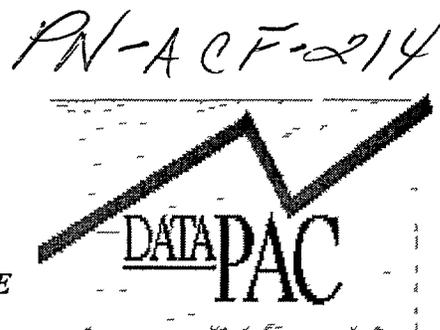


*INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE*



**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
DATAPAC CORE QUESTIONNAIRE SERIES
FOR POSTABORTION CARE
OPERATIONS RESEARCH**

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Four DATAPAC Technical Working Groups were formed to review selected data collection instrument in the series. Participants included:

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1. WHAT IS DATA PAC?

Complications during pregnancy affect millions of women worldwide each year, nearly 600 000 of these women die as a result ¹ Women face many risks during pregnancy and childbirth, including *abruptio placentae*, *placenta previa*, preeclampsia as well as complications such as hemorrhage and infections arising from unsafe induced abortion practices Over 70 000 women are estimated to die each year as a consequence of unsafe abortion ² Worldwide, 13% of pregnancy-related deaths are estimated to result from unsafe abortions, with the vast majority of deaths occurring in less developed countries ² Many more women suffer consequences such as pelvic inflammatory disease and sterility Moreover, these figures underestimate the true impact of unsafe abortion as they do not account for the thousands of women who develop complications after a spontaneous abortion

A postabortion care (PAC) approach has been developed to address the issue of maternal morbidity and mortality related to unsafe induced and spontaneous abortion The PAC approach consists of these elements 1) emergency treatment services for postabortion complications, postabortion contraceptive counseling and services, and, 3) links between emergency abortion treatment and comprehensive reproductive-health care ³

The United States Agency for International Development (USAID), private foundations, and other international agencies have funded over 30 PAC operations research (OR) studies since 1990 in Africa, Asia, and Latin America These studies have investigated ways to maximize the quality of PAC services while minimizing costs and resources used A consensus has emerged among individuals and agencies involved in PAC OR that 1) a centralized database of PAC studies is needed, and, 2) core questionnaires should be developed for use in PAC OR projects in various country settings A centralized database would facilitate inter- and intra-regional OR analyses, while using core questionnaires would lead to more comparable and generalizable research findings

In collaboration with USAID, the Population Council, and other organizations, Ipas is coordinating the development of core questionnaires as well as compiling data and supporting documentation from all available PAC OR studies This project is called "DATA PAC" This guide is part of the DATA PAC Core Questionnaire Series, a set of questionnaires and instruction guides providing an overview on how to design and conduct quantitative PAC OR studies

What is DATA PAC?

- **PAC OR Database** Electronic database for conducting secondary analyses of available PAC OR studies
- **Supporting Documentation** Copies of protocols, blank questionnaires, reports, publications & other documents from PAC OR studies
- **Core Questionnaires** Standardized PAC OR questionnaires & protocols in English & Spanish Includes cost study instruments, patient questionnaire, & service delivery observation guide

DATAPAC Core Questionnaire Series

The DATAPAC Core Questionnaire Series is in modular form that currently includes

- Module 1** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 2** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 3** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 4** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 5** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 6** **GUIDE TO OBSERVATION OF POSTABORTION CARE SERVICES** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the General Information Questionnaire for Postabortion Care Patients (Module 1)*.

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

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2. HOW TO USE THIS GUIDE

This manual discusses the design and implementation of PAC OR studies. Our hope is that the DATAPAC Core Questionnaire Series will be useful both to those who are familiar with OR methods, as well as those for whom PAC OR is new. The various instruments and instruction guides that make up the DATAPAC Core Questionnaire Series are available separately.

Suggestions for how specific questions should be interpreted are presented along with each instrument. We encourage researchers to use the instruments as we have presented them, as this leads to more uniform data and therefore facilitates comparative analyses. However, we understand that the instruments may need to be adapted to reflect the specifics of PAC in each research setting. Therefore, electronic versions of the instruments are available for downloading at the DATAPAC website ([datapac ipas org](http://datapac.ipas.org)) as well as on diskette in Microsoft Word 6.0 (for Windows 3.1 or greater). Also, Epi-Info* and Microsoft Excel files are available to use for entering, cleaning, and analyzing data.

*Epi-Info was developed by the Centers for Disease Control and Prevention and can be downloaded free of charge from www.cdc.gov or obtained (for a fee) by contacting

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3. METHODOLOGY

3.1 Study Objectives

Ultimately, the goal of all PAC OR is to reduce maternal morbidity and mortality associated with unsafe abortion. The immediate objective is then to use OR as a tool to improve the quality of PAC services. Improving PAC services may be accomplished through a variety of means, including reorganizing delivery of services, introducing manual vacuum aspiration (MVA), switching from sharp curettage (SC), also called dilation and curettage (D&C), to for treatment of incomplete abortion, improving infection prevention and pain management practices, providing counseling including information on contraceptives, reducing costs, or, a combination of these options. Postabortion care OR studies generally are designed to demonstrate the feasibility and sustainability of addressing PAC service delivery issues, and to evaluate the impact of changes made to PAC services. Therefore, the study objectives for a particular study depend upon the question or questions a researcher wants to address and the primary audience for dissemination of the study results.

Study objectives should be clearly stated before designing and implementing a study, and should be narrowly focused. Two examples of broad, unfocused study objectives are

“To see if MVA is better than SC for treating patients presenting with incomplete abortion.”

