



IV: POLICY, PROGRAM, AND SYSTEMS ISSUES IN POSTABORTION CARE



IV. POLICY, PROGRAM, AND SYSTEMS ISSUES RELATED TO DELIVERY OF POSTABORTION CARE SERVICES

Although the components of PAC have been broken down into individual interventions for purposes of this module, it is important to remember that PAC has four components—emergency treatment, family planning counseling and services; STI evaluation and treatment, HIV counseling and/or referral for HIV testing; and community empowerment through awareness and mobilization—that are integrally connected. Those components can be provided using various models, e.g., type of emergency treatment given in inpatient and outpatient settings, type of provider used for emergency treatment and counseling, etc.

PAC models must be designed to provide the range of care needed by women suffering the effects of incomplete abortion—and by their families and communities to ensure that women receive the postabortion care they need. For example, using a PAC delivery model which consists of restructuring the environment; training providers in infection control, counseling, and contraceptive technology; providing accurate information to patients regarding emergency treatment, complications, self-care and family planning

methods, return to fertility; and improving contraceptive method availability at the site of emergency treatment can improve provider attitudes, increase provider skills in counseling, increase the number of women being discharged with a family planning method, increase referrals for contraceptive methods not available at the site, and increase quality of care and patient satisfaction.

Ensuring a supportive policy environment for PAC is important so that PAC programs and services are scaled up in a country. Furthermore, as services are redesigned to accommodate or expand PAC, it is important to assess and revise operational policies that affect how services are provided.



IV.A. PROVIDER TRAINING FOR PAC

Mid-level providers, such as nurses, nurse midwives, and auxiliary nurses, as well as chief medical officers and medical doctors, can provide high quality PAC services. In order to do so, they need training, supervision, essential equipment and supplies, and established referral systems. Also, policy that permits mid-level providers to give PAC services needs to be in place. Knowledge and skills of trained providers must include counseling, history taking, physical examination including general physical and complete pelvic exam, pain management techniques including local anesthesia of the cervix, use of equipment to evacuate the uterus, proper handling of used equipment, infection prevention techniques, and management of immediate complications. A trained provider needs to be able to determine the general physical condition of the patient, including whether there is trauma or sepsis and how to manage these complications. In addition, s/he must estimate the size and position of the uterus and determine the most appropriate technique or techniques that may be used to resolve the patient's medical problem and the service level for each patient. Trained providers should be knowledgeable of return of fertility, birth spacing for future pregnancies, and all family planning methods to prevent unintended/mistimed pregnancy and should be able to evaluate and treat sexually transmitted infections, counsel regarding HIV high risk behaviors, provide HIV counseling, and refer for HIV testing as needed. Empathy and humanization are also very important topics that should be discussed in training. Duration of training will depend on trainees' previous training and experience and must be competency-based to guarantee proficiency (Solter et al., 2000). PAC training is needed for providers regardless of the legal status of abortion in their respective countries. To date, most PAC training has been in-service.

Training a variety of categories of providers (e.g., physicians, nurses, counselors) on comprehensive PAC services could lead to:

- Increased provider knowledge of the appropriate use of various interventions for emergency treatment and medical management;
- Increased use of service delivery data to determine the best interventions to use to decrease total program costs;
- Increased provider knowledge of newer technologies for emergency treatment;
- Increased access to PAC by bringing services closer to women who need them instead of being exclusively available in secondary and tertiary service sites;
- Increased provider knowledge on alternate procedures for emergency treatment, infection prevention, and pain management;
- Increased provider knowledge on rapid return to fertility, family planning methods, and when to initiate each, depending on each patient's fertility desires, and regarding where additional reproductive health services may be available when needed;
- Increased and humane treatment of all patients, regardless of providers' assessment of whether the woman had a spontaneous or induced abortion; and
- Increased patient knowledge of her condition, treatment to be used, possible post treatment complications and care seeking if needed, follow-up care, return to fertility, and need to adopt a contraceptive method to prevent unwanted pregnancy.

IV.A.I. PRE-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|---|--|-----------|
| <p>Providing pre-service training to physicians can result in increased use of MVA over sharp curettage.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>A 1999–2001 intervention study conducted in Bolivia’s three largest maternity hospitals found that training providers led to significantly greater MVA use in two hospitals, while physicians in the third hospital continued to use sharp curettage at pre-intervention rates. A review of clinical logbooks for 1,993 procedures showed that use of MVA for uterine evacuation increased to 92 percent from 40 percent in La Paz, and to 75 percent from 68 percent in Sucre. Physicians in Santa Cruz (n=3,044) used MVA for 15 percent of women before and after the intervention. Observations and physician interviews showed that medical residents on rotation were most likely to use MVA, whereas older obstetrician-gynecologists had been using sharp curettage for many years and felt more comfortable with the procedure. Physicians also complained that they did not have trained personnel to prepare the equipment (Billings et al., 2003b). See Appendix I, Billings et al., 2003b, Bolivia, for a description of the intervention.</p> | <p>IV</p> |





IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|-----------|
| <p>In-service PAC training can increase the number of PAC patients who report that they received important information on their care regardless of whether sharp curettage or MVA was used.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A study in 1997–1998 in six hospitals of the Mexican Institute of Social Security (IMSS) found that providing PAC training for providers led to an increase in PAC clients reporting that they received important information on their postabortion care, regardless of whether MVA or <u>sharp curettage</u> was used. While only 55.7 percent of the 282 women who received PAC from institutions where no PAC training was conducted (the control sites) reported that they received information on the finding of specific problems by their physician prior to uterine evacuation, 87 percent of the 279 women who received <u>sharp curettage</u> from institutions with PAC training for providers and 83.7 percent of the 251 women who received MVA from institutions with PAC training for providers (the intervention sites) reported that they received information on the finding of specific problems by their physician prior to uterine evacuation. While only between 2.2 percent to 9.6 percent of women who received PAC at the control sites reported that they received information on various different signs of post-uterine complications, between 22.8 percent and 41.3 percent of women who received PAC from the intervention sites received information on various different signs of post-uterine complications, such as general health problems, intense pain, bleeding for more than two weeks, fever, chills, and foul-smelling vaginal discharge. While only 26 percent of women who received PAC at the control sites received information on where to seek help in case of complications, 32 percent of those receiving MVA and 42 percent of those receiving <u>sharp curettage</u> PAC at the intervention sites received information on where to seek help in case of complications. While only 10.8 percent of women who received PAC at the control sites received information on when they could resume sexual relations, 39.9 percent of those receiving <u>sharp curettage</u> and 20.7 percent of those receiving MVA at the intervention sites received information on when they could resume sexual relations (Billings et al., 2003a). See Appendix I, Billings et al., 2003a, for a description of the intervention.</p> | III |

IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>In-service PAC training can increase the number of PAC patients who report that they received important information on their care regardless of whether sharp curettage or MVA was used.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A study in Burkina Faso found that training providers led to increased information given to PAC patients. Prior to the intervention, providers explained the treatment they were providing to 52 percent of patients. After the intervention, 86 percent of women received information about the procedure. Pre-intervention, 3 percent of patients were told of possible complications or danger signs for which they should seek care, and 12 percent were told of the immediate return to fertility. After the intervention, 46 percent received information about possible danger signs and 94 percent about the return of fertility (Ministry of Health, Burkina Faso, 1998). See Appendix A, Ministry of Health, Burkina Faso, for a description of the intervention.</p> | <p>III</p> |
| <p>In-service PAC training can increase the number of PAC patients who report that they received important information on their care.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A 2001–2003 operations research study in Senegal found that at baseline 68 percent of health center or health post personnel had no previous PAC training (32 percent did), including treatment or counseling, and the proportion of women receiving information on their medical condition or care was very low. The pre/post intervention study introduced an integrated three-element PAC model in 18 primary care sites in two predominantly rural regions in Senegal to test the feasibility of making services more immediately accessible to women in rural areas and to assist with the development of national standards of care for PAC services. Patients treated after provider training took place reported receiving important information at higher (although far from ideal) levels: medical treatment was explained to 51 percent of women, compared to 23 percent before the intervention; 40 percent of women were told of possible future complications, up from 15 percent; and 60 percent were told what to do if they had any complications, compared to 38 percent. Fifty-five percent of women after the intervention, and 20 percent of women before the intervention felt that counseling was sufficient (Dabash, 2003). See Appendix I, Dabash, 2003, for a description of the intervention.</p> | <p>III</p> |





IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
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| <p>In-service PAC training can increase the number of PAC patients who report that they received important information on their care.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A 1996–98 intervention study in a referral hospital in Lima, Peru, tested a model where all PAC services were provided in an obstetrics and gynecology emergency room on an outpatient basis. Doctors were trained in MVA and improved clinical practices, counseling on medical care and family planning, and provision of contraceptive methods. The original study used a pre/post intervention design with no control group. A follow-up assessment of the same outcomes was conducted in 2000–2002 to assess the sustainability of the intervention without outside assistance. Only 10–12 percent of women treated before the intervention were informed about their diagnosis, treatment needed, or the results of the procedure. Information about the patient’s medical diagnosis was provided to 30 percent of women after the intervention and 35 percent three years later, and information given about the needed treatment increased to 47 percent in 1997 and 62 percent in 2000. Information about treatment results was provided to 28 percent of patients after the intervention and remained fairly constant at 31 percent three years later. Data collection included review of the surgical logbook for 455 patients, clinical histories and exit interviews of 323 patients, a time-motion study of 52 patients from arrival at the emergency room until departure, 17 random inventories of supplies and equipment, and 13 in-depth interviews with providers and policymakers (Benson and Huapaya, 2002).</p> | III |
| <p>In-service PAC training can increase the number of PAC patients who report receiving sufficient information to make an informed choice on contraception and who leave the hospital with a contraceptive method.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A study carried out in 1997–1998 in six Institute of Social Security hospitals in Mexico City, Mexico, found that more women in intervention sites reported that they had sufficient information to make an informed choice on contraception and that they left the hospital with a contraceptive method. In hospitals where PAC training was conducted, between 66.4 percent and 77.8 percent of PAC clients received a method prior to leaving the hospital compared to 39.6 percent of PAC patients in control sites. Over 27 percent of women who received PAC in control sites explained that they left the hospital without contraception because they did not receive enough information to make a choice, as compared to zero to 10.2 percent of those in intervention sites. Significantly greater proportions (30–97 percent) of women in the intervention sites as compared to the control sites (16–65 percent) received information and counseling about future pregnancy; 64.5–84.4 percent of the women in intervention sites knew the advantages of preventing immediate pregnancy compared to 29.4 percent in control sites; 74.1 percent of the women in the (continued...)</p> | III |

IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>In-service PAC training can increase the number of PAC patients who report receiving sufficient information to make an informed choice on contraception and who leave the hospital with a contraceptive method.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>(continued...) intervention sites received information on pregnancy prevention, compared to 33 percent in the control sites; and whereas 87.6–94.1 percent of women in intervention sites were offered a contraceptive method, only 69.1 percent were offered one at control sites (Billings et al., 2003a). See Appendix I, Billings et al., 2003a, for a description of the intervention.</p> | <p>III</p> |
| <p>In-service PAC training can increase the number of PAC patients who receive family planning counseling and leave the hospital with a contraceptive method.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A study conducted from 1995–1997 in three hospitals in Bolivia found that contraceptive counseling was almost nonexistent in two of the three hospitals before the study. Following provider training on PAC and contraceptive counseling, counseling increased sharply from 2.8 percent to 84.6 percent in one hospital; from 12.2 percent to 100 percent in another hospital; and from 3.6 percent to 97 percent in the third hospital. “All women who received counseling declared that counselors were very friendly, gave complete information about methods, and left the decision on method choice up to the woman. In addition, counselors also gave good and complete information on when and where to return for postabortion follow-up” (Díaz et al., 1999: 71). Contraceptive acceptance before training was between 10.3 percent and 14.3 percent. Following training, contraceptive acceptance increased to a range of between 63.8 percent and 87.6 percent (Díaz et al., 1999).</p> | <p>III</p> |





IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|---|--|------------|
| <p>In-service PAC training can increase the number of PAC patients who receive family planning counseling and leave the hospital with a contraceptive method.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>An intervention study in Senegal introducing integrated postabortion services found that the proportion of women reporting being counseled on family planning increased from 18 percent to 34 percent after training. Of those counseled, 56 percent left with a method before the intervention (10 percent of all patients), while 76 percent of women counseled (26 percent of all patients) left the hospital with a contraceptive method after the intervention. Providers interviewed reported counseling 31 percent of women on FP before the intervention, and 51 percent after, and said 18 percent of women before and 40 percent of women after the intervention left with a contraceptive method (Centre de Formation et de Recherche en Santé de la Reproduction and Clinique Gynécologique et Obstétricale CHU A. le Dantec, 1998). See Appendix I, Centre de Formation..., 1998, for a description of the intervention. A 2001 operations research study to expand postpartum and postabortion family planning in five hospitals in Honduras found that training providers to offer family planning counseling and services to postabortion care patients prior to their discharge from the hospital led to dramatic increases in the proportion of patients receiving information and methods. At baseline, only 17 percent of postabortion patients were counseled and 13 percent left the hospital with a contraceptive method. These figures rose to 80 percent and 34 percent respectively during the midterm survey and further to 85 percent receiving counseling and 54 percent of women being discharged with a method by the endline survey. Conversely, the percentage of women wanting a method and not receiving one dropped from 48 percent at baseline to 21 percent in the final survey (Medina et al., 2001). See Appendix I, Medina et al., 2003, for a description of the intervention</p> | <p>III</p> |

IV.A.I. IN-SERVICE TRAINING

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|------------|
| <p>In-service clinical and counseling training can lead to increased use of MVA and increased numbers of PAC patients receiving family planning counseling and who leave the PAC facility with a contraceptive method.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A 1996–1998 intervention study in a referral hospital in Lima, Peru, tested a model where all PAC services were provided in an obstetrics and gynecology emergency room on an outpatient basis. At baseline, 38 percent of patients were told they could become pregnant again almost immediately, 18 percent received family planning counseling, and only 2 percent left with a method. In the immediate post-intervention period, the proportions of women receiving information about their return to fertility and family planning rose to 65 percent and 78 percent, with 59 percent leaving with a contraceptive. Three years later, 72 percent were informed of their return to fertility. There were also significant increases in women receiving counseling (89 percent) and contraceptive methods (87 percent). Among those not receiving a method, 48 percent of patients in 1997 and 18.8 percent of patients in 2000 were given a follow-up family planning appointment. MVA use also increased dramatically after the training, from 0 percent to 90 percent, and continued to increase over the subsequent years, even after external funding and technical assistance ended, to an average of 98 percent in 1999 and 2000 (Benson and Huapaya, 2002). See Appendix I, Benson and Huapaya, 2002, for a description of the intervention.</p> | <p>III</p> |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|-----------|
| <p>Training of providers in postabortion family planning and fertility can increase promotion of condom use and promotion of more effective methods of contraception, in addition to correct counseling concerning a PAC patient's return to fertility.</p> <p><input checked="" type="checkbox"/> Strong evidence for action; needs more research: One study.</p> | <p>A 2000–2003 operations research study to increase postabortion family planning in Perm, Russia, found that training obstetrician/gynecologists, nurses, and midwives increased provider knowledge about postabortion family planning and fertility return. Prior to the intervention, only half of providers correctly responded that “fertility returns within two weeks” after an abortion, in contrast to 83.3 percent of providers after the intervention. The content of family planning counseling also changed: providers were more likely to mention condoms as an appropriate postabortion method after the intervention (40 percent, compared to 6.5 percent before the intervention) and less likely to recommend natural family planning (0 percent, compared to 32.3 percent before the intervention). This study used a quasi-experimental time series design to compare two interventions to institutionalize pre-discharge postabortion counseling and family planning services in five sites (two hospitals and three outpatient facilities). Model I consisted of training providers in family planning counseling and interpersonal communication skills and developing and supplying provider job aids and client education materials on postabortion family planning. Model II had the same intervention components, plus offered clients a free initial three-month supply of condoms, pills, DMPA, or IUD. The interventions were evaluated by comparing women assigned to each of the interventions to a “control” group of women attending the same facilities prior to the intervention. Researchers interviewed 1,516 women and observed 40 client-provider interactions prior to the clients being discharged. In addition, researchers interviewed 49 providers and conducted 1,079 13-month follow-up interviews with clients to assess contraceptive use and subsequent pregnancies. The study also included a cost assessment, comparing the average cost to clients for the abortion (including travel, the procedure, and any related complications) with the cost for a one-year supply of contraceptives (Savelieva et al., 2003).</p> | III |

IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>Training of providers can improve clients' knowledge of emergency treatment and follow up care.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>Following an intervention that introduced an integrated PAC model in Senegal, a higher percentage of PAC patients reported being counseled on their treatment and follow-up care; 59 percent were given this important information after providers were trained, in contrast to 43 percent before the intervention. A higher percentage of patients reported receiving counseling specifically on possible future problems: 7 percent before the intervention versus 11 percent after (Centre de Formation et de Recherche en Santé de la Reproduction and Clinique Gynécologique et Obstétricale CHU A. le Dantec, 1998). See Appendix I, Centre de Formation, 1998, for a description of the intervention.</p> | <p>III</p> |
| <p>Training in MVA can result in the use of MVA as well as sharp curettage for PAC.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>A pre/post intervention study conducted in 1994 in two Egyptian hospitals in Cairo and in Minia (a town in Upper Egypt) found that a six-day training on MVA and counseling led to use of MVA as well as sharp curettage for PAC. Prior to the training, only sharp curettage was used in 169 cases per month at the hospitals. After three months, only 16 patients received sharp curettage, with MVA being routinely used on an average of 154 cases per month. Training included demonstrations and supervised practice in surgical theaters and also covered contraceptive methods, family planning counseling training, and pain control. The study involved 552 structured observations of client-provider interactions; interviews with 154 physicians, 66 nurses, and 550 postabortion patients; and a review of medical records. A total of 83 physicians were interviewed pre-intervention and 71 post-intervention. The hospitals served as a clinical training site for medical students (Huntington et al., 1995).</p> | <p>III</p> |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|-----------|
| <p>Training can increase the use of pain medication for PAC patients.</p> <p><input checked="" type="checkbox"/> Enough evidence for action; needs more research: Two studies.</p> | <p>A 2001–2003 operations research study in Senegal found that women received little or no pain medication during uterine evacuation. Reported pain was high, with 65 percent of women reporting strong pain and 15 percent reporting moderate pain during the procedure. These rates dropped after the intervention, when 74 percent of women were given a local anesthetic during treatment. (Virtually all women were prescribed pain medication, but medications were not always available or affordable). Forty percent of women post-intervention reported strong pain and 25 percent reported moderate pain during the procedure, with the remaining 35 percent reporting minimal or no pain (Dabash, 2003). See Appendix I, Dabash, 2003, for a description of the intervention.</p> | III |
| | <p>An evaluation conducted for a project in Kenya 19 weeks following training for private nurse midwives to provide PAC services found that 67 percent of private nurse midwives interviewed, “administered Buscopan either orally or by injection. For others, the intensity of the pain is minimized by Paracetamol injection. Diazepam is used to calm overanxious patients and Ergometrine is the preferred drug for controlling bleeding following MVA” (Yumkella and Githiori, 2000: 28). The training was conducted in 1999 with a series of six one-week workshops. A total of 57 nurse midwives were trained. These 57 nurse midwives represented 95 percent of the nurse midwives in three Kenyan provinces. Of the 57 trained providers, 32 were assessed during the evaluation (Yumkella and Githiori, 2000).</p> | V |

IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Training increases physician satisfaction with MVA.</p> <p><input checked="" type="checkbox"/> Strong evidence: Three studies.</p> | <p>A pre/post intervention study carried out in 1994 in two Egyptian hospitals in Cairo and in Minia (a town in Upper Egypt) found that a six-day training on MVA and counseling increased physician satisfaction with MVA. Following training, 71 percent reported that they were very satisfied with MVA and 43 percent reported that they considered MVA safer than sharp curettage. Thirty-nine percent of physicians reported that MVA was easier to use than sharp curettage (Huntington et al., 1995). See Appendix I, Huntington et al., 1995, for a description of the intervention.</p> | III |
| | <p>A 2001–2003 operations research study in Senegal that introduced a new model of PAC services in health centers and health posts including MVA found that providers expressed greater satisfaction with MVA than with digital cureage, which had been the primary method of emergency treatment before the intervention. (Digital cureage is a method where the forefingers are used to manually explore the uterus and evacuate identified contents, creating opportunities for infection particularly in the absence of systematic hand washing and use of gloves). All providers interviewed were either satisfied (65 percent) or very satisfied (35 percent) with MVA as a method of uterine evacuation. Reasons given by more than 50 percent of providers were that it causes fewer traumas than other methods; it allows for uterine exploration; it is easy to use; and it has a low associated morbidity. In contrast, 48 percent of providers said they were somewhat satisfied and 17 percent said they were not satisfied with digital cureage, with more than half citing the risk of infection, hemorrhaging, and pain to the woman as shortcomings. However, almost half of providers saw the low cost of cureage as an advantage in relation to MVA and other methods (Dabash, 2003). See Appendix I, Dabash, for a description of the intervention.</p> | III |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>Training increases physician satisfaction with MVA.</p> <p><input checked="" type="checkbox"/> Strong evidence: Three studies.</p> | <p>A 1999–2001 intervention study conducted in Bolivia’s three largest maternity hospitals found that physicians who had been trained and used MVA were equally or more satisfied with the procedure compared to sharp curettage. Forty-eight physicians interviewed after the intervention said MVA was more (49 percent) or equally (36 percent) safe; more (26 percent) or equally (72 percent) effective; more (52 percent) or equally (40 percent) simple to use; and that the use of MVA decreased the risk of procedural complications (83 percent). Almost all physicians (94 percent) agreed that because women are conscious during MVA treatment, the procedure leads to greater interaction with the client than sharp curettage (Billings et al., 2003b). See Appendix I, Billings et al., 2003b, for a description of the intervention.</p> | <p>III</p> |
| <p>Training providers can result in increased counseling of PAC patients regarding emergency treatment and follow-up home care.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A pre/post intervention study carried out 1994 in two Egyptian hospitals in Cairo and in Minia (a town in Upper Egypt) included a six-day training on MVA and counseling and resulted in increased counseling of PAC patients on treatment procedures and danger signs. Following provider training, the percent of patients who reported that treatment procedures were explained to them increased from 1 percent to 48 percent and the percent of patients who received instructions about what to do if they had a problem after discharge from the hospital increased from 1 percent to 49 percent. Following provider training, patient’s knowledge of the warning sign of bleeding for more than two weeks postabortion increased from 17 percent to 30 percent, and an awareness of fever or shivers as a warning sign increased from 7 percent to 27 percent (Huntington et al., 1995). See Appendix I, Huntington et al., 1995, for a description of the intervention.</p> | <p>III</p> |
| | <p>Following an intervention to introduce an integrated PAC model in Senegal, a higher percentage of PAC patients reported being counseled on their treatment and follow-up care; 59 percent were given this important information after providers were trained, in contrast to 43 percent before. Patients reported receiving counseling specifically on possible future problems at much lower rates; 7 percent before the intervention versus 11 percent after (Centre de Formation et de Recherche en Santé de la Reproduction and Clinique Gynécologique et Obstétricale CHU A. le Dantec, 1998). See Appendix I, Centre de Formation, 1998, for a description of the intervention.</p> | <p>III</p> |

IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Training providers can increase counseling of PAC patients concerning family planning options and the intention of PAC patients to use family planning.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies.</p> | <p>A pre/post intervention study in two Egyptian hospitals in 1994 in Cairo and in Minia (a town in Upper Egypt) that included a six day training on MVA and counseling increased counseling of PAC patients concerning family planning options and the intention of PAC patients to use family planning. Following provider training, providers offering their PAC patients family planning increased from 10 percent to 50 percent. Following provider training, an increase of 30 percent occurred in PAC patients who reported intending to use a contraceptive method. Pre- and post- intervention levels were not listed in the study (Huntington et al., 1995). See Appendix I, Huntington et al., 1995, for a description of the intervention.</p> | III |
| | <p>A 2001–2003 operations research study in Senegal that included a contraceptive technology update and counseling workshop for providers as part of the intervention found that patients were almost twice as likely to have received family planning counseling after the intervention as before. At baseline, only 38 percent of patients interviewed at health centers received any family planning counseling before discharge, compared to 70 percent after. Twenty percent of patients left the health center with a method, and a substantial proportion (number not given) said they intended to practice family planning after discussing it with their partner (Dabash, 2003). See Appendix I, Dabash, 2003, for a description of the intervention.</p> | III |
| <p>Training providers can change provider attitudes toward PAC patients.</p> <p><input checked="" type="checkbox"/> Enough evidence for action; needs more research: One study.</p> | <p>Following PAC training in Kenya for private nurse midwives conducted in 1999, one of the private nurse midwives noted: “PAC training changed my way of thinking. I used to judge these people (i.e., patients with incomplete abortion). But PAC training changed my way of thinking. I started giving the services to clients regardless of how they started an abortion” (Yumkella and Githiori, 2000: 32). An evaluation was conducted 19 weeks following training for private nurse midwives to provide PAC services (Yumkella and Githiori, 2000). See Appendix I, Yumkella and Githiori, 2000, for a description of the intervention.</p> | IV |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>Training providers to improve the quality of postabortion care can increase women’s:</p> <p>(a) positive evaluations of quality of care;</p> <p>(b) acceptance of contraceptive methods; and</p> <p>(c) satisfaction with the methods.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: Two studies.</p> | <p>A study of 339 postabortion patients in Oaxaca, Mexico, found that an intervention designed to improve postabortion quality of care through which health care workers working in the intervention hospital underwent a series of workshops that focused on a range of issues including technology, equipment usage, humane treatment, information exchange, pain management, and family planning counseling and services, led to women reporting a positive evaluation of quality of care and acceptance of a contraceptive method with which the woman felt satisfied. For medical procedures, some physicians were later chosen as master trainers and underwent further training. Following hospital protocol, no attempt was made to determine whether or not the patient’s abortion was spontaneous or induced in nature. MVA was being used 0 percent of the time at baseline and increased to 78.1 percent at post-intervention. Use of sharp curettage decreased from 89.6 percent to 20.8 percent and a combination of sharp curettage and MVA decreased from 10.4 percent to 1.1 percent. Length of hospital stay was reduced by 36 percent. Respectful communication techniques also increased, for example, 74.4 percent of the patients knew who their attending physician was after the intervention compared to 17.4 percent at baseline. Following the intervention, 84.8 percent of the patients said that the physician used the patients’ name, compared to 59.1 percent at baseline, and physicians explained the diagnosis to 92.4 percent of patients compared to 45.5 percent at baseline. Patient satisfaction with the information provided at a series of stages increased from 17.6 percent to 72.5 percent. Patients receiving contraceptive counseling increased from 42.4 percent to 85.5 percent, and use of any method increased from 29.5 percent to 59.7 percent. Pain management and privacy did not significantly improve. Many of the changes made were also supported by hospital-level policy changes. Guidelines were modified to stipulate use of MVA with a local anesthesia if a patient’s uterus was determined to be smaller than 12 cm. For pain, analgesia was to be administered both before and after the procedure. Finally, all operating rooms became functional 24 hours a day to reduce waiting times (Langer et al., 2002 and Langer et al., 1999).</p> | <p>III</p> |

IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Training providers to improve the quality of postabortion care can increase women’s:</p> <ul style="list-style-type: none"> (a) positive evaluations of quality of care; (b) acceptance of contraceptive methods; and (c) satisfaction with the methods. <p><input checked="" type="checkbox"/> Enough evidence for action: Two studies.</p> | <p>A 1999 study in Bolivia, using a pre- and post-intervention assessment, found that improving the quality of PAC services, specifically provider attitudes and counseling skills, increased acceptance of family planning methods. The study was “aimed at assessing the feasibility of carrying out a program to improve the quality of services for postabortion complications, including contraceptive counseling and services, and the impact on client satisfaction and contraceptive acceptance” (Díaz et al., 1999: 64). Physicians and counselors at the three hospitals attended a training course on the elements of PAC, counseling, and contraceptive technology. The training was intended to change their attitudes and reduce the incidence of repeat abortions through provision of family planning services. Before the intervention, doctors were expected to denounce women who presented with evidence of an induced abortion. At the beginning of the project, all three hospitals significantly improved their PAC facilities and equipment, as none had previously had a specific PAC program. In two of the three hospitals, contraceptive counseling was basically nonexistent prior to the intervention. Women who did not choose a contraceptive method were given an additional opportunity during a follow up visit after one month. Data collected from October 1995 to December 1997 in three maternity hospitals, all serving as referral centers in three different cities, showed a large increase among PAC patients accepting some method of contraception; from 14.3 percent to 63.8 percent in one hospital, from 10.3 percent to 87.7 percent in another hospital, and from 13.2 percent to 81.8 percent in the last hospital. Data were recorded in a logbook and clinical records. “Several women mentioned spontaneously that the quality of the counseling was perhaps the most important reason they had evaluated the attention they received as good” (Díaz et al., 1999: 68). This study concluded that it is possible, with modest inputs and an emphasis on training, to change providers’ attitudes. No data were provided, however the author concluded that “evaluation of the pre- and post-training questionnaires showed an important improvement in the level of providers’ knowledge of postabortion care, including contraception. In addition, monitoring visits showed that providers changed the way they treated women with postabortion complications. They became more considerate and compassionate, treating women as patients in need of assistance rather than as criminals who should be punished for their actions. . . . Interviews with women in the three hospitals showed that a great majority mentioned that they had been well treated and emphasized the supportive attitudes of the nurses and auxiliaries” (Díaz et al., 1999: 68).</p> | <p>IV</p> |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Involving private providers in providing PAC services can increase emergency treatment and family planning counseling and services in communities.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>A 1998 study in Western Kenya, in the Nyanza and Rift Valley provinces, found that involving private providers in the provision of PAC services increased the use of family planning methods. The study was based on an intervention which involved 35 private physicians and was based on the premise that if private physicians were well trained and sensitized to the needs of women in their communities, they would agree to provide PAC and other reproductive health services, at a reduced cost. The intervention developed guidelines on facility standards; developed a five-day training curriculum which included practical and theoretical components of all aspects of reproductive health; identified referral mechanisms; and adopted protocols for family planning methods. The intention was to form a network of private physicians to provide comprehensive and affordable PAC and family planning services: “Involving private physicians was seen as a rapid and cost-effective way of expanding PAC services to the community” (Rogo et al., 1998: 79). During the first year after PAC services were introduced, a total of 675 women with incomplete abortion or menstrual irregularities had been treated, and over 800 new family planning patients had been recorded. Between 12.5 percent and 100 percent of clients at each facility left with a family planning method. The majority of the women had not previously been using a method. The private providers agreed to provide contraceptive methods for free (contraceptives are provided free of charge by the government), with only a minimal consultation charge for family planning clients. A sliding scale for charges was used to ensure that PAC services were accessible for all women. Physicians were provided with one set of MVA equipment (Rogo et al., 1998).</p> | III |

IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>Training midwives to counsel PAC patients on family planning, STIs/HIV, and nutrition (in addition to midwives undertaking other aspects of PAC, including emergency treatment using MVA) can increase counseling on these topics.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A 1998–1999 pilot study in Uganda in 13 health facilities found that training midwives to counsel PAC patients on family planning, STI/HIV, and nutrition increases counseling on these topics. At the time of treatment 70 percent of women received a family planning method, 64 percent received STI/HIV counseling or services, and 33 percent received appropriate nutrition counseling. The evaluation revealed that integrated services were easier to establish at health centers, where midwives were responsible for all reproductive health services, including ordering of supplies, than at the hospital level. About one third (29.6 percent) of PAC patients at health centers left with a family planning method, whereas previous to this study no PAC services were provided at the health center level. In hospitals, it was found that prior to the intervention “there was no routine system of postabortion counseling and no efforts to break the cycle of unwanted pregnancy and unsafe abortion” (Kiggundu, 1998: 9). The study monitored 781 PAC patients during nine months of data collection. Three regional or referral hospitals, four district hospitals, and six health centers participated in the study. The pilot project involved training 10 physicians and 24 midwives separately in a series of three two-week workshops. The doctors and medical officers were trained as PAC trainers who in turn trained the midwives in PAC, integration with other reproductive health services, and record keeping during a series of three two-week workshops. A supervision visit was conducted within two weeks post-training to assist in the implementation of the new PAC services. Ongoing support and supervision was provided every three months. The program was evaluated six months after the last two-week training session and involved the inspection of logbooks and patient records, pre- and post-test skills assessment of the midwives, questionnaires administered to the midwives and their supervisors, interviews of PAC patients, monitoring reports, and direct observations. Prior to the study, doctors were managing all abortion patients in the hospitals and all health centers were transferring postabortion clients. A PAC curriculum and midwives handbook was developed as part of the intervention (Kiggundu, 1999).</p> | <p>III</p> |





IV.A. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Training private nurse midwives can improve their knowledge scores concerning PAC.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>A project to train private nurse midwives in Kenya in 1999 increased knowledge scores concerning PAC. These private nurse midwives did provide PAC services at baseline. The training was conducted in 1999 with a series of six one-week workshops. A total of 57 nurse midwives were trained. Of the 57 trained providers, 32 were assessed during the evaluation, conducted 19 weeks following training. All of the 32 trained midwives who were evaluated achieved scores of 70 percent or above concerning three critical PAC procedures (training included use of MVA, postabortion family planning counseling and services, pain control and management, infection prevention and control, timely and appropriate referral practices, STI/HIV prevention and management and record keeping and reporting), and successfully performed 10 MVA procedures on women presenting with abortion-related complications and a gestational age less than 12 weeks (Yumkella and Githiori, 2000).</p> | IV |

IV.A.2. PROVIDER TRAINING FOR PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---------------------|-------------------------------|-----------|
| Distance education. | No PAC-related studies found. | |





IV.A.3. PEER SUPPORT

| Summary of Evidence | Supporting Research | Gray Type |
|---|--|-----------|
| <p>Providing peer support may be a useful tool for supervision.</p> <p><input checked="" type="checkbox"/> Needs more research: One study.</p> | <p>From 1998-2000, 75 private nurse midwives were trained to provide PAC services in 44 facilities throughout Kenya. Almost half of the providers interviewed had contacted a contact for assistance. “More study is needed to document the long-term sustainability of this approach as a supplement or even partial replacement for more traditional forms of supervision” (Dohlie et al., 2003: xii).</p> | <p>IV</p> |

IV.B. SYSTEMS ISSUES FOR DELIVERY OF PAC SERVICES

IV.B.1. Infection prevention, standard precautions, and instrument processing

The absence of industry-wide standards for evaluation of MVA technology makes infection prevention and instrument processing difficult to assess (Girvin and Ruminjo, 2003). Some researchers suggest all MVA instruments should be rinsed with high-level disinfectant or sterilized water after being cleaned by chemical means and before reuse (Girvin and Ruminjo, 2003). The Ipas Easy Grip® Cannulae and Ipas MVA Plus® may prevent cannulae from clogging during MVA procedures, but more information is needed on these instruments and techniques.





IV.B.I. INFECTION PREVENTION, STANDARD PRECAUTIONS, AND INSTRUMENT PROCESSING

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>PAC training on infection prevention can increase infection prevention measures by physicians and staff.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: One study.</p> | <p>A pre/post intervention study carried out in 1994 in two Egyptian hospitals in Cairo and in Minia (a town in Upper Egypt) found that a six-day training on MVA and counseling increased infection prevention measures taken by physicians and staff. Pre-intervention, only 60 percent of postabortion surgical procedures were observed to be performed with sterile gloves; in the post-intervention period, use of sterile gloves was universal. Prior to training, 74 percent of patients were treated with sterile dilators and 54 percent were treated with sterile curettes, specula, and sponge forceps; following training, sterile instruments were universally used. “The study project did not supply antiseptics or sterile gloves; therefore, these changes in clinical practice were made with existing resources” (Huntington et al., 1995: 355). Prior to training, over 30 percent of the providers did not wash their hands; following training, over 90 percent used a strong antiseptic to wash their hands (Huntington et al., 1995). See Appendix I, Huntington et al., 1995, for a description of the intervention.</p> | III |

IV.B.2. COMMODITIES AND LOGISTICS

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>Lack of basic supplies such as disinfectant solutions can lead to the overuse of antibiotics.</p> <p><input checked="" type="checkbox"/> Needs more research: One study.</p> | <p>A study in Egypt conducted from 1995 to 1996 found that a lack of basic supplies, such as disinfectant solutions, has led to overuse of antibiotics. The study found that only 10 percent of patients received no antibiotics prior to discharge (Huntington et al., 1998). See Appendix I, Huntington et al., 1998, for a description of the intervention.</p> | <p>III</p> |





IV.B.3. ASSESSMENT FOR RECOVERY, FOLLOW-UP, AND REFERRAL MECHANISMS

-
- No PAC-related studies were found on the topics of assessment for recovery, follow-up, or referral mechanisms.
 - More information is needed on how to strengthen referral networks to improve access to care and to better define the role of health posts within the referral network (Dabash et al., 2003).

IV.B.4. SUPERVISION

As with other areas of reproductive health, supervision is a critical part of sustaining postabortion care interventions; however, supervision is not often conducted in a systematic manner, and there is little evidence on best practices for supervision in PAC. PAC programs often lack explicit norms and guidelines; supervisors lack adequate training, guidelines, and instruments; and supervision is generally conducted on a discretionary basis (Brambila, 2004). An operations research project conducted in Mexico, Bolivia, and Guatemala in 2002–2003 developed and tested a supervision instrument and guidelines to be used to provide constructive feedback to service providers and program managers. A technical committee composed of representatives of governmental and nongovernmental health services identified key supervision problems and reviewed supervision materials developed by Pathfinder, EngenderHealth, JHPIEGO, Ipas, Population Council, and WHO/RHR. They then developed an improved instrument that was tested over a four-month period in one hospital in each of the three countries. Hospitals were purposively chosen based on willingness of the administration to participate, as well as the existence of an established PAC program (at least three years, with an average of five or more patients per day) and “a reputation for providing reasonable quality of care” (Brambila, 2004: 6).

The evaluation concluded that the new instrument shared many of the same shortcomings with previous supervision tools. In particular, it was too long, parts were subjective or ambiguous, and it did not help the supervisor to focus on problem solving or priority setting for program improvement. Although no results are available, researchers believe the new instrument, being tested in Guatemala, “makes supervision more focused on substantive service problems, provides a framework to analyze problems one at a time, provides guidelines to discuss each problem with the relevant staff members, allows the supervisor to develop improvement plans that are proposed by workers who will implement them and, in general, makes supervision more focused on problem-solving than problem identification” (Brambila, 2004: 10). An English version of the revised instrument is included in the final report (Brambila, 2004).





