic data exist on access to PAC services; neither the Service Provision Assessment Survey (SPA) nor DHS collect relevant data. Data from 1996 indicate that 15 percent of hospitals, 21 percent of MOH clinics, 23 percent of PPAG clinics, and 27 percent of maternity facilities offer services for management of abortion complications.

Social and Cultural Access

As section I indicated, Ghana is a country with great diversity; it has more than 100 languages and dialects and nine ethnic groups. Table 1 illustrated the great regional social and cultural differences within Ghana. For instance, in greater Accra, according to the 1998 DHS, only 15 percent of women had no formal education, while in the Northern region, 83 percent had none. The contraceptive prevalence rate in Accra is more than double that of the Northern region, while the under 5 mortality rate is one third. While 23 percent of women are in polygamous union, that rate also varies greatly from rural to urban areas and across regions. (The team is aware of no research examining how social and cultural factors affect access to PAC.)

In the case study interviews, some private nurse-midwives indicated that they tried to reach out to women and facilitate access by listing postabortion care with other services on signboards in front of their clinics. They also related that they held meetings at churches and in schools in the community. Situational analysis data indicate that private midwife maternity facilities, on average, charged higher fees than other service provider...

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8 For example, PPAG, with 12 clinics, provided PAC services to only 125 women in 2000.
types (hospitals, MOH clinics, and PPAG) for almost all family planning methods and services. The impact of pricing upon choice of a provider is unknown.

Geographic Access

CA–supported activities have focused on the three southern regions of Eastern, Ashanti, and Brong Ahofo. They were selected by the MOH and PRIME based on the following criteria: foundation in LSS and PAC capacity and commitment at the regional level, hospitals with experience serving or planning to serve as LSS and PAC clinical training sites, RRTs with expressed interest in training midwives in SMCS, and the geographic clustering for monitoring and supervisory purposes. Refresher training for RRTs is underway in the three northern regions of Northern, Upper East, and Upper West.

PRIME has data on utilization before training in three regions and on utilization in selected facilities after training. Among the 36 facilities surveyed by PRIME during the baseline assessment in the three southern regions (before training), the average number of incomplete abortion cases per facility for a 6–month period was 24 for hospitals (regional and district), 2 for health centers, and less than 1 per maternity facility. These figures may not represent the potential caseload volume, as they are not based on a representative sample. Further, it is unclear whether some clients were referred to higher levels by primary levels, whether women bypassed them because they believed the providers were unable to treat emergencies, or whether price was a factor. Primary-level providers expressed the need to educate their communities about their new skills after training and to promote their services.

PRIME indicates that it has trained and supported 75 primary providers (including PPAG and providers in the operations research study). An additional 100 GRMA midwives were trained by those who had been trained by PRIME. Some nurse-midwives have reported that they were not supported by doctors who either kept the MVA kits or did not allow them to perform MVA procedures.

Consideration for both the private and public sectors in a given geographic area is important for cooperation and supervision. If doctors and nurses at a local hospital believe that they have been left out, they may pose problems for the private nurse-midwife. In the PRIME assessment, one midwife reported, “When you refer a case to these hospitals they know perfectly well it is a referral but they will say all sorts of things about you like, ‘why do you have to go to these midwives knowing very well that when it gets complicated you will be brought here.’ This way they discourage the clients about us.” A few cases of referrals from hospitals or health centers to private nurse-midwives when doctors were unavailable were reported to the team.

Age (Adolescents)

The scope of work for the global evaluation asked, “Are there groups that are systematically excluded from PAC services, or simply not adequately linked to health services, for example, adolescents…” Unfortunately, while in some countries there have been qualitative studies that would help to answer this question, in Ghana there have not been. It is unclear whether adolescents are being adequately served in Ghana; in general, there is little information on their use of PAC services. There were relatively few
adolescents in the PAC records reviewed, although in one hospital visited, adolescents were 15 percent of the caseload.

DHS data provide an understanding of adolescent sexuality and the need for PAC.

Table 9
Selected Data on Ages at First Marriage, First Intercourse, and Recent Sexual Activity Among Never-married Men and Women

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Age at First Intercourse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(women 20–49; men 25–59)</td>
<td>17.6</td>
<td>19.4</td>
</tr>
<tr>
<td>Median Age at First Marriage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(women 25–49; men 30–59)</td>
<td>19.1</td>
<td>25.6</td>
</tr>
<tr>
<td>Median Age at First Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(women 25–29)</td>
<td>20.9</td>
<td></td>
</tr>
<tr>
<td>Percent Never Married Who Never Had Sexual Intercourse</td>
<td>57.2%</td>
<td>58.0%</td>
</tr>
<tr>
<td>Percent Never Married Who Had Sexual Intercourse in Last 4 Weeks</td>
<td>13.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Ages 15–19 Who Never Had Sex</td>
<td>62.2%</td>
<td>80.7%</td>
</tr>
<tr>
<td>Ages 15–19 Never Married</td>
<td>83.6%</td>
<td>97.0%</td>
</tr>
</tbody>
</table>

Source: Ghana DHS 1998

These data may help explain why so few teenagers were receiving PAC services in Ghana, especially in rural areas. Among teenagers, although the median age at first intercourse is 17.6 years, a majority (62.2 percent) has never had sex. Moreover, the DHSs report a decline in fertility among 15–19 year olds, from 124 births per 1,000 women in 1988 to 90 in 1998.

The 1998 survey did indicate, however, that 22.9 percent of pregnancies to 15–19 year olds ended in ‘early pregnancy loss.’ The early pregnancy loss was 38.9 percent for urban teenagers and 17.0 percent for rural teenagers. Only 4.8 percent of adolescents between the ages of 15 and 19 use modern methods of contraception. The unmet need is 27 percent, all but 2 percent for spacing.

Private midwives commented that they were making a special effort to reach adolescents by visiting schools and churches. One report indicates that midwives reported an increased number of clients after such outreach. PPAG is also reaching out to adolescents.

Access for Severe Complications

The chief evidence of the severity of complications remains the continuing high proportion of maternal deaths attributed to abortion. A few anecdotes from clinic sites suggest that serious complications are being appropriately managed by stabilizing patients with intravenous fluids and transporting them to hospitals. Data are lacking on morbidity rates associated with either spontaneous or induced abortion.
Need for Access Indicators and Data

Tessa Wardlaw and Deborah Maine suggest UNICEF, WHO, and UNFPA process indicators that would measure change in the availability, utilization, and quality of care for women with obstetric complications, over a short period. These indicators would serve to answer PAC questions on access:

- Are there enough facilities providing emergency obstetric care (EOC) (and PAC)?
- Are they well distributed?
- Are enough women using these facilities?

Two access indicators that are particularly relevant for PAC are as follows:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Acceptable Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Essential EOC Facilities</td>
<td>For every 500,000 population</td>
<td>“This indicator requires a count of the facilities in which EOC services are actually being provided. This is different from process indicators that measure the capacity to perform EOC or related services. Unfortunately, … there are many health facilities in the world that should be able to provide EOC (that is they have the staff and so on), but in fact, they do not provide it. That is why these indicators focus on actual functioning, not capability.”</td>
</tr>
<tr>
<td>Basic EOC</td>
<td>At least 4 basic EOC facilities</td>
<td></td>
</tr>
<tr>
<td>Comprehensive EOC</td>
<td>At least 1 comprehensive EOC facility</td>
<td></td>
</tr>
<tr>
<td>Geographic Distribution</td>
<td>Minimum level is met in subnational areas</td>
<td>“If sufficient numbers exist, then the next step is to determine whether they are adequately distributed. One telling indicator is the average travel time to an EOC facility. While this is an informative indicator, the data required are difficult to obtain…A crude but efficient way to assess the distribution of EOC services throughout the country is to calculate the amount of EOC services in areas smaller than the country as a whole … mapping facilities would be helpful in visualizing the geographic distribution of EOC services.”</td>
</tr>
</tbody>
</table>
IV. INFORMATION, COUNSELING, AND LINKAGES

FAMILY PLANNING

While the inclusion of family planning counseling and services is considered an important part of the PAC program in Ghana, low levels of contraceptive use as well as low demand for modern methods make establishing quality postabortion family planning a challenge. Short-term methods, particularly Depo-Provera, are popular, but long-term methods, such as IUDs and Norplant, were limited in sites visited, and permanent methods were rare. According to EngenderHealth, these services have been established in 157 MOH clinics and hospitals throughout the country.