“Is SC more expensive than MVA?”

These objectives could be rephrased to read

“Are there differences in the number of treatment-related infections or trauma when women are treated with either MVA or SC?”

“Are there differences in the amount staff time, medical supplies, and equipment required when women are treated with either MVA or SC? If so, do these differences have an impact on the facilities’ cost of providing services?”

The key is to be certain that the study objectives are stated in a manner conducive to making actionable recommendations for PAC policy and program management. Several resources provide guidance on how to formulate study objectives.^{4,5} Once a researcher has clearly defined the study objective or objectives, designing the study can begin.

3.2 Study Design

3.2.1 Study Types

Numerous study designs have been used in OR to study treating complications of abortion, including quantitative designs such as *descriptive* and *comparative* studies, as well as qualitative designs such as *exploratory* studies incorporating open-ended interviews and focus groups. This guide focuses on two types of quantitative study designs—descriptive and comparative studies.

Descriptive studies generally seek to illuminate the availability, quality, and cost of current PAC services. Comparative study designs are useful when the study objective is to measure the effect of an intervention, such as whether the introduction of MVA leads to better quality of care when treating incomplete abortion. A further consideration is whether to conduct the study at only one hospital or clinic (*single-site study*) or include two or more sites in the study design (*multi-site studies*). The type of study chosen depends ultimately upon the study objectives.

3.2.2 Descriptive and Comparative Studies

Descriptive studies are often cross-sectional in design. Cross-sectional studies typically collect data once to provide a “snap shot” of current PAC services and may help illuminate deficiencies in quality of care and inefficiencies in resource use. However, cross-sectional studies do not allow researchers to measure the impact of changes in service delivery over time.

Comparative studies, in contrast, are designed to measure one treatment protocol against another. Examples would include testing SC versus MVA or testing one method of providing postabortion contraceptive services versus another. Postabortion care OR comparative studies generally fall into two categories: *concurrent-control* and *pre-post intervention* studies. In a concurrent-control study (also called *static-group comparison* studies)⁵ of MVA and SC, the *control group* continues to receive the standard treatment, such as SC with heavy sedation and no postabortion contraceptive counseling. Patients in the *intervention group* may then receive a modified treatment regimen, such as postabortion contraceptive counseling after treatment with MVA under local anesthesia and/or light sedation. Theoretically, this can be done at a single site if the caseload is sufficient to randomize patients into intervention and control groups, and if the hospital staff are proficient and sufficiently motivated to follow different treatment protocols based on the group randomly chosen for each patient.

In most settings, however, it is not feasible to randomize patients and use a single-site concurrent-control study design. Ideally, introducing MVA for the treatment of incomplete abortion includes more than simply replacing curettes with syringes. In order to fully benefit from the use of MVA, services generally must be reorganized. For example, the treatment procedure can be moved from the operating theater to a procedure room, general anesthesia or heavy sedation can be replaced with local anesthesia and/or light sedation, most postabortion patients can be treated on an outpatient rather than inpatient basis. Based on such changes, it would likely be impossible in most settings to randomly assign some patients to treatment with SC on an inpatient basis and other patients to treatment with MVA on an outpatient basis.

As an alternative, researchers will often choose one hospital where SC is used to serve as a control site, and another hospital where services are reorganized and MVA is introduced to represent the “intervention group” (e.g. a multi-site, concurrent-control study). This design has the advantage of allowing for the collection of data from both comparison groups simultaneously, which can significantly reduce the period of data collection, the overall length of the study, and perhaps reduce study costs. Researchers should be cautious, however, if using a concurrent-control design. There are ethical issues around withholding superior treatment from the control group. Also, with the multi-site concurrent-control design, any difference between intervention and control groups may be due more to the inherent difference between the study sites than the intervention itself.

Pre-post intervention studies are comparative studies that begin with a number of patients who are recruited into the study and treated according to standard practices. This first period of data collection is often called the “baseline” or “pre-intervention” phase. Next, an intervention is implemented, such as introducing a postabortion contraceptive counseling program, reorganizing PAC service delivery, and/or training staff in the use of MVA. Patients are then treated according to the new protocol and the results are compared with the data from the baseline phase. The advantage with the pre-post intervention design is that changes in service quality and resources used are more likely to be directly attributable to the changes in services, rather than differences in study sites that may occur in concurrent-control studies. However, pre-post intervention studies typically take longer to complete and may therefore not conform to budget and timeframe requirements. Even so, we recommend pre-post intervention designs as they tend to avoid certain ethical and analysis problems inherent in concurrent-control study designs.

3 2 3 Single-site and Multi-site Studies

If a provider needs to evaluate PAC services at a single facility, and it is not important how this facility compares with other facilities, then a single-site design can be employed. The impact on PAC service quality and resource use of introducing new services (MVA, postabortion contraceptives, etc.) at that site can therefore be assessed by doing a baseline study (pre-intervention) and following up with a post-intervention study after the new service has been introduced.

On the other hand, if researchers want to assess the state of PAC services across systems, regions, or entire countries, such as determining whether implementing MVA and new treatment protocols can improve services at public hospitals in general, then the study would require two or more sites. A multi-site study can be used to compare different facilities, such as facilities using SC versus those that have adopted MVA to treat incomplete abortion. The size of multi-site studies can range from two to an unlimited number of sites.