IV.B.5. NON-TRAINING SUPPORT THAT PROVIDERS NEED TO HELP DO THEIR JOBS

| Summary of Evidence | Supporting Research | Gray Type |
|---|-------------------------------|-----------|
| Non-training support that providers need to help do their jobs. | No PAC-related studies found. | |

IV.B.6. WHO CAN PROVIDE PAC SERVICES

| Summary of Evidence | Supporting Research | Gray Type |
|---|---|------------|
| <p>Allowing trained midwives to provide PAC (using MVA) will help increase access to PAC services at all levels of the health system.</p> <p><input checked="" type="checkbox"/> Strong evidence: Five studies..</p> | <p>In 1996, Ghana’s Ministry of Health instituted the “National Reproductive Health Service Policy and Standards” in which registered midwives at all levels of the health system were listed as appropriate providers of PAC services, including 1) emergency treatment for incomplete abortion with MVA; 2) postabortion family planning counseling and methods; and 3) information to link women to other reproductive health services. For a study conducted in Ghana from 1996 to 1998, IPAS trained registered midwives who then treated a total of 323 women for incomplete abortion with MVA. Prior to the intervention, all 323 women would have had no option but to travel to the district hospital for emergency care by a physician. Structured questionnaires were conducted with 59 women treated for incomplete abortion prior to discharge from the hospital, 78 women treated for incomplete abortion by midwives in health centers in maternity homes, eight physicians providing PAC in hospitals, 39 community leaders, and nine national level policymakers. The general consensus was that, in the words of one physician, “Some of the patients come from far away, so if the midwife in their community can provide PAC services, this saves lives, money and prevents complications” (Billings et al., 1999a: 147). One policymaker noted: “It is important that emergency treatment be given to those women at the source and at the spot where they live. Doctors are not available for people to get emergency treatment, whereas there are enough midwives who can assist if these patients are aware and can go to them for help” (Billings et al., 1999a: 148).</p> | <p>III</p> |
| | <p>In 1999, the Ministry of Health in Myanmar acknowledged the potential role of midwives in PAC. Prior to 1999, hospital doctors and nurses had responsibility for the clinical management of PAC patients, but PAC had not been integrated into the health services in rural health centers staffed by midwives. Midwives perform nearly 45 percent of deliveries and provide nearly two-thirds of ANC to pregnant women. In 1999, the Ministry of Health provided training for midwives. After training, midwives visited an estimated 80 percent of PAC patients after discharge. As one midwife put it: “After training, we feel confident about when to start birth spacing and telling patients when they can have sex again; before we did not discuss this” (Htay et al., 2003: 32). The study interviewed 22 hospital and clinic staff, 163 volunteer community health providers, and 170 PAC patients (Htay et al., 2003).</p> | <p>III</p> |





IV.B.6. WHO CAN PROVIDE PAC SERVICES

| Summary of Evidence | Supporting Research | Gray Type |
|---|--|-----------|
| <p>Allowing trained midwives to provide PAC (using MVA) will help increase access to PAC services at all levels of the health system.</p> <p><input checked="" type="checkbox"/> Strong evidence: Five studies..</p> | <p>A 1998–1999 pilot study in Uganda in 13 health facilities found that (based on site logbooks, patient records, monitoring reports, pre- and post-test skills knowledge and skills assessment, and patient interviews) training midwives to provide PAC services, including MVA, increased women’s access to PAC at all health facility levels. Midwives treated 75 percent of the 437 PAC patients who received MVA with no procedure-related complications. The study monitored 781 PAC patients during the nine months of data collection (Kiggundu, 1999). See Appendix I, Kiggundu, 1999, for a description of the intervention.</p> | III |
| | <p>A project to train private nurse midwives in Kenya in 1999 increased access to PAC. Four hundred and thirty-six PAC patients were provided services during the 1999 assessment which otherwise may not have had access to services. The Kenyan Ministry of Health has now changed its policies to allow nurse midwives to provide PAC (Yumkella and Githiori, 2000).</p> | III |
| | <p>A study in Burkina Faso found that training midwives as well as physicians to use MVA for emergency treatment, along with ensuring the availability of equipment, led to near universal use of MVA and to service provision by lower level providers. Before the intervention, most patients (60 percent) were treated with sharp curettage by an obstetrics and gynecology specialist. In cases where a trained physician was not available, providers generally treated women with digital curage—the only method available to untrained or lower-level providers (digital curage is a method where the forefingers are used to manually explore the uterus and evacuate identified contents, creating opportunities for infection (particularly in the absence of systematic hand washing and use of gloves). As part of the intervention, physicians and midwives were trained in emergency uterine evacuation using MVA, and after the intervention 97 percent of patients were treated with MVA, usually by midwives. This eliminated the need to resort to digital curage in the absence of a specialist, and only 1 percent of patients continued to be treated with that method, in contrast to 40 percent before the intervention. The remaining 2 percent of post-intervention patients were treated with sharp curettage (Ministry of Health, Burkina Faso, 1998). See Appendix I, Ministry of Health, Burkina Faso, 1998, for a description of the intervention.</p> | III |

IV.B.6. WHO CAN PROVIDE PAC SERVICES

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>Use of dedicated FP nurse/counselors as compared to FP referrals for contraceptives can increase immediate contraceptive acceptance for PAC patients.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A study conducted during 1999 of the introduction of MVA to treat incomplete abortion at a regional hospital in El Salvador found that immediate contraceptive acceptance was increased from 19 percent to 62 percent with the use of a dedicated family planning nurse/counselor as compared to the family planning referrals without counseling. Hospital cost, length of stay, complication rates, and family planning acceptance following PAC was compared in a prospective, randomized controlled study of 154 women assigned to either sharp curettage or MVA (Koontz et al., 2003).</p> | <p>III</p> |





IV.B.7. MAINTAINING COMPETENCIES OF PAC PROVIDERS

| Summary of Evidence | Supporting Research | Gray Type |
|--|-------------------------------|-----------|
| Maintaining competencies of PAC providers. | No PAC-related studies found. | |

IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

Women giving birth as well as PAC patients around the world in the poorest countries continue to lack access to safe emergency obstetric care (*Please see “What Works: A Policy and Program Guide to the Evidence on Family Planning, Safe Motherhood, and STI/HIV/AIDS Interventions; Module 1: Safe Motherhood Module” by Gay et al., 2003*). A study in three referral hospitals in Dakar, Senegal, found that 62 percent of patients went to at least two health facilities before being treated for incomplete abortion (Centre de Formation et de Recherché en Santé de la Reproduction and Clinique Gynecologique et Obstetricale CHU A. le Dantec, 1998). Access to PAC was hampered by cost and physical access. Another study of PAC patients in Senegal noted, “In abortion complication cases, health posts should stabilize and evacuate PAC clients to the nearest district-level center or regional hospital for care. In reality, many PAC clients do not have the means or access to health centers; thus, untrained health post staff, mostly traditional birth attendants, often found themselves providing emergency treatment services” (Dabash, 2003: 5).

National legislative and local hospital policy changes, including developing and disseminating protocols and service delivery guidelines for PAC, restructuring services, and policies to support the restructure of services are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure. Increasing the availability of emergency transport available for PAC in addition to emergency obstetric care (EmOC) can increase women’s access to needed services. A study in Ethiopia of 120 health facilities found that only 13 percent of these health centers were able to respond with emergency transport to assist a woman needing PAC (Gebreselassie and Fetters, 2002). In fact, no efforts have been made to “define or measure unmet need for PAC,” as well as no systematic inquiry analyzing the barriers inhibiting access to PAC services such as geographical, cultural, and social factors (Cobb et al., 2001: 30). Almost nothing is known about PAC programs that have been able to overcome some of these barriers (Cobb et al., 2001: 30). In addition, the illegality of abortion in many countries in the world, the stigma attached to abortion, and the penalties attached to both the women who seek abortions and the providers who try to help these women are further barriers to access, even though postabortion care is officially sanctioned.





IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>Providing family planning counseling and services in the same place as emergency treatment can increase patients' knowledge and intent to use family planning.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A study in Burkina Faso found that providing family planning counseling and services in the same place as PAC emergency treatment increased patients' knowledge and intent to use family planning. Before the intervention, women treated for abortion complications were referred to an off-site family planning clinic for services. Only 30 percent of women received counseling about family planning, and although 64 percent said they intended to use contraception, only 57 percent received a method. As a result of the integrated family planning counseling and services introduced in the intervention, 94 percent of women reported being counseled on family planning. Eighty-two percent of women said they intended to practice family planning, and 83 percent left the hospital with a method (Ministry of Health, Burkina Faso, 1998). See Appendix I, Ministry of Health, Burkina Faso, 1998, for a description of the intervention.</p> | <p>III</p> |
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>A study of 339 postabortion patients in Oaxaca, Mexico, (year not specified) showed that revising hospital policies and protocols can improve PAC services. The study found that introducing MVA resulted in reducing the hospital stay from 20.7 to 17.4 hours. Following hospital protocol, no attempt was made to determine whether or not the patient's abortion was spontaneous or induced in nature. Many of the changes made were also supported by hospital-level policy changes. Guidelines were modified to stipulate using MVA with local anesthesia if a patient's uterus was determined to be smaller than 12 cm. Finally all operating rooms became functional 24 hours a day to reduce waiting times (Langer et al., 2002; Langer et al., 1999; Brambila et al., 1999). See Appendix I, Langer et al., for a description of the intervention.</p> <p>A study conducted during 1999 of the introduction of MVA to treat incomplete abortion at a regional hospital in El Salvador found that compared to sharp curettage, use of MVA and associated changes in protocol led to a significant reduction of 28 percent in time spent by the PAC patient in the hospital (Koontz et al., 2003). See Appendix I, Koontz et al., 2003 for a description of the intervention.</p> | <p>IV</p> |

IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>A 1999–2001 intervention study conducted in Bolivia’s three largest maternity hospitals found that reorganizing PAC services can reduce length of hospital time for PAC patients. The study found that the average length of hospitalization for women treated with MVA was much lower than with sharp curettage. The intervention consisted of reorganization of services to ambulatory care, PAC training on information and counseling (health status, uterine evacuation procedure, postabortion contraception, and care after leaving the hospital), and appropriate technologies and technical performance, and refresher training and supportive supervision (Billings et al., 2003b). See Appendix I, Billings et al., 2003b, for a description of the intervention.</p> | IV |
| | <p>A pilot program to improve the provision of family planning to PAC patients to avoid repeat abortions in a single public maternity hospital in Turkey has been successfully expanded into 10 public facilities throughout Turkey and then into 12 private sector and two public sector hospitals. Early evidence that “women were relying on repeat abortion to control their fertility made it clear that the Turkish family planning program, despite its successes, was unable to meet the contraceptive needs of its clients” and, therefore, became the impetus for providing family planning to PAC patients (Senlet et al., 2001: 91). The Turkish Ministry of Health initiated a pilot postabortion family planning program from 1991–1993 to link these services in a selected facility where large numbers of abortions were provided. The Turkish Ministry of Health set up structural links between abortion and family planning services; overcame staff resistance to providing PAC family planning services by conducting both a study on the safety of IUD insertions following PAC (which showed no increased risk of infection or expulsion) and conducting a series of seminars to reeducate staff on contraceptive technology; and provided accurate information to PAC patients about family planning. For example, “when women first came to the clinic to verify their pregnancy and to request an abortion, they attended a group session in which each contraceptive method was explained in detail” (Senlet et al., 2001: 91). At their appointment for an abortion, women met with a (continued...)</p> | III |





IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>(continued...) family planning counselor for a private counseling session. Contraceptive method availability was improved. As a result of the pilot program, use of a modern contraceptive among abortion clients increased from 65 percent in 1991 to 97 percent in 1992. The pilot project resulted in more effective contraceptive use, which led to the “reduction of repeat abortions.” From 1992–1998, the same strategy from the pilot project was expanded to 10 more large public hospitals. These interventions then served as prototypes in the curriculum of Turkey’s MCH program, “Postabortion Family Planning,” which included modules from EngenderHealth. A questionnaire sent in 1999 to these 10 sites found postabortion family planning acceptance rates of over 90 percent. “Perhaps this initiative’s most striking aspect is its ongoing self-sustainability. External assistance to all imitative hospitals ended several years before 1998 and in most cases involved technical assistance for a few months only” (Senlet et al., 2001: 92). In 1998 in the 14 additional hospitals, only 37 percent of PAC patients accepted a method of family planning; by 2001, this was increased to 72 percent. Abortion has been legal in Turkey since 1983 (Senlet et al., 2001).</p> | III |
| | <p>A study from 1977–1978 in Senegal that trained providers to use MVA to treat patients for abortion complications found that costs for treatment with MVA were lower than for sharp curettage, although still very expensive for women. Prior to the intervention, PAC services cost an average of 35,800 CFA (US\$70) in three hospitals. After the intervention approximately half of patients were treated with MVA, and services cost an average of 26,700 CFA (US\$50). However, the post-intervention cost for patients treated with MVA only was 23,800 (US\$46) CFA, as opposed to 33,400 CFA (US\$64) for those treated with sharp curettage, due to other improvements in service efficiency. An important element in the cost difference is the level of service provider treating the patient; the switch to MVA allowed midwives to begin to provide the majority of emergency services to PAC patients (Centre de Formation et de Recherche en Santé de la Reproduction and Clinique Gynécologique et Obstétricale CHU A. le Dantec, 1998). See Appendix I, Centre de Formation et de Recherche..., 1998, Senegal, for a description of the intervention.</p> | III |

IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|------------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>A 1996–98 intervention study in a referral hospital in Lima, Peru, tested a model where all PAC services were provided in an obstetrics and gynecology emergency room on an outpatient basis. Doctors were trained in MVA and improved clinical practices, counseling on medical care and family planning, and provision of contraceptive methods. The original study utilized a pre-post intervention design with no control group. Since the conclusion of this study, the hospital received no outside technical or financial assistance for postabortion care, and all PAC services remained under the full responsibility of the Department of Obstetrics-Gynecology and its emergency room services, and the hospital itself. A follow-up assessment was conducted in 2000–2002 to assess whether the PAC intervention was sustainable without outside assistance, and researchers used the same outcome measures that had been used to evaluate the intervention in the first study. Use of MVA for uterine evacuation increased from 0 percent to 90 percent after the intervention in 1997 and continued to increase even after external funding and technical assistance ended—to an average of 98 percent in 1999 and 2000 (Benson and Huapaya, 2002). See Appendix I, Benson and Huapaya, 2002, for a description of the intervention.</p> | <p>III</p> |
| | <p>A 1994–1995 PAC operations research study in Egypt found substandard quality care provided to PAC patients and the feasibility of rapidly improving outcomes related both to providers, such as technical knowledge and counseling skills, and outcomes related to patients, such as the return to fertility and the need for contraception. Between 1996 and 1997, services were expanded from the two sites of the pilot study into 10 district, general university, and teaching hospitals. Based on studies in these 10 hospitals, the Ministry of Health and Population’s essential obstetric care protocols are based on the results of PAC research and specify MVA as the procedure of choice in treatment of incomplete abortion at less than 20 weeks gestation, the use of pain medication, and the importance of counseling (Huntington and Nawar, 2003).</p> | <p>V</p> |





IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>A 1999–2001 intervention study conducted in Bolivia’s three largest maternity hospitals found that the average length of hospitalization for women treated with MVA was much lower than with <u>sharp curettage</u>. Pre-intervention women treated with <u>sharp curettage</u> were hospitalized for an average of 34 hours in La Paz, 34.3 hours in Santa Cruz, and 38.6 hours in Sucre. Post-intervention, the average length of stay was 10.7 hours with MVA and 49.1 hours with <u>sharp curettage</u> in La Paz; 4.4 hours for MVA and 26.2 hours for <u>sharp curettage</u> in Santa Cruz; and 19.9 hours for MVA and 45.9 hours for <u>sharp curettage</u> in Sucre. Most of the difference came from the shorter recovery time required for MVA with local anesthesia compared to <u>sharp curettage</u> with general anesthesia. However, treatment time was marginally shorter with MVA, and pre-procedure waiting time for women treated with MVA dropped by about 2 hours in all three hospitals, to 1.7–3.5 hours post-intervention, while it remained constant or increased for women treated with <u>sharp curettage</u> who waited between 3.4 (Santa Cruz) and 22.4 hours (Sucre). The intervention consisted of re-organization of services to ambulatory care; PAC training on information and counseling (health status, uterine evacuation procedure, postabortion contraception, and care after leaving the hospital), and appropriate technologies and technical performance; and refresher training and supportive supervision. Data were collected through 935 client exit interviews, 269 three-month follow-up interviews with clients, 439 client observations, review of 768 clinical records, 47 provider interviews, 204 provider questionnaires, 138 male partner interviews, and 424 client flow observations to assess costs (Billings et al., 2003b).</p> | <p>III</p> |
| | <p>A 1991 rapid assessment in Kenya and Mexico found that MVA used fewer resources and required less hospital time than sharp curettage. The study identified and analyzed the differences in the costs of MVA and sharp curettage used in the treatment of incomplete first-trimester abortions. Data were collected between January and June 1991 in four hospitals in Kenya and five hospitals in Mexico using direct observation to document actual time and resources from the beginning to the end of patients’ hospital stays. All women included in the study had incomplete abortion with a uterine size related to less than 13 (continued...)</p> | <p>III</p> |

IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>(continued...) weeks gestation. The protocol required that MVA not be performed for pregnancies of more than 12 weeks. The study design planned for at least 15 women from each hospital to be observed, but because of small caseloads this was not possible in all of the hospitals. Cost components studied were staff, drugs, and hospitalization. Cost at the four Kenyan hospitals ranged from \$2.94 to \$5.24 for MVA (a 23 percent difference) and \$3.99 to \$15.25 for sharp curettage (a 66 percent difference). In the Mexican hospital that performed both MVA and sharp curettage, the average cost for an MVA client was \$65.73—17 percent less than the hospital with the lowest cost for sharp curettage (\$79.23) and 72 percent less than the hospital with the highest cost for sharp curettage (\$235.90). Hospital costs accounted for the largest proportion of total cost, yet even when hospitalization costs were excluded, the cost of MVA was less than the cost for sharp curettage. Personnel costs were the second greatest contributor to average cost (Johnson et al., 1993).</p> | III |
| | <p>A study in Oaxaca, Mexico, (year not specified) found that use of MVA decreased the average cost by almost 32 percent. Using sharp curettage as the procedure of choice cost \$264.47 per patient as compared to \$180.22 using MVA. These costs include the intervention costs (e.g., project costs), supplies (e.g., syringes), training time, supervision, and monitoring. “The results of this study show that the improved service-delivery model achieved significant cost savings and simultaneously improved quality of care for patients undergoing postabortion treatment” (Brambila et al., 1999: 121). In terms of the procedure used for uterine evacuation, MVA was being used 0 percent of the time at baseline and increased to 78.1 percent at post-intervention. Sharp curettage at baseline was the most utilized technique at 89.6 percent and decreased to 20.8 percent; and a combination of Sharp curettage and MVA was 10.4 percent at baseline and decreased to 1.1 percent. Length of hospital stay was reduced by 36 percent. In terms of which procedure to use, guidelines were modified to stipulate the standard protocol of MVA usage with a local anesthesia if a patient’s uterus was determined to be smaller than 12 cm. Finally, all operating rooms became functional 24 hours a day to reduce waiting times (Langer et al., 2002; Langer et al., 1999). See Appendix I, Langer et al., for a description of the intervention.</p> | III |





IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure.</p> <p><input checked="" type="checkbox"/> Strong evidence: Eleven studies.</p> | <p>A study conducted during 1999 of the introduction of MVA to treat incomplete abortion at a regional hospital in El Salvador found that compared to sharp curettage, use of MVA and associated changes in protocol led to a significant cost savings of 13 percent (Koontz et al., 2003). See Appendix I, Koontz et al., for a description of the intervention. (Koontz et al., 2003).</p> | III |

IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|---|--|-----------|
| <p>Increasing linkages and referrals between clinic-based health practitioners and community-based providers may increase more timely access to PAC.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: Two studies.</p> | <p>Postabortion care in Egypt was successfully expanded from district hospitals to other district hospitals, three rural hospitals, and five primary care units to provide care to 495 PAC patients who otherwise may not have received PAC care. Twenty-eight physicians and 30 nurses were trained in MVA. PAC patients attending rural health units were diagnosed, stabilized by first aid measures, and referred to a district hospital (Megied and Hassan, 2003).</p> | IV |
| | <p>A qualitative study in Kenya using 74 in-depth interviews with female adolescents, women having abortions, providers, and leaders, in addition to 32 focus group discussions with married men and women, adolescent males and females, community health workers, CSWs, teachers, elderly men and women, and single men and women found that community-based providers believe that increasing linkages and referrals between clinic-based health practitioners and community-based providers may increase more timely access to PAC (Rogo et al., 1999).</p> | IV |
| <p>Providing contraceptive technology updates and counseling workshops for providers at the primary level can increase postabortion family planning counseling and method provision prior to discharge.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A 2001–2003 pre/post intervention operations research study to improve access to PAC in rural regions in Senegal that included a contraceptive technology update and counseling workshop for providers as part of the intervention found that patients at primary care facilities were almost twice as likely to have received family planning counseling after the intervention as before. At baseline, only 38 percent of patients interviewed at health centers received any family planning counseling before discharge, compared to 70 percent after the intervention. Twenty percent of patients left the health center with a method, and a substantial proportion (number not given) said they intended to practice family planning after discussing it with their partner. Although this is a much lower proportion than have left with a family planning method in similar studies in urban hospitals in other countries, it is not much lower than the 26 percent found in a 1998 OR study in three referral hospitals in Dakar (CEFOREP, 1998). It is also worth noting that 72 percent of women said their pregnancy had been wanted, suggesting that a large number of them had experienced a miscarriage and might desire a subsequent pregnancy soon afterward (Dabash, 2003). See Appendix I, Dabash, 2003, for a description of the intervention.</p> | III |





IV.C. INCREASING ACCESS TO CARE, INCLUDING TYPES OF FACILITIES THAT PROVIDE PAC

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>Increased distance to health facility is associated with decreased access to emergency obstetric care, increased hemorrhaging and length of hospital stay, and increased maternal and neonatal mortality rates.</p> <p><input checked="" type="checkbox"/> Enough evidence for action: Two studies..</p> | <p>A study conducted in 1994 in Egypt reporting results from a descriptive study of women who presented at public sector hospitals found that 56 percent of women reported having traveled more than five kilometers to the hospital where they received medical treatment for incomplete abortion. Patients with severe hemorrhaging were approximately 1.3 times more likely to have traveled more than five kilometers compared to patients who were admitted with mild to moderate hemorrhage. Patients with extreme blood loss upon admission had a significantly longer hospital stay of 16.6 hours as compared to patients with mild to moderate hemorrhaging with a hospital stay of 14.7 hours. A total of 568 hospitals were included in the sample frame, including 95 percent of government hospitals and approximately 60 percent of all hospital beds. Of those, approximately 15 percent of hospitals were randomly selected (for a total of 86 hospitals). (Huntington et al., 1998).</p> | III |
| | <p>A 1999–2000 index designed to measure the effort levels of national programs in 49 countries to reduce maternal and neonatal mortality (MNPI) found that the sharpest distinctions in maternal mortality rates between high- (MMR 750+), medium- (MMR 250-749), and low- (MMR < 250) countries were observed in areas characterized by large gaps between rural and urban access to emergency obstetric services and treatment. Emergency treatment included care for postpartum hemorrhage, obstructed labor, and abortion complications. On a scale from 0 to 100, countries with low MMRs scored an average of 30 points higher than did countries with high MMRs, largely as a result of the latter having less access to safe abortion and emergency treatment for complications. District hospitals rated better at service delivery than did health centers and neonates typically received better care than did women presenting for antenatal care or delivery (Ross et al., 2001).</p> | III |

IV.D. ENSURING QUALITY CARE, INCLUDING USE OF ON-SITE QUALITY IMPROVEMENT TECHNIQUES

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|------------|
| <p>Improving the quality of care of PAC, whether MVA or sharp curettage is used, reduces the average length of stay in hospital facilities.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> <p>Introducing MVA can lead to decreased hospital stays among PAC patients.</p> | <p>A study in 1997–1998 in six hospitals of the Mexican Institute of Social Security (IMSS) found that by improving the quality of care for PAC clients, regardless of whether MVA or <u>sharp curettage</u> was used, the average hospital stay was reduced from between 12 to 30 hours to eight hours following the intervention. The study authors attribute improvements in quality of care to provider training concerning providing empathy and support for the woman and identification of her emotional state and specific needs, such as information about possible post-procedure complications and follow-up and care at home, counseling to identify women’s reproductive health intentions, information about return to fertility, contraceptive methods provided according to the needs and desires of the woman, as well as use of MVA. The study included 803 women treated for abortion complications (Billings et al., 2003a). See Appendix I, Billings et al., 2003a, for a description of the intervention.</p> | <p>III</p> |
| | <p>A 2001–2003 operations research study in Senegal found that introducing MVA in health centers and health posts led to a reduction of mean hospital stay from 1.3 days (31 hours) to 0.4 days (10 hours). Before the intervention, digital curage was the primary method used for uterine evacuation, either with general anesthesia or often no pain medication, and 77 percent of women remained at the health facility overnight. After the intervention, 57 percent of women were treated with MVA, and only 40 percent of women remained overnight. Among patients treated with digital curage, 50 percent were kept overnight, while only 36 percent of MVA patients were. Despite overall shorter hospital stays, patients often had a longer pre-treatment wait for MVA than for curage: 14 of the 51 women interviewed at the end of the study waited more than two hours for treatment after being admitted, and almost all of these women were treated with MVA. However, the delay does not necessarily indicate lower quality treatment; the main reasons for the delay were that a trained provider and medication were not always immediately available, while digital curage was sometimes performed by untrained providers and without adequate pain medication or infection prevention (Dabash, 2003). See Appendix I, Dabash, 2003, for a description of the intervention.</p> | <p>III</p> |





IV.D. ENSURING QUALITY CARE, INCLUDING USE OF ON-SITE QUALITY IMPROVEMENT TECHNIQUES

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|------------|
| <p>Providing counseling on post procedure complications, follow-up care at home, return to fertility, contra-ceptive methods, and providing empathy and support improves the quality of care of PAC.</p> <p><input checked="" type="checkbox"/> Strong evidence: One study.</p> | <p>A study in 1997–1998 in six hospitals of the Mexican Institute of Social Security (IMSS) found that by improving the quality of care for PAC clients, regardless of whether MVA or <u>sharp curettage</u> was used, women reported that they received important information on their postabortion care. The intervention consisted of provider training to provide empathy and support for the woman and identification of her emotional state and specific needs, information about possible post procedure complications, follow-up and care at home, counseling to identify women’s reproductive health intentions, information about return to fertility, and contraceptive methods provided according to the needs and desires of the woman, as well as use of MVA. Eighty-seven percent of the 279 women who received <u>sharp curettage</u> and 83.7 percent of the 251 women who received MVA at the intervention sites reported that they received information on the finding of specific problems by their physician prior to uterine evacuation, compared to 58.7 percent of the 282 women at the control sites. Between 2.2 percent to 9.6 percent of women who received PAC at control sites reported that they received information on various different signs of post-uterine complications, such as general health problems, intense pain, bleeding for more than two weeks, fever, chills, and foul-smelling vaginal discharge—compared to between 22.8 percent and 41.3 percent of women who received PAC from institutions at intervention sites. While 26 percent of women who received PAC at control sites received information on where to seek help in case of complications, 32 percent of those receiving MVA PAC in institutions and 42 percent of those receiving <u>sharp curettage</u> PAC at intervention sites received such information. While only 10.8 percent of women who received PAC at control sites received information on when they could resume sexual relations, 39.9 percent of those receiving <u>sharp curettage</u> and 20.7 percent of those receiving MVA in institutions at intervention sites received such information. Among women who felt that their concerns had been identified, 96 percent of those treated for PAC where providers were trained in PAC perceived the hospital staff helped them to address their concerns, as compared with 80 percent of women treated for PAC in hospitals where providers did not receive PAC training (Billings et al., 2003a). See Billings et al., 2003a, for a description of the intervention.</p> | <p>III</p> |

IV.D. ENSURING QUALITY CARE, INCLUDING USE OF ON-SITE QUALITY IMPROVEMENT TECHNIQUES

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Provider attitudes and behavior toward PAC patients can lead to a delay in seeking care.</p> <p><input checked="" type="checkbox"/> Enough evidence for action; more research needed: One study.</p> | <p>A study in Zimbabwe using theater to generate discussions on abortion and PAC attracted 2,500 people to the performances. Post-performance discussions with 200 people and key informant interviews with 61 informants found that “nurses’ attitudes and behavior toward postabortion care clients have an impact on client decisions to seek care. In particular, community members are concerned about gossip, harsh treatment, and unfriendliness to youth. On the other hand, nurses are often frustrated by the client’s failure to explain her reason for her condition and her delay in seeking treatment until complications are severe” (Settergren et al., 1999: x). “Fear of being reported to the police was the most commonly cited reason for not seeking prompt medical attention for abortion complications” (Settergren et al., 1999: 18).</p> | <p>V</p> |