Part of the challenge to improving the second component is keeping providers fully informed and up-to-date on family planning. According to PRIME's baseline assessment in the three southern regions, among the 128 midwives sampled from various level facilities (predominantly the public sector), only 27 percent had been trained in family planning and 17 percent had been trained in IUD insertion and removal. In the site visits, the evaluation team spoke with a number of both doctors and midwives whose knowledge of family planning was insufficient and who held misconceptions (“IUDs can migrate in the body”) and biases about methods (dislike of condoms and the belief that clients would not accept them).

Data from the 1996 situational analysis supports the need for training service providers in family planning. As the following table indicates, providers need training on the indications for various family planning methods. That 7 percent of providers recommended the condom and spermicide for limiting family size helps to explain the high demand for abortion.

The lack of knowledge about permanent methods is very unfortunate. Note that for spacing, 8 percent of providers would recommend female sterilization and 6 percent would recommend male sterilization. The lack of provider knowledge in 1996 was more critical than it was at the time of the previous situational analysis in 1993, at which point only 3 percent would recommend a condom and 4 percent a spermicide for limiting; less than 1 percent would recommend either female or male sterilization for spacing.

As USAID’s SO 3 indicates, USAID is funding several activities to improve family planning, including long-term methods and quality of care.

A new national campaign, supported by President Kufuor, funded by USAID, and led by the MOH, JHU/CCP, GSMF, and the NPC, will reinforce knowledge from the client side. The program, Life Choices, will encourage couples to use modern contraceptive techniques at both public and private sector delivery points. Messages are designed to dispel rumors about family planning and to address misconception and misinformation about its side effects.
Table 11
Percentage of Providers Recommending Various Methods for Spacing and Limiting by SDP, 1996

<table>
<thead>
<tr>
<th>Method Recommended</th>
<th>Hospitals</th>
<th>MOH Clinics</th>
<th>PPAG Clinics</th>
<th>Private Maternities</th>
<th>All SDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Oral Pill</td>
<td>18</td>
<td>13</td>
<td>23</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>Injectable</td>
<td>50</td>
<td>50</td>
<td>45</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Norplant</td>
<td>29</td>
<td>20</td>
<td>35</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>Condom</td>
<td>9</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Spermicide</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>80</td>
<td>85</td>
<td>83</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>56</td>
<td>61</td>
<td>52</td>
<td>47</td>
<td>57</td>
</tr>
<tr>
<td>IUD</td>
<td>42</td>
<td>35</td>
<td>50</td>
<td>46</td>
<td>39</td>
</tr>
<tr>
<td>Natural FP</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method for Spacing</th>
<th>Hospitals</th>
<th>MOH Clinics</th>
<th>PPAG Clinics</th>
<th>Private Maternities</th>
<th>All SDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Oral Pill</td>
<td>79</td>
<td>83</td>
<td>88</td>
<td>76</td>
<td>82</td>
</tr>
<tr>
<td>Injectable</td>
<td>73</td>
<td>79</td>
<td>83</td>
<td>84</td>
<td>79</td>
</tr>
<tr>
<td>Norplant</td>
<td>51</td>
<td>42</td>
<td>52</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>Condom</td>
<td>72</td>
<td>72</td>
<td>80</td>
<td>67</td>
<td>72</td>
</tr>
<tr>
<td>Spermicide</td>
<td>66</td>
<td>65</td>
<td>77</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>4</td>
<td>7</td>
<td>17</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>4</td>
<td>4</td>
<td>12</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>IUD</td>
<td>82</td>
<td>75</td>
<td>82</td>
<td>66</td>
<td>76</td>
</tr>
<tr>
<td>Natural FP</td>
<td>34</td>
<td>30</td>
<td>35</td>
<td>29</td>
<td>31</td>
</tr>
</tbody>
</table>

Figure 3
National Campaign Graphic

Demand and access are also simultaneously being improved in districts and rural areas throughout Ghana by the Community Health Planning and Services (CHPS) initiative. This community-based approach to improving integrated health services is an MOH priority (as stated in the second five-year program of work).
OTHER REPRODUCTIVE HEALTH SERVICES

The third component seems extremely weak in Ghana. Data indicate that services in Ghana are very weak. As demonstrated in table 7 above, only 52 percent of health facilities provided counseling on HIV/AIDS, only 57 percent provided counseling or had IEC on other STDs, and only 13 percent diagnosed STDs.

In 2000, the MOH, with assistance from Family Health International, evaluated the syndromic diagnosis and treatment of three STD syndromes. The overall weakness of STD diagnosis and treatment is described in the following section.

- National guidelines for STD management are based on syndromic approach, and antibiotic sensitivity studies are conducted to ensure that algorithms are appropriate to local conditions. Data were gathered through observation of the client-provider encounter, interviews of health care providers in public and private facilities, and simulations of vaginal and urethral discharge syndromes by mystery shoppers in pharmacies and chemical shops.

- Among the 241 observed client-provider encounters were 40 cases of male urethral discharge syndrome, 182 cases of vaginal discharge syndrome, and 9 cases of genital ulcer disease in males and 9 in females.

- Only 10 providers (4 percent) took an adequate history, performed an adequate examination, and provided adequate treatment. Although 90 percent of service providers reported giving advice on condom use, only 26 percent actually provided education on condom use during the observations.

- Public and private providers did not differ importantly in their management practices. Most pharmacies performed worse, which may be due in part to the fact that most pharmacies do not have trained pharmacists as primary/first line attendants. Medical assistants performed slightly better than physicians.

In the site visits conducted for the global evaluation, no evidence was found that midwives or doctors were familiar with local variations in HIV or syphilis nor that they had a role in preventing transmission of STDs. Many providers expressed a dislike of condoms and no support for dual protection.

In the national reproductive health service protocols, there are five pages on the management of unsafe abortion and postabortion care. The only reference to linking the client with other reproductive health services, if appropriate, is one line, “Counsel about dangers of abortion and risk of transmission of STD.”

INTERACTIONS BETWEEN WOMEN AND PROVIDERS/STAFF

During the only procedure that the team observed (MOH teaching hospital), the doctor that was performing the procedure focused on the technical aspects of performing the MVA, while the nurse-midwife comforted and reassured the patient.
V. TECHNICAL PERFORMANCE

DATA ON HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT

Data have been collected on the human resource development and management of Ghanaian service providers in areas relevant to PAC. The 1996 situational analysis investigated previous training of service providers at hospitals, MOH clinics, PPAG clinics, and private maternity facilities in two of the three components of PAC.

Table 12
Percent of Staff Having Received Training in Two Elements of PAC, 1996

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Basic Training</th>
<th>Refresher Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Planning</td>
<td>89</td>
<td>69</td>
</tr>
<tr>
<td>Management of Abortion Complications</td>
<td>42</td>
<td>14</td>
</tr>
</tbody>
</table>

As indicated in section II, Key Stakeholders in Postabortion Care, Important PAC–related Activities, in response to data such as these, the safe motherhood program has worked to increase the availability of high-quality, integrated, safe motherhood services. PRIME began in the three most advantaged regions of Ghana. In 2000, PRIME moved on to three more disadvantaged regions: the Northern, Upper East, and Upper West (see table 1 for the significant differences between these two groups). In the needs assessment of five components of safe motherhood (safe delivery, antenatal care, postnatal care, postabortion care, and family planning), PRIME concluded that a “review of findings of performance for RRTs and service providers performance in each region showed that there are no major differences in the performance of RRTs and service providers between the regions” (the Northern, Upper East, and Upper West). The assessment is rich in data; highlights include the following:

- Relatively few physicians were working in these regions. The majority of providers at higher levels were midwives; at the health-center level, they were primary-level providers (community health nurses, traditional birth attendants, and community-based agents).

- Most of the safe motherhood personnel had not received training in safe motherhood areas, such as emergency obstetric care, PAC, or family planning.

- Numerous human resource management issues were identified, including the lack of job descriptions for RRTs, lack of a formal supervisory system, and inadequate transport, training materials, and funding to conduct training.

- Of service providers, only 7 percent (Upper East), 19 percent (Northern), and 36 percent (Upper West) were able to perform MVA.