A type of multi-site study design that is gaining popularity in some areas of OR requires recruiting a large number of study sites and randomizing at the site level, known as *cluster randomization*.⁶ An example of cluster randomization would be to recruit 50 sites that treat women for complications arising from unsafe abortion, then randomize 25 sites to receive an intervention while the remaining sites would continue with their standard treatment protocols. Obviously, a PAC OR study of this size would be expensive and difficult to mount, so the usefulness of cluster randomization is likely limited for PAC studies.

Regardless of the number of sites, researchers should take care to account for differences in factors that are unrelated to whether the site is a control site or an intervention site. For example, in multi-site cost studies, differences in salary levels may not be largely affected by whether MVA or SC is used, but more by different pay scales at each site. One method to control for these differences is to standardize salary costs by calculating an average of the salaries across sites. A full discussion of standardization is beyond the scope of this manual. Please consult a biostatistician when designing and also when analyzing data from multi-site studies.

3 2 4 Participant Selection Criteria

In most cases, study participation should be limited to women presenting for treatment of incomplete abortion (or providers of incomplete abortion services in studies with provider

interviews, etc) However, depending upon the study objectives, other patient selection criteria may be needed Some studies have focused on women who seek treatment for septic abortions and therefore only patients who presented with septicemia complicating their incomplete abortions were recruited ⁷ Another example includes most PAC OR cost studies, where it is recommended that patients be included only if they present with no major complications other than incomplete abortion and are 12 weeks or less uterine size ⁸ For more information on participant selection criteria in cost studies, please consult Module 3 of the DATA PAC Core Questionnaire Series, the *Guide to Assessing Resource Use in the Provision of Postabortion Care*

Principal Investigators (PIs) should avoid being overly restrictive when specifying the patient selection criteria Having a non-restrictive participant selection criteria allows Data Collectors to gather information on the full range of PAC patients The PI then has the opportunity to stratify by certain criteria (age, status at presentation, marital status, etc) when analyzing the data Ultimately, participant selection, either during data collection or the data analysis phase of the study, should be driven by the particular objectives of the study

Regardless of the selection criteria chosen, the PI should make certain that the Data Collectors understand the selection criteria before data collection begins The sample Participant Selection Checklist (Annex 1) should aid Data Collectors when recruiting patients for the study

3 2 5 Sampling, Randomization, and Sample Size

Sampling is the process for determining who will be invited to participate in the study Sampling can take place at the hospital or clinic level For example, if a given country has 100 hospitals or clinics that routinely treat PAC patients, and a researcher chooses to conduct a study at four of these sites, then the researcher has sampled the available study sites Sampling can likewise occur at the patient level, where a hospital may treat 50 PAC patients per month, but a researcher limits data collection to a sample of 20 patients In either case, researchers may choose between having a *randomized sample* or a *convenience sample* Generally, a random sample of sites or patients allows the researcher to generalize the results to the broader population from which the sites or patients were selected

Convenience samples typically fall into four categories purposive, temporal, quota, and “snowball” sampling ⁴⁵ **Temporal sampling** is the most common type of sampling used in PAC OR studies, and typically includes recruiting all or a portion of women admitted for treatment of incomplete abortion over a given time (e g all women admitted to a clinic in a given month) Similar to temporal sampling is **quota sampling** where, for example, the first 30 women admitted to a hospital for treatment of incomplete abortion would be invited to participate in the study However, with temporal or quota sampling, researchers run a risk of getting a biased or non-representative sample, especially if the intended sample size is small (less than 50 women or two to three sites) or time period is brief (a few weeks or even months) To ensure, for example, that all types of facilities that offer PAC services (public, private, university sponsored teaching hospitals, etc) are represented in the study, the researcher would collect data from each of these kinds of sites This is an example of **purposive sampling** Finally, **snowball sampling** describes a technique where participants in a study are asked to identify other people who may be appropriate candidates for the study (i e ask a woman who has recently received PAC services to identify other women who have received similar services) Snowball sampling can be very useful

when attempting to locate people from marginalized populations, such as women who require treatment for complications of an illegally induced abortion and would otherwise be difficult to identify and interview. However, confidentiality issues must still be respected when using snowball sampling.

A randomized sample should be distinguished from *randomization*, which describes the process by which patients are randomly assigned to intervention groups, such as randomly assigning 10 patients to receive contraceptive counseling, and 10 patients to receive no counseling. Randomization is the best way to reduce the chance of bias from unmeasured factors. However, randomized studies may require that some patients be denied superior care, such as when patients are randomized to a group treated with SC or a group that does not receive contraceptive services. Denying superior care is a critical ethical issue and thus the advantage of randomization, lower risk of bias, must be balanced with patients' rights for the highest quality care available. Also, studies employing randomization are usually more complicated to design and manage and tend to be more expensive than studies with quasi-experimental designs. It must be noted, however, that most statistical tests are designed assuming that randomization has occurred. Therefore, many of the statistical tests used to evaluate PAC OR data (chi-squares, ANOVAs, etc.) should be used with caution when using data from non-randomized samples. Again, we recommend that a PI consult a biostatistician during the design and analysis of PAC OR studies.

Finally, there is the issue of sample size – determining how many clinics or patients to include in a study. Formulas exist to help researchers determine the sample size required to conduct certain statistical tests with a predetermined level of certainty and Epi-Info and other statistical software packages have features to estimate needed sample-size. However, sample sizes in PAC OR have typically been determined by caseload and study budgets. A full discussion of calculating sample sizes, sampling, and randomization is beyond the scope of this manual, but several resources exist to help guide these decisions.^{4,5,9} Due to the increased costs and ethical issues associated with random sampling and randomization, most PAC OR studies have employed convenience sampling and a non-randomized (quasi-experimental) design.