IV.E. PAC FOR WOMEN IN COUNTRIES WHERE ABORTION IS LEGAL AND AVAILABLE

| <p>Abortion is legal and available in some countries such as Russia and most countries in the former Soviet Union and India. Studies have shown that even in settings where abortion is legal, women still experience complications of incomplete abortion that require medical care. Furthermore, postabortion counseling offers an opportunity to provide family planning information and services to prevent subsequent abortions.</p> | | |
|---|---|-----------|
| Summary of Evidence | Supporting Research | Gray Type |
| <p>PAC services are needed even where abortion is legal.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies and one literature review.</p> | <p>According to unpublished Ministry of Health data from Russia, in 2001, abortions accounted for 27.7 percent of all maternal deaths in Russia, in contrast to an estimated 13 percent worldwide. Abortion is legal and available in Russia. A 2000–2003 operations research study to increase postabortion family planning in Perm, Russia, found that 17.2 percent of women having a legal, facility-based abortion experienced some type of complication, for which 46.2 percent (7.2 percent of all women) were hospitalized. Ten percent of the total sample reported incurring some cost associated with a complication (Savelieva et al., 2003). See Appendix I, Savelieva et al., 2003, for a description of the intervention.</p> | III |
| | <p>A review of the available literature on adolescent sexual behavior in India found that “while abortion has been legal in India since 1972, limited availability and poor quality have kept safe abortion beyond the reach of most poor women” (UNICEF, 1991 cited in Jejeebhoy, 1996: 17). “...Only about 538,000 of the estimated 6.7 million pregnancy terminations occurring annually are performed by registered providers in licensed facilities” (Ministry of Health and Family Welfare, Government of India, 1999 cited in Johnston et al., 2003: 182). A 1999 community assessment in four villages in rural Uttar Pradesh using non-random qualitative data collection techniques found that postabortion care services are needed even where abortion is legal. During the year in which the study took place (April 1999 - March 2000), between 8 percent and 10 percent of patients admitted to Kasganj Christian Hospital (5-8 patients per month) were admitted with abortion complications. Data collection revealed that “while there are clear linkages between induced abortions conducted by untrained providers and the severity of complications, postabortion complications were also experienced by some women who went to referral-level providers” (Johnston et al., 2001: 25). In (continued...)</p> | III |

IV.E. PAC FOR WOMEN IN COUNTRIES WHERE ABORTION IS LEGAL AND AVAILABLE

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| <p>PAC services are needed even where abortion is legal.</p> <p><input checked="" type="checkbox"/> Strong evidence: Two studies and one literature review.</p> | <p>(continued...) Uttar Pradesh approximately 25 percent of Primary Health Centers and 59 percent of Community Health Centers provide abortion services. The assessment was facilitated by research teams at Kasganj Christian Hospital and Kamala Nehru Memorial Hospital from August through November 1999 and included 54 key informants, 18 community mapping sessions, 24 focus group discussions, and 38 provider interviews (Johnston et al., 2001). Untrained providers do not provide contraceptive method choices following abortion nor do they counsel patients for how long they should observe sexual abstinence. “An illiterate mother of four girls and two boys said that she underwent an abortion because she and her husband could not afford to have more children. To avoid future pregnancies, she and her husband practice sexual abstinence, the only contraceptive method of which she is aware” (Johnston et al., 2003: 185). Untrained providers (such as dais) also were unprepared to help women address abusive situations when women sought abortions resulting from a pregnancy due to rape (Johnston et al., 2003).</p> | III |
| | <p>Despite the liberalization of the abortion law in Ghana, “many abortions continue to be induced illegally under unhygienic conditions by operators who are either untrained or inadequately trained to do them” (Lassey, 1995: 775). “In a study of 212 patients admitted for PAC, 58 percent of the abortions were performed outside legally designated health institutions “(Lassey, 1995: 776).</p> | III |





IV.F. INTEGRATION OF PAC WITH EMERGENCY OBSTETRIC CARE SERVICES AT ALL LEVELS OF THE HEALTH SYSTEM AND IN SERVICE DELIVERY

| Summary of Evidence | Supporting Research | Gray Type |
|---|--------------------------------|-----------|
| Integration of PAC with emergency obstetric care services at all levels of the health system and in service delivery. | No PAC-specific studies found. | |

IV.G. SCALING UP AND SUSTAINABILITY

Most PAC interventions have been small in scale, raising the question of the feasibility of scaling up and sustaining interventions that are no longer part of research projects. However, because PAC, through policy changes and reorganization of service, reduces time and costs for health facilities and improves client health outcomes, it is potentially easier to introduce and sustain than other reproductive health interventions that may not have such clear cut cost-benefit advantages. An assessment of PAC operations research studies in Burkina Faso and Senegal noted that on conclusion of the formal research projects, the study sites tended to make or maintain the changes necessary to continue the new PAC model independently. As one maternity chief said, “I saw that this system was much more effective and cost-effective. It is my job to make the maternity unit run better, so I reorganized the services. If I waited for someone from the Ministry to tell me to change, I could be waiting forever” (Marin et al., 2003: 8).

Prior to the OR studies, neither country had any explicit service protocols or policy regarding services for women presenting with complications from an incomplete abortion. One of the key outcomes from these studies was that the ministries in both countries took ownership of the model and incorporated PAC into their larger safe motherhood strategy. The Burkinabé Ministry of Health collaborated with CRESAR to develop national norms and standards regarding PAC, and the Senegalese Ministry has developed national service delivery protocols, assisted by CEFORP and JHPIEGO. Both countries now include PAC supplies and commodities in their annual budgets and are seeking a sustainable source for MVA equipment, most of which has been donated until now (Marin et al., 2003).





IV.G. SCALING UP AND SUSTAINABILITY

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>Research on PAC can be used for policymakers to support expanding PAC programs and nation-wide PAC protocols.</p> <p><input checked="" type="checkbox"/> Needs more research: One study and one literature review.</p> | <p>A 1994–1995 operations research study in Egypt on PAC revealed substandard quality of care provided to PAC patients and the feasibility of rapidly improving outcomes related both to providers, such as technical knowledge and counseling skills, and outcomes related to patients, such as the return to fertility and the need for contraception. Small-scale expansion of services from the two sites of the pilot study into 10 district, general university and teaching hospitals was achieved from 1996–1997. Studies in these 10 hospitals increased evidence for the need to expand PAC programs. Based on the studies in these 10 hospitals, the Ministry of Health and Population’s essential obstetric care protocols are based on the results of PAC research and specify MVA as the procedure of choice in treatment of incomplete abortion at less than 20 weeks gestation; the use of pain medication; and the importance of counseling (Huntington and Nawar, 2003).</p> | V |
| <p>Integrating family planning counseling and services into safe motherhood programs will assist in achieving sustainability of PAC.</p> <p><input checked="" type="checkbox"/> Needs more research: One study and one literature review.</p> | <p>In Egypt, PAC passed to the safe motherhood program. However, safe motherhood programs need additional expertise in family planning to meet the needs of PAC patients. “PAC...will be realized only as holistic programming is achieved for women’s reproductive health services” (Huntington and Nawar, 2003: 124).</p> | V |

IV.G. SCALING UP AND SUSTAINABILITY

| Summary of Evidence | Supporting Research | Gray Type |
|--|--|-----------|
| <p>PAC programs can be scaled up.</p> <p><input checked="" type="checkbox"/> Strong evidence: Three studies..</p> | <p>From 1994–1997, a total of 1,325 health care professionals working in 23 percent of the Mexican Institute of Social Security (IMSS) hospitals nationwide were trained in the use of MVA and other aspects of postabortion care (Fuentes Velasquez et al., 2001 cited in Billings et al., 2003). Throughout Mexico, approximately 120,000 women received abortion-related care every year in public sector facilities (INEGI, 2001 cited in Billings et al., 2003), of which in 1997 slightly more than 56,000 of these women were treated at IMSS facilities (IMSS, 1997 cited in Billings et al., 2003).</p> | III |
| | <p>A pilot program to improve the provision of family planning to PAC patients to avoid repeat abortions in a single public maternity hospital in Turkey has been successfully expanded into 10 public facilities throughout Turkey and then into 12 private sector and two public sector hospitals (Senlet et al., 2001).</p> | III |
| | <p>A 2001–2003 operations research study in Senegal found that midwives as well as physicians at district health centers can be trained to provide MVA and other PAC services in rural areas, referring complicated cases to district hospitals. Previous OR studies in Senegal have successfully introduced MVA as part of a comprehensive PAC program in three tertiary-level hospitals in Dakar (CEFOREP, 1998). This OR study continued the progression in primary care facilities, demonstrating that even in settings with the most limited resources and trained personnel, providers can use MVA to safely treat women arriving with incomplete abortions (Dabash, 2003). See Appendix I, Dabash, 2003, Senegal for a description of the intervention.</p> | III |





IV.G. SCALING UP AND SUSTAINABILITY

| Summary of Evidence | Supporting Research | Gray Type |
|--|---|-----------|
| PAC services including MVA can be sustained without outside assistance. | A 1996–98 intervention study in a referral hospital in Lima, Peru, tested a model where all PAC services were provided in an obstetrics and gynecology emergency room on an outpatient basis. Doctors were trained in MVA and improved clinical practices, counseling on medical care and family planning, and provision of contraceptive methods. The original study utilized a pre/post intervention design with no control group. Since the conclusion of this study, the hospital received no outside technical or financial assistance for postabortion care, and all PAC services remained under the full responsibility of the Department of Obstetrics-Gynecology and its emergency room services, and the hospital itself. A follow-up assessment was conducted in 2000–2002 to assess whether the PAC intervention was sustainable without outside assistance, and researchers used the same outcome measures that had been used to evaluate the intervention in the first study. Use of MVA for uterine evacuation increased from 0 percent to 90 percent after the intervention 1997 and continued to increase even after external funding and technical assistance ended—to an average of 98 percent in 1999 and 2000 (Benson and Huapaya, 2002). See Appendix I, Benson and Huapaya, 2002, for a description of the intervention. | III |

IV.H. NON-TRAINING CONTRIBUTIONS TO ESTABLISHING AND SUPPORTING PAC

Policies and clinical protocols are needed to reorganize services to implement PAC models and improve the provision of emergency treatment of abortion complications, procedures for maintaining the confidentiality of abortion patients, assurance that the cost of treatment services is affordable for women seeking PAC, provision of information to the general public about where PAC is available, and education about the importance of seeking care promptly. Providers need information on the provisions of existing abortion laws, and public education is needed about which services are available within the provision of existing laws. Policymakers need to become aware of the impact of unsafe abortion and to recognize the benefits of timely PAC (Kinoti et al., 1995 and Benson et al., 1996). These recommendations made in 1995 were based on a review commissioned by the Conference of Health Ministers for East, Central, and Southern Africa (held in 1993) of 99 published and 146 studies in the grey literature.