The report presents numerous interventions to address the problems and illustrates the difficulties of human resource development and management in a low resource country. PRIME is working to upgrade regional training and support teams and to establish supervision systems and tools.
**PRESERVICE TRAINING**

Preservice training in postabortion care is reportedly taking place within the regular curriculum for doctors (general and specialists) in Ghana. Preservice nurse-midwife training includes postabortion family planning and recognition of signs and symptoms of incomplete abortion complications, but does not include training in MVA. Most key informants believed that nurse-midwives should have additional clinical experience before they are trained in MVA technique. This attitude may reflect an overemphasis on MVA procedure and underplay their role in stabilizing and referring patients appropriately, as well as their roles as providers of family planning and other reproductive health services.

**INSERVICE TRAINING**

As indicated, PAC training in Ghana has largely occurred through the 3–week inservice training of the safe motherhood clinical skills program. For this reason, training appears to focus on the emergency treatment of complications rather than the complete postabortion care package. For example, in a follow up and evaluation of RRTs and providers in the first three regions addressed by the MOH and PRIME, PAC clinical skills were evaluated only in four areas of MVA: control of pain and anxiety, preparing the MVA syringe, performing the MVA procedure, and postprocedural steps.

In the follow-up assessment in all five areas of safe motherhood, both RRTs and service providers showed more positive scores than they had at either pretesting or posttesting. RRTs are not, however, master trainers; the evaluation team decided that of a maximum score of 100 percent, 80 percent would be the cut-off score. The RRT mean score at follow up was 87 percent (compared with 73 percent at pretest). Unfortunately, because the PAC baseline skills assessment and follow-up evaluation assessment were not based upon the same instrument or criteria, they could not be compared. The report does present data on other skill areas that might provide insight both on the RRTs’ skills and upon the skills of service providers they had trained.

<table>
<thead>
<tr>
<th>Decontamination, Cleaning and High-Level Disinfection</th>
<th>Management of Postpartum Hemorrhage Using External Bimanual Compression</th>
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</thead>
<tbody>
<tr>
<td>RRT</td>
<td>Trained Providers</td>
</tr>
<tr>
<td>97%</td>
<td>74%</td>
</tr>
</tbody>
</table>

The report notes that of the 28 sampled trained service providers, 10 had provided MVA following their training in the several months following their training.
PAC TECHNICAL PERFORMANCE ISSUES

Low Caseload Volume for Training

As noted above, data were not available for an assessment of PAC–specific training. Training for postabortion care within a safe motherhood clinical skills program, however, reportedly requires additional time to allow for the acquisition of skills for the MVA procedure. RRTs and service providers reported to the team that although training sites may have a sufficient caseload volume for safe motherhood training in general, they may not have a sufficient volume for the treatment of postabortion complications. In one hospital, the RRT, a physician, indicated that he was unwilling to certify a recent group of nurse-midwives as being competent because they had had insufficient MVA clinical practice at his district hospital.

Sufficient clinical MVA practice in decentralized training is an important consideration, with subsequent logistic and cost implications for in-service training in postabortion care. The benefits of decentralized training include fostering regional ownership, easier monitoring and evaluation, and more individualized training with fewer trainees. However, it is inadequate to certify providers as competent without their mastering competencies through practice with a minimum number of actual cases.

Low Caseload Volume after Training

The issue of low caseload for training in a decentralized safe motherhood training approach is exacerbated by nurse-midwives having a low caseload volume after training in their clinical practice. In the PRIME baseline survey, the average maternity (private midwife practice) had received less than one postabortion client in the previous 6 months. The majority of midwives interviewed by the team indicated that since training, they had received relatively few clients a year. There were exceptions, however; one successful nurse-midwife in a small town reported having received 12 PAC clients in the first 8 months of 2001.

Time Away from Work

In-service training, which involves taking service providers away from their duty station in a country of scarce human resources and overburdened service personnel, has real opportunity costs. It is difficult to give staff the time needed to attend training, given that other service providers, already overburdened, will have to increase their caseload. Although 2–3 weeks is a minimal amount of time to learn all the skills involved in safe motherhood (and PAC), that departure will affect service delivery at their site. As the PRIME report noted in the assessment discussed above, one administrator noted on the departure for staff for in-service training, “Two weeks ago, we had to run the whole unit with only two midwives, and they had to stay on for the second shift for which they were not paid.”

Commitment of superiors is, therefore, an important issue. One lesson learned from the PRIME experience is that regional and district directors need to be involved in the training in some way, otherwise they would be unwilling to allow staff to attend training and unwilling to support them upon their return.
VI. APPROPRIATE TREATMENT OF COMPLICATIONS

Providers described three scenarios for treatment of incomplete abortion. For women with inevitable abortion, women who presented were told to return home and rest. Some women with incomplete abortion required only manual removal of the products of conception from cervical os or vagina with forceps. Those clients presenting with an incomplete abortion and without severe complications (such as uterine perforation or cervical tears or lacerations that could be seen by the provider) and who were within the appropriate gestational age (under 12 weeks) were treated with MVA and standard pain management. Those with later gestational ages (depending on the level and experience of the provider) were either referred to the next higher level or, in hospitals, they were treated with sharp curettage in a surgical theater.

PAC providers stated that verbacaine, or verbal anesthesia, was the primary method of pain management. This was supplemented, as needed, by paracetemol or pericervical block with xylocaine, or a suppository. In one major teaching hospital, xylocaine block is used during training but not in the routine provision of MVA services. The hospital tried to conserve resources for economic reasons and because of the medical belief that the block was unnecessary and entailed some risk to the patient.

At individual clinics, nurse-midwives had patients with diverse complications. One patient attempted self-induced abortion at 30 weeks and came to the nurse—who delivered and resuscitated a premature infant. Another patient had an unexpected amount of hemorrhage; the nurse started intravenous fluid and accompanied the patient to the hospital. In several clinics were PAC records indicating that the patient had a molar pregnancy.

Ideally, PAC would be provided 24 hours a day, 7 days a week, and a woman would be able to return home if she had no further complications within a few hours. The team was unable to determine to what extent the women received such care in public facilities. The major teaching hospital scheduled all MVA procedures from 3 to 5 p.m. each day; a few women might leave that evening, but most spent the night. At a second major hospital, the team only saw records for inpatient PAC clients; the records for outpatient clients were not made available.

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This means that women receive verbal counseling and reassurance but generally no medication to manage pain.
VII. EQUIPMENT, SUPPLIES, AND MEDICATIONS

TREATMENT OF COMPLICATIONS

While MVA equipment was approved by the MOH as an essential item in 2000, it is not widely available, according to providers trained in PAC. Most trained providers were given one or two sets of equipment after training, but did not know where or how to obtain more once these wore out or were broken or lost. One group of midwives who had been recently trained reported not receiving or being able to purchase MVA kits (this group was the same group about whose technical competence there were questions).

The chief teaching hospital in Accra has only three MVA sets; it cycles the three sets each day for about 8 patients. It has no MVA sets in stock. It has obtained MVA equipment through donor-supported training, or it may request them from FPD in the MOH, or the department may request them directly from the MOH.

While individual physicians imported MVA equipment from the United Kingdom, Yugoslavia, the United States, and possibly elsewhere between the mid–1970s and 1993, procurement of MVA equipment from Ipas for training began in 1993. In addition to the Ipas MVA equipment, physicians informed us that the British Rocket syringe, Nigerian MVA, and other syringes have been used. In June 2001, one medical equipment store in Kumasi sold 10 Ipas MVA kits to 10 of 47 trainees at cedis 500,000 each—but could not obtain MVA kits for the others. The nurse-midwives did not view this as an exorbitant charge for life-saving equipment. While the Nigerian MVA equipment appears to have been discredited and MVA kits may be infrequently and unpredictably in the open market, the market potential should be evaluated and international standards for quality equipment should be established.

Pain management medication appears to be available in Ghana. Public sector providers may have a financial disincentive to offer pain treatment to patients if not specifically requested, which is likely to be uncommon.

FAMILY PLANNING

At most clinics and the one pharmacy visited, some contraceptives were present but the stock of at least one method of contraception was absent.