4. PLANNING THE STUDY

Regardless of the type of study, the planning process remains relatively unchanged for the PI. After designing and planning the study, the PI should pre-test any data collection instruments, collect and analyze data, and then report the results. However, the order of the steps involved in planning a study may vary. For example, in some settings the PI may need to get approval from the Ministry of Health or the agency funding the study before beginning any other activities. In other settings, a Ministry may not be willing to approve a study until the PI has identified key study staff and the research location(s).

Before beginning data collection, the PI should

- Select study staff
- Select sites
- Meet with site staff
- Obtain approval for the study
- Obtain supplies
- Train data collectors

4.1 Select Study Staff

The primary staff needed for a study is a PI and one or several Data Collectors. Larger studies, particularly multi-site studies, may also require Site Coordinators, Data Managers, and Biostatisticians.

4.1.1 The Principal Investigator

The PI for the study will have primary responsibility for coordinating tasks and activities, training and supervising Site Coordinators and Data Collectors, participating in data collection, analyzing data, and developing and disseminating study results. Therefore, the PI should be very familiar with hospital procedures, experienced in the oversight of data collection and analysis, objective and detail oriented. Experience in training would be very useful as the PI is often responsible for training Data Collectors. The PI could be a physician, nurse, hospital administrator, public health specialist, and/or a social scientist. Occasionally, a study will have more than one PI, known as Coinvestigators. Aside from coordinating study activities, the PI is responsible for ensuring that all study staff are thoroughly trained in informed consent requirements and study procedures.

4.1.2 Site Coordinators

In a small study, the PI may have many responsibilities, including supervising Data Collectors and the data collection process. However, in larger studies such as multi-site studies, the PI may not be able to supervise data collection. Therefore, the PI will need to employ Site Coordinators at each site who can monitor the data collection process, review completed forms, and answer questions from Data Collectors, administrators, or the study participants themselves. Like the PI, Site Coordinators should be very familiar with hospital procedures, experienced in the oversight of data collection, objective and detail oriented.

4.1.3 Data Collectors

Candidates for Data Collectors might include off-duty medical residents, social workers, nurses, or students of health-related or social science fields.

The type of study, required sample size, length of data collection period, and projected PAC case-load will determine the number of collectors necessary to conduct the study effectively. For example, in hospitals with a low number of postabortion patients, one to two Data Collectors may be adequate, while in hospitals with high caseloads, several Data Collectors may be needed. If intensive observation is required, such as with the *DATAPAC Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* or the *DATAPAC Guide to Observation of Postabortion Care Services (Module 5)*, extra Data Collectors may be required.

At some sites, many women arrive at night for postabortion care. If the study involves observation of services, it will be necessary to have Data Collectors available both day and night. However, in some settings it may be considered inappropriate, or unsafe, for Data Collectors to stay overnight. In these situations, standard time limits for data collection must be established, for example, 08 00 to 18 00 hours. If the study involves observation of PAC services, data collection should occur for at least seven consecutive days so that data are obtained on both weekdays and weekends as well as all work shifts. The number of Data Collectors and the hours they will actively collect data should be determined prior to initiating the study and the hours of data collection should be the same for all sites if a multi-site study.

Qualities of good Data Collectors

- Patient & objective
- Detail-oriented
- Experienced working in health care settings
- Familiar with supplies & equipment used for PAC
- Familiar with the provision of contraceptive services
- Familiar with logbooks & patient charts
- Able to establish good relationships with staff & patients
- Committed to collecting data for the duration of the study
- Respect confidentiality of study participants

4.2 Select Site or Sites

The primary criterion for selecting sites is the type of health care facility needed as determined by the study objectives. Potential sites include any facility that treats incomplete abortion, including Ministry of Health hospitals, Social Security facilities, private hospitals and other appropriate facilities. The World Health Organization (WHO) has developed a classification system to distinguish between different types of health facilities that consists of Primary Health Centers, First Referral Centers (District Hospitals), Secondary Level Hospitals, and, Tertiary Hospitals. Principal Investigators need to pay particular attention to the fact that different kinds of facilities tend to attract different kinds of patients.

Patient caseload at the site or sites is, in most situations, the second most important criteria when selecting study sites. Caseload also helps determine the number of Data Collectors and days needed for data collection. The most accurate sources of information about the number of cases treated over a given period of time are obstetric-gynecology department logbooks and hospital discharge records, which generally register the name, diagnosis, and date of treatment for each patient. The PI may also want to talk with nurses, midwives, and doctors at the potential research site for a verbal confirmation of the number of patients seen.

Other factors are important when selecting study sites. Site staff need to be at least cooperative with study staff, if not enthusiastic about participating in the study. If the study is designed to measure the impact of changing PAC services, there must be interest at the site in adopting new

services. Finally, researchers will need full access to all areas where treatment is provided and approval of hospital authorities is required.

Once the site or sites have been chosen, the PI should become familiar with treatment practices at each site. Although some hospitals or health systems have written guidelines describing treatment protocols for incomplete abortion, most do not. In addition to reading available protocols (where they exist), the PI should observe PAC service delivery and interview staff.

4.3 Meet with Site Staff

The PI should involve the site staff with study design as soon as possible in the planning stage. The PI should familiarize the staff who work with PAC patients (e.g., ob-gyn, emergency department and contraceptive clinic staff such as physicians, nurses, aides, and midwives) with the objectives of the study and introduce them to the Data Collectors. It is important to discuss the purpose of the study, describe the Site Coordinators and Data Collectors' tasks, emphasize that the study will not interfere with current workloads, and explain that the study results will be made available to the staff. Lastly, the PI should explain how the study will help administrators improve the efficiency and quality of care offered and that the purpose of the study is not to evaluate individual staff members.