PRIME II has conducted research that has demonstrated a clear need for and acceptability of emergency contraception as one of the contraceptive options. Adding it should help reduce repeat abortions.
VIII. SCALING UP AND SUSTAINABILITY

Ghana appropriately has begun PAC training in the most advantaged regions of the country. In those regions, PAC, as a program with three elements, faces the following challenges:

- assuring that PAC is treatment of complications, family planning services, and linkages with other RH services;
- assuring that trainees in decentralized safe motherhood life-saving skills receive enough MVA clinical training to become competent;
- establishing PAC records in outpatient public sector facilities that clearly separate the treatment of complications from other procedures;
- determining how the public sector can train providers more rapidly than it is, while still assuring quality; and
- facilitating the optimal use of trained midwives in public sector hospitals so that access to PAC services is available 24 hours a day, 7 days a week.

As the Ghanaian program expands into geographic regions that pose even greater challenges, it might be useful to have a plan that has the following characteristics:

- resolves the challenges identified above,
- assures a sustainable supply of MVA equipment in the public sector and rationalizes donations of equipment in the private sector to providers that are competent and that potentially have a caseload volume,
- develops public sector facilities, which usually have the highest volume of patients; and
- maps out realistically national objectives for expanding access and improving quality.
IX. CONCLUSIONS

The PAC program in Ghana offers a number of lessons of the low-resource country context in initiating and scaling up a successful PAC program.

- Ghana illustrates the challenge of maintaining a PAC focus when PAC is integrated into safe motherhood and decentralized.

- Ghana illustrates the challenges of establishing PAC, with its three elements, in a country with a very weak national family planning program. It is difficult to have a strong family planning component in PAC when providers have not received previous training in family planning, when they themselves have misconceptions and fears, and when demand is low in the community.

- Ghana illustrates the importance and potential impact that training other cadres (beyond doctors) can have in a low resource country with regions that are even more underserved than the national average. Nurse-midwives are in public sector facilities throughout the country and can be critical providers of PAC services if they receive sufficient training and should doctors allow them to provide MVA in hospital situations.

- The Ghanaian program illustrates the importance of having good data about abortion and its morbidity and mortality and good record keeping on PAC services themselves.

  - Macro International supported surveys—DHS and SPA—could obtain more relevant information (e.g., DHS on induced abortion, spontaneous abortion, and treatment; and SPA on the availability of MVA equipment in health facilities).

  - National hospital reports on maternal mortality could be analyzed by cause of death by locale and by personal characteristics, including age and marital status. An international team could collaborate with the Ghanaian MOH and others to provide training and assistance to improve the completeness and accuracy of maternal death data.

  - It is essential for USAID–supported activities that data segregate treatment on postabortion complications from other procedures. Ghana lacks but could also develop abortion surveillance for legal abortions performed in hospitals.
APPENDIX A

HISTORY OF PAC–RELATED ACTIVITIES IN GHANA
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the mid–1970s to 1994</td>
<td>Individual physicians used vacuum aspiration equipment, including the Rocket syringe from England</td>
</tr>
<tr>
<td>Before 1993</td>
<td>Some MVA kits were brought in from Nigeria</td>
</tr>
<tr>
<td>1993–current</td>
<td>Ipas is the primary provider of MVA equipment for training</td>
</tr>
<tr>
<td>1992–94</td>
<td>Development of consensus document on safe motherhood policy for Ghana</td>
</tr>
<tr>
<td>1994</td>
<td>Cairo Conference (ICPD)</td>
</tr>
<tr>
<td>March 1995</td>
<td>Ghana began safe motherhood initiative</td>
</tr>
<tr>
<td>1995–96</td>
<td>UNICEF bought Ipas kits for the safe motherhood initiative</td>
</tr>
<tr>
<td>1995–1996</td>
<td>GSMF</td>
</tr>
<tr>
<td>1999</td>
<td>MVA kits added to MOH list of equipment, but unaware that MOH has ever purchased equipment (Taylor)</td>
</tr>
<tr>
<td>1997</td>
<td>PPAG/FHI conduct feasibility study comparing emergency contraception on demand or in advance as a contraceptive option</td>
</tr>
<tr>
<td>2000</td>
<td>PRIME II proposes feasibility study to evaluate linking emergency contraception with PAC services</td>
</tr>
</tbody>
</table>
APPENDIX B

PERSONS CONTACTED
PERSONS CONTACTED

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ANYIMAM HEALTH CENTRE
Happy Akpeatsi, Nurse-midwife

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Dr. Bonku
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APPENDIX G

POSTABORTION CARE IN NEPAL

CASE STUDY
The complete version of this document is available printed or online (POPTECH Publication Number 2001–024–007). To review and/or obtain a document online, see the POPTECH website at [www.poptechproject.com](http://www.poptechproject.com). Documents are also available through the Development Experience Clearinghouse (www.dec.org). Printed copies and additional information about this and other POPTECH publications may be obtained from:

The Population Technical Assistance Project  
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Washington, DC 20005  
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## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADRA</td>
<td>Adventist Development and Relief Agency International</td>
</tr>
<tr>
<td>ANM</td>
<td>Auxiliary nurse-midwife</td>
</tr>
<tr>
<td>CPR</td>
<td>Contraceptive prevalence rate</td>
</tr>
<tr>
<td>CREHPA</td>
<td>Center for Research on Environmental Health and Population Activities</td>
</tr>
<tr>
<td>D&amp;C</td>
<td>Dilation and curettage</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
</tr>
<tr>
<td>EOC</td>
<td>Emergency obstetric care</td>
</tr>
<tr>
<td>FHD</td>
<td>Family Health Division (MOH)</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal year</td>
</tr>
<tr>
<td>GTZ</td>
<td>German Technical Cooperation</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human immunodeficiency virus/acquired immunodeficiency syndrome</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, education and communication</td>
</tr>
<tr>
<td>IUD</td>
<td>Intrauterine device</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MVA</td>
<td>Manual vacuum aspiration</td>
</tr>
<tr>
<td>NFCC</td>
<td>Nepal Fertility Care Center</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td>NSMP</td>
<td>Nepal Safe Motherhood Program</td>
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<tr>
<td>PAC</td>
<td>Postabortion care</td>
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<tr>
<td>QoCMC</td>
<td>Quality of Care Management Center, MOH</td>
</tr>
<tr>
<td>RTI</td>
<td>Reproductive tract infection</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually transmitted disease</td>
</tr>
<tr>
<td>TUTH</td>
<td>Tribhuvan University Teaching Hospital</td>
</tr>
<tr>
<td>UMN</td>
<td>United Mission of Nepal</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WHO</td>
<td>World Health Organization</td>
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ENDNOTES
I. NEPAL ENVIRONMENT

DEMOGRAPHIC AND HEALTH DATA

Located between India and China, Nepal is a landlocked country of diverse geography, cultures, climates, traditions, and languages. A large percentage of the population lives in remote areas, without access to basic infrastructure or services. Only 37 percent of households own radios and fewer than 6 percent have televisions.1

The population of Nepal is about 23 million, with 781,686 live births occurring every year. The official infant mortality rate is 64.4/1,000 live births. The total fertility rate is 4.1, with a modern contraceptive prevalence rate (CPR) for married women of 35.4 percent. The population has more than doubled during the last 35 years. Life expectancy is one of the lowest in the world: 53.5 years for women and 55 years for men.1

Maternal deaths occur frequently in Nepal. Reported maternal mortality rates vary from 539/100,000 live births to 1,500/100,000 live births. With a lifetime risk of maternal death of one in 10, approximately 4,500 women a year (12 each day, or 1 every 2 hours) die of pregnancy-related complications, the vast majority of which could be prevented.4

Nepal’s high maternal mortality and morbidity rates are due to a number of factors, including early, closely spaced, and repeated pregnancies; poor health and nutritional status of women; low utilization and availability of adequate health services; harmful traditional beliefs and practices; the low status and literacy levels of women (28.6 percent); the cost of and willingness to pay for essential obstetric care (EOC); and the lack of transportation and inaccessibility of health services (including distance). The vast majority of births (88.9 percent) take place at home, often under unhygienic conditions and with untrained attendants. Physicians attend only 7.8 percent of all births and nurses and auxiliary nurse-midwives (ANMs) attend 3.1 percent.