4.4 Obtain Approval for the Study

Hospital approval and support for the project is crucial if resulting policy recommendations are to be implemented. In many cases, approval will also be needed from local and national government authorities, as well as funding agencies. Because PAC OR study may require access to confidential information such as salary documents and patient records, researchers must first obtain written permission from appropriate authorities in order to have access to this information and to all physical areas where incomplete abortion patients are treated.

Additionally, researchers are usually required to seek approval from a review committee, sometimes called a Medical Research Council or an Institutional Review Board. Review committees are typically mandated to review proposed research projects and determine that the proposed study 1) has sufficient scientific merit, 2) meets established standards for protecting the study participants from harm, 3) guarantees confidentiality, and, 4) ensures that informed consent will be obtained from all participants. Whether or not a formal review process is required, researchers are responsible for ensuring that participants recruited into the study are fully informed about the nature of the study and that each participant has indicated that he or she has chosen to participate freely.

4.5 Informed Consent

The Data Collector must explain the study to each participant and obtain informed consent to include each participant in the study (participants would include both the patients as well as providers if conducting an observation study). The participant must also be told whether their responses are *anonymous*, *confidential*, or neither.

- ***Confidential*** means that the identifying information about the participant such as name, addresses, or identification numbers will be written down and attached to their questionnaires. However, this information will not be reported individually or shared with others beyond the study staff.

- *Anonymous* means that neither the participant's name nor any identifying information will be attached to the interview

In many PAC OR studies, it may be easier to assure anonymity to patients than to providers who are on staff at the study site. However, most PAC OR studies require identifying information in order to link the questionnaires with patient charts and other records. Therefore, participants can usually only be guaranteed confidentiality, not anonymity.

An example of recommended informed consent language that assumes confidentiality follows:

Hello, my name is [*name of Data Collector*], and we are conducting a study on the quality of care this hospital provides its patients. If you agree to participate, we may observe the care you receive and/or we may ask you a few questions about your medical history and treatment while in the hospital.

Any answers you give are completely CONFIDENTIAL, meaning that no one other than the study staff will be able to see your answers, and your name or address will NEVER be associated with the answers you give. You have every right to refuse to participate in the study. Whether or not you are in the study will not affect your care. If you do agree to be in the study, you may still refuse to answer any question.

If you have any questions about this study later, please contact [Principal Investigator's name and telephone number and/or address]. Do you agree to participate in this study?

More examples of informed consent forms for patients, providers, and administrators are available from Ipas or can be downloaded from <http://datapac.ipas.org>. Written, informed consent is often required by the hospital or study site, and thus the PI should obtain the appropriate form and make it available to the Data Collectors. Even if the study site does not require written consent, it is usually advisable to get written consent from the patient before beginning the interview. Many studies have relied upon oral consent of the participants, but we recommend written consent. A copy of the signed form should be filed with each patient's study records (not hospital records).

4.6 Obtain Supplies

The PI or other research staff will need to collect supplies necessary for data collection, including pens, clipboards, watches, and a white coat or any other uniforms that will allow Data Collectors access to treatment areas.

4.7 Train Data Collectors

In order to ensure that data are collected in a consistent and correct manner, it is critical that the Data Collectors receive comprehensive training on how to administer the data collection instruments used in the study. Comprehensive training should include reviewing the instruments question by question, role playing, and pre-testing the instruments in a hospital setting (supervised by the PI). Data Collectors should be instructed not to discuss the study results with anyone other than the PI, and the importance of patient and provider confidentiality and informed

consent should be repeatedly stressed. It is not unusual for questions raised by the Data Collectors during training to lead to modifications in the instruments themselves.

Once training and pre-testing is completed, a *Guide for Data Collectors* should be drafted. In addition to providing information on how the Data Collectors can contact the PI with questions or concerns, the *Guide Book* should help clarify the questions in the instruments (i.e. definitions of unusual terms, patient selection criteria, appropriate units for measures, cues to start and stop timing of PAC events, etc.)

Depending upon the size and complexity of the study, training of Data Collectors may be spread out over several days. In addition to paying Data Collectors for their time while being trained, it is customary to provide refreshments for Data Collectors during training. A sample agenda is provided below in Figure 1.

Figure 1 Sample Agenda Training Workshops for Data Collectors

<i>Day 1</i>
<ul style="list-style-type: none">• Introductions• Overview of study (if this is a follow-up study, then discuss findings of baseline study)• Roles of Principal Investigator and Data Collectors• Overview of instruments• Ethical guidance (Confidentiality & Informed Consent)
<i>Day 2</i>
<ul style="list-style-type: none">• Review instruments (role plays)
<i>Day 3</i>
<ul style="list-style-type: none">• Pre-test instruments at local hospital or hospitals if practical
<i>Day 4</i>
<ul style="list-style-type: none">• Revise instruments if needed
<i>Day 5</i>
<ul style="list-style-type: none">• Additional training & testing on revised instruments if needed

5. DATA COLLECTION

One method for gathering data is self-administered instruments, such as a questionnaire completed by a patient or provider. However, self-administered instruments have not been widely used in PAC OR to date, and therefore this manual focuses on three methods for collecting data: observation, record review, and interviews. Regardless of the method of data collection, study staff must ensure that the data collected are of high quality and are kept secure so that confidential information is not revealed to people outside of the study team.