Spontaneous and induced abortions are a significant cause of maternal mortality and morbidity in Nepal. Ministry of Health (MOH) statistics for 1999–2000 show that 5,670 abortion cases were treated at MOH facilities. (The MOH postabortion care [PAC] coordinator stated during an interview that cases are probably underreported.) A 1998 maternal mortality and morbidity study carried out by the Family Health Division (FHD) of the MOH attributed 5.4 percent of maternal deaths to abortion; however, other authorities cite figures between 13 and 30 percent.5 A study conducted at five major hospitals outside the Kathmandu Valley by the Center for Research on Environmental Health and Population Activities (CREHPA)6 in 1999 showed that 20–48 percent of total obstetric and gynecologic admissions were due to complications of abortion. In the Thapathali Maternity Hospital in Kathmandu, where over 1,400 women are treated annually for incomplete abortion (there are 16,000 annual deliveries), 61 percent of the total obstetric and gynecologic admissions in 1999 were for abortion complications.

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The number of women of reproductive age is expected to increase by 71 percent by the year 2011, which will require a significant expansion of reproductive health services, including PAC.

POLICY ENVIRONMENT

Induced abortion is illegal in Nepal and can result in prison sentences for both the practitioner and the woman. Despite the risk of imprisonment, induced abortion is widely practiced, as evidenced by hospital admission rates for abortion-related complications. In 1995, USAID provided financial and technical support to establish a PAC program at the Thapathali Maternity Hospital in Kathmandu under the auspices of the MOH. In December 1997, the MOH national reproductive health strategy was formally adopted and the prevention and management of complications of abortion was named the fourth of eight priority services. The other seven priorities are family planning; safer motherhood (including newborn care); child health; reproductive tract infections (RTIs), sexually transmitted diseases (STDs), and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS); prevention and management of infertility; adolescent reproductive health; and problems of elderly women, particularly cancer treatment. PAC is also a stated priority in the MOH safe motherhood strategy and in the ninth national health plan. A subcommittee for safe motherhood, which began a year ago and that meets once a month, has helped PAC coordination among donors and the MOH.

The director of the MOH/FHD reported that the division strongly supports the improvement, strengthening, and expansion of PAC services. A full-time designated PAC coordinator, funded by USAID, provides technical and administrative support within the FHD. PAC is considered an integral part of the Ministry’s Safe Motherhood Program, which is supported by the Department for International Development (DFID)/Options, and which is emphasized as an essential element of EOC. The pilot program to train nurses as providers of manual vacuum aspiration (MVA)/PAC is considered successful, and MOH/FHD strongly supports the expansion of PAC services through this level of providers.

STRUCTURE OF HEALTH SERVICES

Half to three fourths of the population depend on the public sector health care delivery system. The MOH was created in 1956; modern health services in Nepal consisted of a few urban hospitals and rural dispensaries until the 1960s. When the MOH reorganized in 1987, it divided the country administratively into five regional health directorates with 14 zones, 75 district public health offices, 3,995 village development committees, and 36 municipalities. The district public health offices are responsible for providing preventive and some curative services through the five regional hospitals, 11 zonal hospitals, 74 district hospitals, 117 primary health care centers (headed by doctors), 754 health posts, and 3,187 subhealth posts (each staffed by an auxiliary health worker and a female maternal and child health worker). The public sector also has a network of dispensaries

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and clinics that provide traditional medicine services through the Ayurvedic, Unani, and homeopathic systems.\footnote{[3]}

Although only 11 percent of the population is urban, the major health facilities and personnel are concentrated in the capital city of Kathmandu and a few other cities. The rural areas, especially in the midwestern and far western development regions and the hills and mountains, are underserved.\footnote{[4]} A 1997 MOH report states that at least one third of the posts for health assistants, auxiliary nurse-midwives, and village health workers are unfilled and that many of the posts (health posts and subhealth posts) reported to be filled are actually vacant (30–50 percent). The doctor–population ratio is 1:21,646, which is low even by international comparisons for other low-resource countries.\footnote{[5]}

Government revenues finance only 50 percent of total public sector health spending with the difference being provided by external assistance. The share allocated to primary health care has declined in recent years.\footnote{[6]} Public sector spending on health care is approximately US $2.30–$3.10 per person. The planning, provision, and delivery of health services are accomplished on an ad-hoc basis, resulting in a serious lack of adequate infrastructure, human resources, and the delivery of essential basic health services. Many health facilities lack service providers as well as basic drugs and medical supplies. Approximately 70 percent of overall health expenditure is private. However, 70 percent of expenditures are spent in the public sector; there are significant cost recovery and fee payments to public providers of health care.\footnote{[7]}

The private sector is small but has grown in recent years and currently includes 9 private hospitals, 74 private nursing homes, 2,000 private clinics, and more than 8,000 pharmacies (MOH 1997). Of the 18,000 registered nongovernmental organizations (NGOs), approximately 250 provide some type of health care services (e.g., family planning, tuberculosis and leprosy programs, child survival interventions, and health education). The private sector and NGOs are unregulated and their activities are not well integrated into the public sector. The four hospitals run by the United Mission of Nepal (UMN), which are located in the central, western, and eastern regions, provide over 30 percent of the hospital care for Nepal.\footnote{[8]} The UMN has so far not participated in the PAC program, reportedly due to concerns that it would be perceived as abortion services.\footnote{[9]}

Professional health personnel providing women’s health care services in Nepal include doctors and staff nurses. Auxiliary nurse-midwives also provide a significant proportion of women’s health services in Nepal in both hospital and primary care settings. Due to a shortage of physicians available to perform MVA at the PAC program sites, in 1999, staff nurses were included as service providers in PAC training. However, there is also a significant shortage of staff nurses in Nepal, especially in rural areas.

EVOLUTION OF PAC

The goal of the PAC program is to contribute to the reduction of death and disabilities of women; the objective is to prevent and manage abortion-related complications by providing comprehensive PAC services throughout the health care system. After a year of planning, the PAC program was initiated in Nepal with U.S. Agency for International Development (USAID) funding at Maternity Hospital in Kathmandu in 1995, with technical support from JHPIEGO and EngenderHealth (then known as AVSC). (Table 1 on the following page summarizes the key events in the evolution of PAC in Nepal.) Maternity Hospital in Kathmandu is the nation’s largest facility providing inpatient and outpatient obstetric and gynecologic services. Management of the hospital is a joint public/private partnership partially administered through the MOH, and is still the only training site for PAC services in Nepal.

The PAC program is now in the process of expanding to 19 hospitals in 15 districts in a phased manner. The plan is to expand to five new sites in the next year and train 40 additional staff (20 doctors and 20 nurses). The criteria for selection of PAC sites include expressed interest and commitment of the institution and the ability to meet MOH criteria, a significant number of incomplete abortion cases admitted to the hospital, family planning counseling and services provided to incomplete abortion cases, proper maintenance of infection prevention practices, and the availability of required infrastructure at the facility. Priority is given to districts where the National Safe Motherhood Program (NSMP) and EOC services are being funded by DFID, the United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO). In addition, there are now two PAC sites at private sector hospitals under development. The MOH has assumed responsibility for managing all aspects of the PAC program, including planning, training, monitoring, and follow up in both the public and private sectors.

SOURCES OF INFORMATION FOR CASE STUDY

Sources of information for this case study include interviews with staff from the MOH, JHPIEGO, EngenderHealth, and the six facilities visited (see appendix A for list of persons contacted) as well as observation of these facilities and review of service statistics. These hospitals represented both the public and private sectors and included all levels of hospitals in Nepal: district, zonal, regional, and central. Team members observed two procedures at one hospital (Western Regional Hospital, Pokhara). A number of documents were also reviewed (see appendix B).
<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1995</td>
<td>On May 28, PAC was initiated at Maternity Hospital in Kathmandu.</td>
</tr>
<tr>
<td>April 1997</td>
<td>PAC training began for other institutions:</td>
</tr>
<tr>
<td></td>
<td>- TUTH, Kathmandu</td>
</tr>
<tr>
<td></td>
<td>- Western Regional Hospital, Pokhara</td>
</tr>
<tr>
<td>1998</td>
<td>Additional sites trained:</td>
</tr>
<tr>
<td></td>
<td>- Adventist Development and Relief Agency International (ADRA), Banepa</td>
</tr>
<tr>
<td>1999</td>
<td>Additional sites trained:</td>
</tr>
<tr>
<td></td>
<td>- Military Hospital, Kathmandu</td>
</tr>
<tr>
<td></td>
<td>- Baglung District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Surkhet District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Seti Zonal Hospital, Kailali</td>
</tr>
<tr>
<td>April 1999</td>
<td>Staff nurses begin to be trained to be service providers for MVA. 2000 Additional sites trained: 2000</td>
</tr>
<tr>
<td></td>
<td>- Lumbini Zonal Hospital, Butwal</td>
</tr>
<tr>
<td></td>
<td>- Bheri Zonal Hospital, Nepalgunj</td>
</tr>
<tr>
<td></td>
<td>- Bharatpur District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Dhading District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Hetauda District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Bhaktapur District Hospital</td>
</tr>
<tr>
<td></td>
<td>- Narayani Zonal Hospital, Birgunj</td>
</tr>
<tr>
<td>December 2000</td>
<td>Memorandum of understanding among FHD, Nepal Fertility Care Center, Quality of Care Management Center, JHPIEGO, and EngenderHealth, signed by all parties</td>
</tr>
<tr>
<td>Dec. 2000–April 2001</td>
<td>JHPIEGO and FHD conduct performance evaluation at nine hospitals.  JHPIEGO and FHD conduct performance evaluation at nine hospitals.</td>
</tr>
<tr>
<td>July 2001</td>
<td>Total number of providers trained:</td>
</tr>
<tr>
<td></td>
<td>- 52 physicians, 27 staff nurses as PAC providers, and 42 PAC assistants (including staff nurses and ANMs)</td>
</tr>
</tbody>
</table>
II. KEY STAKEHOLDERS