5.1 Observing PAC Services

In the DATAPAC Core Questionnaire Series, both the *Guide to Assessing Resource Use in the Provision of Postabortion Care* (Module 3) and the *Guide to Observation of Postabortion Care Services* (Module 5) involve observation of PAC services. There are various steps that a Data Collector can take to ensure that observing PAC services is as unobtrusive as possible¹⁰

- It is essential to get the consent of both the patient and the provider before observing their interaction. Please see example of informed consent form for patients in Section 4.5 above.
- No more than one person should observe services at any one time.
- Even if the Data Collectors are trained in the provision of PAC services, they should let the provider know that the role of a Data Collector is solely that of observer and not “experts” who can be consulted during the session.
- The Data Collector should also explain to providers that the purpose of the observation is not to assess their personal performance, nor to gather information during the observation that would be provided to their superiors to be used in a performance appraisal. Rather, the purpose of doing the observation is for the monitoring team to assess how PAC services are provided overall at the health care facility. Providers should be told that the observation is only one part of a larger process, with the overall goal of improving PAC services at the health care facility.
- Before the session begins, the Data Collector should find a place to sit or stand so that the patient-provider interaction can be seen clearly. However, it is important that the Data Collector not obstruct either the provider or patient.
- During the session, the Data Collector should remain quiet and still so as not to distract the patient and provider. Writing on the forms should be done as discreetly as possible.
- The Data Collector may want to consider dressing in neutral colored clothing to minimize drawing attention to her or himself.

It is important to note that both providers and patients may behave differently when they know they are being observed. Conducting a number of observations of service provision can help overcome this problem as far as the provider is concerned. It has been shown that people who are repeatedly observed tend to ignore the observer and behave as they would during a routine provider-patient encounter.

5.2 Record Reviews

Reviewing records provides useful data, particularly when combined with data gathered using other methods, such as interviews or observations. Several instruments in the DATAPAC Core Questionnaire Series involve record reviews, including the *Guide to Using the General Information Questionnaire for Postabortion Care Patients* (Module 1) and the *Guide to Using the Clinical Case Report Form for Postabortion Care Patients* (Module 2).

Logbooks can provide a wealth of information about patients who have received services at the health care facility, such as a patient's identification number, age, parity, the date on which she had her procedure, the name of the health care provider who did the procedure, uterine size, the reason for the procedure, the type of procedure used and any complications the patient had when she arrived or that developed during the procedure. Logbooks may also help determine which

steps of providing service take the most time, which areas are strongest, or when patients do or do not receive the follow-up care they need. However, logbooks may be difficult to find, incomplete, not up-to-date or difficult to read.¹⁰

Patient charts are also useful for finding out specific information about care that a particular patient received, and can also provide information similar to what can be found in a logbook. The advantage to using a patient chart is that information in the chart may be more detailed than what is recorded in the logbook.¹⁰ As with logbooks, however, patient charts may be difficult to find, incomplete, not up-to-date or difficult to read.

5.3 Interviewing patients and providers

Currently, the DATAPAC Core Questionnaire Series only includes one interview instrument, the *Guide to Using the Postabortion Care Patient Exit Interview* (Module 4). However, introducing other interview instruments are planned over time, including a “PAC Provider Interview” and perhaps a “Hospital Manager/Administrator Interview.” Below are some points to guide Data Collectors when interviewing a patient or provider.¹⁰

- The Data Collector should explain that the purpose of the interview is to help improve PAC services at the health care facility and that interviewee responses and feedback are desired and important.
- Obtaining consent when interviewing patients or providers is vital. It is important to identify whether the interview is confidential or anonymous. This manual provides an example of an informed consent form that assumes responses are confidential.
- The Data Collector should simply read the questions as written, without making any changes in the wording. If participants ask for clarification, the interviewer should simply re-read the question and ask the participant to answer it to the best of their understanding. Re-phrasing or explaining the question may lead the patient or provider to a response. Also, the Data Collector should keep a neutral inflection at all times because the tone in which a question is asked can provide subtle cues to interviewees about how they think an interviewer wishes them to respond.
- For questions that have predetermined response categories or rankings (for example, rarely/never, sometimes, routinely/always), the Data Collector should always read all possible responses, even if the participant answers before the Data Collector has finished reading all possible responses.

Interviewing patients is a delicate task requiring diplomacy. Below are some special points to consider when interviewing women after they have received PAC services at the health care facility.¹⁰

- In order to help set the patient more at ease, the interview should be conducted in a private environment. This may make the woman more comfortable to speak openly about her experience at the health care facility.
- The goal of the interview is to have a conversation with someone who has an important perspective on the quality of PAC services provided at the facility. Approaching the interview from the point of view of wanting to learn from the patient's experience may help the Data Collector be more relaxed with the patient. The more relaxed, open and sincere the

interviewer is, the more likely it is that the patient will feel comfortable answering questions openly and honestly

- Several other factors may help make the patient more comfortable while being interviewed. The interviewer may consider wearing casual clothes rather than a uniform. It may also help if the interviewer is a staff member who is not directly involved in the provision of the woman's care.

The final step in interviewing participants is to thank them for their time and comments!

5.4 Pre-testing Instruments

After modifying the DATAPAC data collection forms to reflect service delivery conditions at the study site, or drafting new forms if necessary, Data Collectors should pre-test them by administering the form(s) to a small, pre-determined number of patients. Pre-testing ideally should be integrated with training of Data Collectors. If feasible, pre-test the instruments with at least 2-4 patients or more. Researchers should pay special attention to how well the data collection forms reflect the reality of the treatment process.