NATIONAL INSTITUTIONS

Family Health Division (FHD), Ministry of Health, His Majesty’s Government of Nepal coordinates the PAC program in Nepal, with technical assistance provided by JHPIEGO and EngenderHealth (see the following section). The program was fully handed over to the FHD in 1999.

Quality of Care Management Center (QoCMC) has recently incorporated PAC into ongoing supervision. This activity is supported by USAID through EngenderHealth.

National Health Training Center provides PAC training and is fully funded by USAID with technical support from JHPIEGO.

Nepal Fertility Care Center (NFCC) manages the MVA equipment.

Center for Research on Environment Health and Population Activities: Although not directly involved in PAC, it has conducted research on the magnitude of the problem of postabortion complications at hospitals in Nepal.

A memorandum of understanding among FHD, NFCC, QoCMC, JHPIEGO, and EngenderHealth regarding the PAC program in Nepal, signed in December 2000, was to take effect from May 15, 2000, until October 31, 2001.

USAID, COOPERATING AGENCIES, AND OTHER DONORS

USAID Role

USAID has provided leadership for PAC services in Nepal since 1995. USAID first funded PAC activities in Nepal through JHPIEGO and EngenderHealth in 1995, and continues to be very supportive of the program in Nepal. (See the section, PAC Investment, for the significant support USAID has given PAC.)

Activities of Cooperating Agencies

JHPIEGO and EngenderHealth are the primary cooperating agencies involved in PAC in Nepal:

- JHPIEGO provides technical assistance in training, funds 12–13 staff positions at Maternity Hospital in Kathmandu for training and service delivery, provides equipment, assists in establishing and monitoring new sites, and gives additional support to the MOH in all aspects of implementing the PAC program.
- **EngenderHealth** provides support to the PAC program through full-site infection prevention training, gives technical assistance on follow-up/supervision visits after training, and assists in establishing and monitoring sites. It recently began supporting PAC services in private sector facilities.

**PAC Investment**

USAID expenditures in Nepal for PAC have been significant over the past few years, largely because of a high level of interest from the Mission and a willingness to fund the expansion of PAC services in Nepal. The two primary Mission-funded CAs are JHPIEGO and EngenderHealth. The Mission has also given money to the MOH directly for training PAC providers and assistants. While funding has been integrated with other programming, JHPIEGO estimates that it has spent approximately $300,000 from USAID/Nepal field support funds since 1995 to implement PAC programs. JHPIEGO estimates that it spent approximately $25,000 in USAID/Nepal field support funds in fiscal year (FY) 2000 and $18,000 in FY 2001 to support the PAC program.

EngenderHealth spent $27,500 from USAID/Nepal field support funds in FY 1996 for PAC and $1,500 in FY 1999. Expenditures for FY 2000 and 2001 have been steady at the level of about $5,000. To date, there have not been any core funds from EngenderHealth for its PAC activities.

The Mission has also given money directly to the MOH in order to support PAC since 1998. This support has consistently been at $5,000 per year since FY 1998 and has been designated solely for training courses in PAC.

**Other Donors**

**DFID** provides support to the Nepal Safe Motherhood Program (NSMP) through Options, working in nine districts with PAC services currently operating at the initial three sites.

The **German Technical Cooperation (GTZ)** supports safe motherhood work in three districts but does not support any PAC services.

**UNICEF** supports safe motherhood work in four districts and plans to include PAC in the EOC units, using the same model as DFID.

**Private funding** to EngenderHealth has allowed expansion to two private sector PAC sites.
III. ACCESS TO SERVICES

SOCIAL AND CULTURAL ACCESS

Decisions to use health services under normal circumstances or when complications occur are usually made by a woman’s husband or mother-in-law; a woman’s health is rarely seen as a priority within the family. Many families are unable or unwilling to pay for the cost of transportation and treatment when pregnancy-related complications occur. Cultural barriers to abortion are strong, with induced abortion usually associated with shame and spontaneous abortion often associated with guilt (i.e., that the woman had a role in causing it). Induced abortions are available in private clinics for high prices and through traditional practitioners who are less expensive than physicians or nurses but who are probably associated with higher complication rates.

GEOGRAPHIC ACCESS

A high percentage of the population lives in remote, rural areas without access to basic health or other services. The mountainous terrain and isolated communities between large river systems in the Terai make it particularly difficult to reach essential health services, especially during emergencies. Villages are often not accessible by roads navigable by vehicles; in many areas of the country, women and their families have to walk several days in order to reach a health facility. One doctor emphasized the need to extend PAC services to the primary health center level; if not, some women will have to walk for 2 or 3 days to obtain services. As he said, “they have the problem, but don’t have the services.”

SEVERITY OF COMPLICATIONS

A 1998 hospital-based study conducted by CREHPA showed that the majority of women admitted for abortion complications were diagnosed with severe trauma, perforation of the uterus, infection, septic shock, and severe hemorrhage. More than half the women required blood transfusions and were hospitalized for 3–7 days. The average cost of treatment per woman was $62. According to a 1995 study by McIntosh and Tietjen, 40 percent of women suffer from complications after an abortion, such as infertility and chronic pelvic pain.

STRUCTURE OF HEALTH SERVICES

Twenty-four hour access to emergency obstetric services was only recently made available in Nepal in the public sector at Maternity Hospital and at the Baglung District Hospital. Most facilities in practice still have limited service hours, primarily due to chronic lack of staff (especially nurses). Other administrative barriers to PAC access include changing and weak hospital management, poor provider attitudes towards public sector clients (lack of incentives to treat clients well in public sector facilities), lack of

adequate infrastructure, and lack of basic essential diagnostic, screening, and other health services (such as laboratory services and blood supply). Despite barriers and limitations to services, public health managers and clinicians alike are committed to making PAC services increasingly available in Nepal. The training of staff nurses to perform MVA and provide PAC services is an example of the commitment of the MOH to expand access to PAC services.


IV. INFORMATION, COUNSELING AND LINKAGES

FAMILY PLANNING

The use of family planning has soared over the last 15 years, from a contraceptive prevalence rate (CPR) of 15 percent in 1986 to almost 40 percent today. Nevertheless, there is still very significant unmet need, particularly among youth and in rural areas, as the following tables demonstrate.

Table 2  
Percentage of Women Using Family Planning in Nepal

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Sterilization</td>
<td>15.0</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>6.8</td>
</tr>
<tr>
<td>Pill</td>
<td>1.6</td>
</tr>
<tr>
<td>Injectables</td>
<td>8.4</td>
</tr>
<tr>
<td>Condoms</td>
<td>2.9</td>
</tr>
<tr>
<td>Norplant</td>
<td>0.6</td>
</tr>
<tr>
<td>Intrauterine device (IUD)</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35.4</strong></td>
</tr>
</tbody>
</table>

*Source: DHS 2001, preliminary data*

Table 3  
Percentage of Women with an Unmet Need for Family Planning, by Age and Intent

<table>
<thead>
<tr>
<th>Age</th>
<th>To Space</th>
<th>To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–19</td>
<td>33</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>20–24</td>
<td>24</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>25–29</td>
<td>11</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>30–34</td>
<td>4</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>35–39</td>
<td>1</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>40–44</td>
<td>&lt;1</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>45–49</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>16</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

*Source: DHS 2001, preliminary data*

Table 4  
Percentage of Women with an Unmet Need for Family Planning by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>To Space</th>
<th>To Limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>7</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Rural</td>
<td>12</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>16</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

*Source: DHS 2001, preliminary data*

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\(^1\) DHS 2000.
PAC training has emphasized family planning counseling and the importance of linking this to emergency treatment. However, this is meeting with mixed success at the facilities, with some sites doing very well while others provide FP to very few PAC patients. It is very rare for dilation and curettage (D&C) patients to receive any FP counseling, highlighting the strong distinction between MVA patients and D&C patients, who go through completely different tracks in the hospitals.