Based on the information from the pretest, the researchers should again adapt the forms to best reflect the treatment process they observed. Once the data collection instruments are finalized, enough forms should be printed for the sample size, plus a few extras in case of errors or loss.

The PI should be prepared to make decisions about the level of detail of data to be collected. For a cost and resource use study, for example, the PI may decide that the prorated costs of certain supplies are too small to include in the calculation of the average cost per patient. It is critical that decisions be made before final data collection begins and that data collection is consistent for all patients observed. Finally, these decisions should be noted in the presentation of study results.

Please note The PI may need to adapt questionnaires to reflect the requirements of each study. All data collection forms in the DATAPAC Core Questionnaire Series are available on a floppy disk in Word 6.0 format, or may be obtained at the Ipas website (<http://datapac.ipas.org>)

5.5 Data Quality

The keys to good data quality is comprehensive training and strong supervision by the PI and Site Coordinators. In order to ensure that data are consistent and of high quality, Data Collectors must complete the forms systematically for all participants. When a study requires several Data Collectors, it is essential that they be well-trained in order to ensure consistent data collection.

Data Collectors should never try to guess the answer to a question when data are unavailable. For instance, the Data Collector should note on the form any situations when it was not possible to determine when a patient began or ended a particular step in the process. Figure 2 offers additional suggestions for improving the quality of data collection. Also, when interviewing participants, Data Collectors should be instructed to ask each question exactly as it is written. If the question is not understood by the participant, the Data Collector should simply repeat the question as written and instruct the interviewee to answer the question to the best of his or her understanding. If the Data Collector finds that certain questions are being routinely

misunderstood, the Site Coordinator or PI should be notified as this might indicate that the question or questions need to be re-written

Figure 2 Suggestions for Improving the Quality of Data Collection

- The PI or Site Coordinator should be readily available on site to monitor data collection & answer questions
- Consider the whole postabortion care process including the waiting time, not just the details of the uterine evacuation procedure itself
- Determine which types of patients will be included in the study before starting
- Know what to look for before beginning data collection Do not become overburdened with unnecessary information Involve hospital staff early in the study design process If site staff are involved, they will be more likely to encourage changes later that will reduce resource utilization & improve quality of care
- Consistency is essential Be certain to record information the same way for each participant For example, in cost studies, if timing begins when patients register with the receptionist, begin recording for all patients at that time If timing begins after the receptionist has retrieved the patient’s file, ensure that all of the patients are timed this way
- Provide a guidebook for the Data Collectors to reference when questions arise about data collection

Finally, Data Collectors should complete a form with ink pens, preferably “ball point” pens If corrections or changes need to be made, the Data Collector should strike through the original answer and write in the new answer and then write their initials by the change (Figure 3)

Figure 3 Suggested way to make changes on data collection forms

Original response	Original response with correction		
Marital status <##>	Marital status <##>		
1 Married	1	1 Married	1
2 Cohabiting, “In union”	2	2 Cohabiting, “In union”	2
3 Single	3	3 Single	3
4 Divorced	4	4 Divorced	4
5 Widowed	5	5 Widowed	5

5.6 Data Confidentiality

In order to protect the confidentiality of study participants, arrangements should be made to store completed informed consent and data collection forms in a safe and secure location Completed forms should be locked and access limited to the PI and perhaps the Site Coordinator when appropriate If data are entered into a computer software program such as SAS, SPSS, Epi-Info, Microsoft Excel, or similar software packages, then the data files should be password protected, and any back-up copies of the datasets on floppy diskette locked up as are the completed forms

6. DATA MANAGEMENT AND ANALYSIS

Once data are collected, the next step involves assimilating the data into a form suitable for data analysis Data management is a detail-oriented process that requires the direct supervision of the

PI in order to ensure that all the care taken to collect data of high quality is not undermined by sloppy data management practices. Depending upon the complexity of the analysis required, a biostatistician may need to be consulted during data analysis. Any statistical hypothesis to be tested, as well as the approach for testing the hypothesis, should be specified in the Study Proposal during the designing of the study. If there are multiple planned study objectives, such as measuring quality of services, patient satisfaction, and the cost of services, we recommend that the PI specify the primary objective or objectives. Although unplanned analyses may be performed, they should be described as such in study reports as it is difficult to interpret the statistical significance of results from most unplanned statistical tests.

Data management and analysis are topics that usually consume entire books and thus a comprehensive review is beyond the scope of this guide.¹¹ Nevertheless, a brief description of the process follows.

6.1 Data Management

Data management is the process that includes data coding, entry, and cleaning. All three of these procedures are greatly facilitated by a computer and appropriate statistical software. To that end, Ipas provides data entry and cleaning files to be used with Epi-Info, a free statistical software package available from the United States Centers for Disease Control and Prevention.^a

6.1.1 Data coding

Data coding is the process of transforming textual answers on questionnaires into numerical formats so that the answers can be manipulated by statistical software packages such as Epi-Info, SAS, or SPSS. Examples of data coding include coding “yes or no” questions as either 1 (for ‘yes’) and 0 (for ‘no’) or coding “single, married, cohabitating, divorced, or widowed” as “1, 2, 3, 4, or 5”, respectively. To facilitate the coding process, the PI should create a “Code Book.” A Code Book lists each question asked and the possible answers, except for “open” questions, along with the code for each answer. In addition, questionnaires should have the appropriate codes printed on the forms themselves. All DATAPAC questionnaires are pre-coded so that completing the questionnaire and coding it are combined into a single step. Therefore, once the questionnaire is completed and reviewed by the data supervisor or PI, it is time to begin data entry.