Interestingly, one site (Baglung District Hospital) had a very different setup, with both MVA and D&C performed in the same location (the labor room). The same register was used for both; on the register labeled ‘MVA Register,’ one provider had crossed this out and written ‘PAC (MVA + D&C).’ This type of setup should be encouraged wherever possible. If not, this more comprehensive view of PAC could be facilitated by having logbooks in both MVA and D&C rooms (typically D&C is being performed in the operating theater because of the use of general anesthesia) that collect the same standardized information, including FP counseling and method provision. Monitoring visits would then involve looking at both MVA and D&C logbooks, as both are part of PAC. This needs to be addressed to create a more coherent PAC program where any woman treated for postabortion complications receives comprehensive care, whether she is treated with MVA or D&C.

OTHER REPRODUCTIVE HEALTH SERVICES

Linkages with other reproductive services are mentioned sporadically, if at all, rather than in any systematic manner. As in most programs, this element still needs a clear definition, and it needs to be addressed in training, in collection of service statistics and monitoring, and in supervision. There is, however, good promotion for condoms. One sign states, “Condoms protect against unwanted pregnancy and HIV/AIDS/STDs.”
V. INTERACTIONS BETWEEN WOMEN AND PROVIDERS

A needs assessment conducted in three district hospitals by the Nepal Safe Motherhood Program in 1997 found that services were unresponsive to client needs:

- communication between providers and clients was poor,
- PAC services were not provided on a 24–hour basis,
- counseling and referral were not considered essential parts of services,
- clinical protocols were nonexistent,
- blood supply was inadequate, and
- infection prevention practices were poor.

A recent evaluation of nine PAC sites in Nepal conducted by JHPIEGO found that, in general, providers and assistants expressed empathy for women’s circumstances and a desire to see an improvement in their situation. Much of this can be attributed both to USAID’s onsite support to the PAC sites as well as the NSMP and its quality of care model component at each of its project sites. Both USAID’s training and supervision and the quality of care model stress communication and supportive attitudes during provider interactions with clients.

The PAC evaluation team did not observe or hear reports of poor treatment of women by providers during interviews and during the two procedures observed at the regional referral hospital. On the contrary, the provider demonstrated excellent skills in interacting with the women during the MVA (the provider was respectful, reassuring, and communicative throughout both procedures and gave appropriate information in a comforting manner). (It is difficult to make an accurate assessment of interactions between providers and patients receiving PAC services in Nepal given the limited time available for the team to gather information and observe procedures.) Client-oriented care and respectful/sensitive treatment of women during PAC is probably an area that merits continued emphasis during PAC training, monitoring, and supervision.
VI. TECHNICAL PERFORMANCE

TREATMENT OF COMPLICATIONS

The Nepal PAC training program is competency based and has emphasized quality over quantity. Only four providers are trained at one time in order to ensure an adequate number of supervised procedures for students during the initial PAC training. Although this slows the expansion process, providers receive good training in the technical aspects of performing MVA, in counseling for family planning, and in referral for other reproductive health services. All PAC training takes place at Maternity Hospital in Kathmandu. It was hoped that Pokhara Regional Hospital would also become a model PAC training site but that has not happened due to a number of political and logistical factors, including the problem that it does not wish to train staff nurses as primary providers of MVA.

The centralized training model has a number of advantages, including adequate caseload and supervision for PAC students as well as standardized experiences and training approaches. (All PAC providers in Nepal are trained at the same site, under the same conditions, usually with the same instructors.) The disadvantages include a lack of different supervised clinical experiences in a variety of settings (low technology/high technology, resource poor/resource adequate) and the inability to expand PAC services rapidly due to lack of more than one training site.

Since 1999, nurses in Nepal have been trained as PAC service providers on a pilot basis. The program has encountered some resistance from doctors and patients (at Hetauda Hospital, the evaluation team was informed that patients prefer being treated by doctors and will insist if the doctor is around that they be treated only by the doctor). However, acceptance of nurses performing MVA by clients and patients at Maternity Hospital and Baglung Hospital appears to be high, and the evaluations conducted by the NSMP and JHPIEGO regarding quality of performance by nurses and client satisfaction were very positive.

In 1993, a training needs assessment conducted by JHPIEGO at Maternity Hospital in Kathmandu (the current national PAC training site for Nepal) found that women admitted for D&C for incomplete abortion usually had to spend 1 to 7 days in the hospital for treatment and recovery. The hospital has recently begun to provide 24–hour services, with 58 percent of clients presenting with incomplete abortions receiving MVA. Approximately 80 percent of clients arrive at the hospital in the morning and are admitted by 3 p.m. A total of 6,763 women received PAC services between 1995 and December 2000 (almost half were treated with MVA). Nurses are now performing 54 percent of MVAs, and 73 percent of MVA clients accept a family planning method before leaving the hospital. Costs have been reduced by about one third with the introduction of MVA.

At Hetauda Hospital in Nepal’s Central region, PAC training (with MVA) has enabled the 25–bed hospital to offer a life-saving service that it was previously unable to provide.

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1 Hetauda Hospital director.
The hospital’s ability to provide safe D&C services is limited; therefore, before PAC training 10 months ago, the majority of cases were referred to another hospital over 45 minutes away. The hospital currently treats 15–20 postabortion clients a month, with the majority of cases treated with MVA within 2 hours of arrival. Although one nurse-midwife has been trained in MVA, the doctors perform the majority of the procedures. The hospital administrator, who is a doctor, stated during the interview, “patients prefer the doctors to do them.” The cost of MVA is 500 rupees (about $12) in addition to the cost of supplies; however, family planning is provided free of charge.

Baglung Hospital is a 15–30 bed (15 beds officially) referral center for a large area in the hills of western Nepal. The next level of care is available in Pokhara, well over 3 hours away on a difficult road often blocked by landslides. PAC services have been available 24 hours a day since 1998. One doctor and three staff nurses have been trained to perform MVA, with two ANMs trained in PAC as assistants. An average of three to four MVA procedures a month are performed. Health education sessions on PAC are conducted in the outpatient department and blood transfusion and x-ray services are available. The director stated that the community has confidence in nurses performing MVA and that he would like to extend PAC services to the three primary health centers in the district because many clients live 2 to 3 days walk from the hospital health centers. Baglung is also a safe motherhood site with a full-time safe motherhood coordinator, and it appeared to be a model site for both PAC and emergency obstetric care.

Pain management during MVA is not standardized in Nepal and training guidelines leave it up to the discretion of the provider to use an analgesic, sedative, or paracervical block. In practice, MVA is usually performed with verbal anesthesia only. In the JHPIEGO evaluation, the most common response from providers (16 of 22 respondents) when asked about pain management was that verbacaine alone was used. The report’s concluding recommendation regarding pain management is that “PAC providers need to be supported in the use of appropriate pain management and to incorporate routine use of analgesics and antispasmodics. While providers learn pain management during training, they do not always apply this, preferring to give no anesthesia, causing women more discomfort than necessary.” In site visits, many providers mentioned the problem of pain. Although one doctor said that with verbal anesthesia, “usually they tolerate [the pain],” another doctor described an MVA procedure at the hospital as follows: “The woman was crying with pain and moving from here to here. Why should this patient have this pain? I imagined my wife here; why should she be made to feel this pain?”

Training of PAC supervisors is of primary importance for ensuring quality in ongoing programs. There is a need to take the time to train PAC supervisors so that they have the appropriate skills and knowledge to supervise PAC services effectively. The emphasis on training of supervisors could be placed on supervisory skills and the second and third components of PAC along with theoretical knowledge of MVA, but not necessarily requiring clinical competency in MVA. This would shorten the time needed for training to make this more feasible. It is crucial that supervision in PAC be improved and institutionalized.
VII. APPROPRIATE TECHNOLOGIES FOR TREATMENT OF COMPLICATIONS

PAC sites in Nepal vary widely in terms of infrastructure, staff, availability of 24-hour services, and diagnostic and treatment capabilities (availability of blood and essential laboratory and other services). The recent evaluation of nine PAC service sites in Nepal conducted by JHPIEGO found that 75 percent of providers were competent in triage, initial infection prevention, client comfort assured, and MVA procedure. However, MVA units appeared to be underutilized and many clients eligible for MVA were being sent to the operating room for D&C. Additional improvements in scheduling, staffing, and overall case management were recommended.
VIII. EQUIPMENT, SUPPLIES, AND MEDICATIONS

TREATMENT OF COMPLICATIONS

There were an adequate number of MVA kits at all of the sites visited, which were provided through JHPIEGO via the NFCC through non–USAID sources. When this mechanism is no longer available and the current allotment of kits is depleted, it is unclear how future supply will be maintained.

The situation for other supplies varies at the different hospitals visited. In some, all supplies for the procedure and for family planning appear to be available, but at other sites (Hetauda District Hospital, for example), patients have to bring various consumable supplies before receiving services.

FAMILY PLANNING

At the sites visited, it was encouraging to see that family planning methods are available where women are treated for incomplete abortion. This greatly facilitates acceptance of methods for those who are counseled and choose to accept a method at that time. At two of the hospitals visited, there was a column in the record to note the name of the provider of the family planning counseling. This has now been added to the standard information to be collected in registers. This should be incorporated into all logbooks, as it helps to emphasize the importance of this aspect of PAC, improves accountability, and gives staff credit for this important work.

OTHER REPRODUCTIVE HEALTH SERVICES

Linkages with other reproductive health services are very weak or nonexistent; no data were collected on the state of services in Nepal.
IX. SUMMARY OF ELEMENTS OF PAC

TREATMENT OF COMPLICATIONS

Postabortion care in Nepal has been introduced as a medical program and, in general, remains too strongly identified with MVA. This is not universally true, however. In Baglung District Hospital, for example, the doctor explained, “we are not differentiating between MVA and D&C, but we are giving homogeneous counseling.” Staff from this facility should share their experiences with other facilities.

Table 5
Service Statistics from Maternity Hospital
May 28, 1995 to December 31, 2000

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total Gynecologic Admissions</td>
<td>17,808</td>
</tr>
<tr>
<td>Total for PAC</td>
<td>6,763 (37.8 percent of total gynecologic cases)</td>
</tr>
<tr>
<td>Total MVA in MVA unit</td>
<td>3,251 (48.1 percent of total PAC)</td>
</tr>
<tr>
<td>MVA in Operating Theater</td>
<td>118 (1.7 percent of total PAC)</td>
</tr>
<tr>
<td>D&amp;E in Operating Theater</td>
<td>3,394 (50.2 percent of total PAC)</td>
</tr>
<tr>
<td>Family Planning Acceptance</td>
<td>2,256 (70 percent)*</td>
</tr>
<tr>
<td>Total Patients Admitted in Ward after MVA</td>
<td>1,570 (23.2 percent)</td>
</tr>
</tbody>
</table>

*It is important to note that in these statistics the family planning acceptance is only calculated for MVA. Although a figure of 70 percent is cited in the statistics, this completely leaves out the D&C (referred to here as D&E) patients. Since this is the model site where all providers in the country are trained, the association of PAC with MVA to the exclusion of D&C patients is reinforced in the training.

FAMILY PLANNING

Although the second element has also been emphasized, there is still a need to strengthen family planning linkages, particularly for D&C patients, who seldom receive family planning counseling at most facilities, including Maternity Hospital.

OTHER REPRODUCTIVE HEALTH SERVICES

The third element of PAC—linkages with other reproductive health services—is mentioned only sporadically.

There has been no work in Nepal in the potential fourth element of the PAC framework, that is, work with the community. There have been no specific efforts to educate the community about the services; instead there is reliance on word of mouth. As one doctor reported, the information spreads “by their mouth, not our mouth.” There is now a need for careful and sensitive IEC to the community, which should also work to promote confidence in the ability of nurses to perform MVA.
X. SCALING UP AND SUSTAINABILITY

The PAC program in Nepal is well coordinated by the MOH, with useful technical assistance provided by a small number of cooperating agencies and with a considered strategy for scaling up. As mentioned above, the training is currently conducted at Maternity Hospital in Kathmandu, although there are plans to create additional regional training centers. This will be essential for the expansion of PAC. There are both advantages and disadvantages to this central training. Advantages include an adequate caseload to ensure competency, easier quality control, and standardization of training. Disadvantages include the problem of training in a facility where trainees see PAC as a vertical program and then want to emulate this at their facility, the high cost in bringing people to Kathmandu, and the fact that only a limited number of staff can be trained from each site.

The site visits to the hospitals highlighted the need to train more providers at each site. After a small number of providers are trained at Maternity Hospital (or at the regional training centers as these become available), it will be necessary to provide support for on-the-job training so that additional staff can be trained at each hospital.

It is also essential to hold sensitization/orientation meetings at each facility so that all staff is acquainted with the concept of PAC. The report on the initial JHPIEGO/FHD work at Maternity Hospital in 1995 describes conducting five 1–hour orientation sessions for about 150 medical and administrative staff 1 week before initiating services. This needs to be done on a smaller scale at each hospital while scaling up to help ensure sustainability of services. As a doctor at Maternity Hospital said, “the main thing is to change the attitude of doctors and nurses, and that has to come from the top level. No one wanted to do MVA at first.”

FHD and other PAC partners must strengthen the supervision system for PAC, which until recently was ad hoc and minimal, in order to enhance sustainability of high-quality services. Recently, a more strategic approach to supervision has been developed through QoCMC, and FHD should monitor this to ensure that it is effective. In addition, long-term sustainability will require institutionalization of PAC into preservice training for both doctors and nurses. It is also important that PAC continue to be viewed as an integral part of safe motherhood, as PAC services have been particularly successful at facilities that have also been a part of the Nepal Safe Motherhood Program.

The MOH is actively involved and committed to PAC with designated staff for the program, which will help make the services sustainable. There is now discussion of developing an official national strategy for PAC, and this is an opportune moment to do so. FHD was planning to hold a PAC stakeholders meeting in the near future to begin this important process.
XI. CONCLUSIONS AND LESSONS LEARNED

It is important that the MOH lead the central-level coordination of the PAC program. This is facilitated greatly by having a designated PAC coordinator within the MOH.

Differentiation at most sites between MVA and D&C patients limits access to comprehensive PAC services. There is a need to address issues around the organization of services, but there is also a need to reinforce the message of PAC as a comprehensive program for all women treated for incomplete abortion, no matter what method is used for treatment.

Increased orientation and sensitization at the facility level is needed. This is essential for creating support among the management at facilities. It should also emphasize the team approach so that all staff members are included. This is currently done in the PAC program in the Philippines; this whole-site orientation for PAC could be adapted for Nepal. The sharing of experiences between different hospitals in Nepal could also be included.

There is a need to create regional training centers, provide support for on-the-job training, and institutionalize PAC into preservice training for doctors and nurses. All of these measures are important for creating an expanded and sustainable PAC program. The current training setup is high quality and well institutionalized but needs to be supplemented in the long term in order to adequately expand PAC throughout the country.

Inadequate pain management is an obstacle. A significant number of complaints regarding the current pain management protocols were noted during site visits and in the JHPIEGO/FHD evaluation. Verbacaine should be supplemented with preprocedure analgesics and local anesthesia when necessary (for example, if any cervical dilation is necessary). This needs to be clarified in training and supervision.

The implementation of more systematic supervision is essential for ensuring the continuity and quality of services.

Long-term sustainability requires the development of mechanisms for the procurement of MVA kits.

The FHD should initiate community education activities. There is now a need for careful and sensitive information, education, and communication (IEC) to the community, which should also work to promote confidence in the ability of nurses to perform MVA.
APPENDICES

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B. REFERENCES
PERSONS CONTACTED

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Dr. Sunila Shaky, House Officer

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ENDNOTES

1 NFHS–Nepal Family Health Survey, 1996.
9 Thapa, 1995.