During the process of coding data, it is not uncommon to find questions that were answered in ways unintended when the questionnaire was designed. For example, a question designed to have one correct answer, such as “Employment Status”, may have more than one answer checked. The answer to the question “Age” may be illegible, or an accidental stray mark may appear to be an answer to a question. There is no definitive way to code responses in this situation. The PI, usually in consultation with study staff, may try to make a logical guess, or may try to discern the correct answer based on the answer to another question (e.g. if “Age” is illegible, the patient’s age may be calculated from the date of birth in her hospital records). Sometimes the PI will simply code the responses as “other” or better yet, “missing data”, as though the question were unanswered rather than indecipherable. Regardless of how ambiguous responses are coded, it is critical to be consistent. In other words, if an unintelligible response to the question “Employment Status” is coded as “missing” on one form, then all unintelligible responses to that

^a See the “How to Use This Manual” section for more information on how to obtain Epi-Info.

question should be considered “missing” To facilitate consistency in the coding of these questionable responses, the study staff coding the data should record instances when they were required to make judgments on how to code a response in the study Code Book The PI is responsible for reviewing the Code Book and approving all such coding judgments

6.1.2 Data entry

Depending upon preference, time, and availability of study staff, the data may either be entered (“keyed”) throughout the study as it is collected, or entered *en masse* once data collection is completed If the study is large, consider subcontracting a company specializing in data entry One advantage of entering data throughout the study is that problems with the data may be discovered during data entry, perhaps in time to correct the problem Also, if data entry is ongoing, then data analysis can begin as soon as data collection ceases As with all other components of the study, data entry requires patience, persistence, and careful attention to detail

On a technical note, there are two methods of data entry that can help maintain high data quality The more rigorous method is usually called *double-keyed-compare-to-zero* or *double-key validation* These cryptic terms describes a process where the data are actually entered twice on separate occasions (sometimes by one person or team but preferably by two people or teams) Once the data are entered twice, the two datasets are electronically compared and, where the keyed answers to a question differ, the PI may safely assume that one keyed answer is incorrect The error may then be corrected by reviewing the answer from the questionnaire Epi-Info and many other software packages have double-key validation features

The other and less rigorous method to validate the accuracy of data entry is to take a random sample of the questionnaires, typically 10-20%, and hand-check those questionnaires against the data as keyed into the dataset If the PI finds few (perhaps less than one percent) or no errors, then she or he may have some confidence that the overall quality of the data entry is sufficient However, if the data entry error rate begins to climb beyond one or two percent, then the PI and study staff may need to visually validate every questionnaire and correct the dataset Depending upon the sample size and number of questions on the questionnaire(s), it may actually require less time and effort to double-key validate in the first place

Finally, in the past, software packages have handled missing data differently SPSS, for example, previously required that missing data be coded and keyed with a user-defined value such as 99, 999, 999, etc , while Epi-Info and SAS allowed missings to be coded as a period (“ ”) With SAS, moreover, the missing data symbol (“ ”) can be combined with a letter to distinguish why the data were considered missing, so that “ a” might mean that the interviewer forgot to ask the question, while “ b” might mean that the patient refused to answer the question Using periods to represent missing data is now acceptable in SPSS and most other statistical software and is the best method to use when entering data

Epi-Info files (* qes) are available from Ipas or the DATAPAC website (www.datapac.ipas.org) to use to enter data collected with the DATAPAC questionnaires

6.1.3 Data cleaning

Reviewing the Code Book, visually checking the questionnaires, and double-keying the data are actually parts of the “data cleaning” process After spending a considerable amount of time and

money training interviewers and collecting data, insuring that the responses were correctly coded and entered is very important

The next step to making sure the data are as clean as possible is to try to determine if the data “make sense” Are the responses to the questions within the expected range? For example, patients requiring PAC services must be of reproductive age, which for most women falls between the ages of 15 and 45 If the dataset contains records where women in the study are aged 9 or 92, there is most likely an error that must be corrected Perhaps this is a simple keying error, where a review of the questionnaires shows that the woman supposedly aged 9 is really 19, and the woman reported aged 92 is actually 29 years old However, sometimes nonsensical responses are recorded on the questionnaire itself, and the data were keyed precisely as recorded on the questionnaire This is another situation where there is no definitively correct answer The PI and study staff may try to determine the correct answer from another source, accept the answer as is, or chose to ignore those particular responses during analysis, known as “excluding outliers” It is also very important to remember that an apparently nonsensical response may actually be correct For example, although rare, women occasionally have been pregnant 15 or more times Identifying cases where there are unexpected answers such as outliers is usually accomplished by using statistical software to compute descriptive statistics such as a mean, median, mode, range, standard deviation, quartile and frequency distribution for each question coded continuously (i e age, years of education, pain on a 1-10 scale, annual income, etc), and frequency distributions for dichotomous and categorical questions (i e marital status, ever/never contraceptive use, employment status, etc)

The next issue the PI should address when cleaning the dataset is *internal consistency* Internal inconsistencies arise when the response to one question contradicts the answer to another An example would be when, according to the questionnaire or dataset, a woman says that she “never” used contraception in one question, but answers in another question that she and her partner were using condoms when she got pregnant Again, the PI and study staff may try to determine the correct answer from another source, accept the inconsistency as is, or chose to exclude those particular responses during analysis Epi-Info has a feature to check for internal consistency as well as with-in range values as the data are keyed Epi-Info files (* .chk) for the DATAPAC Core Questionnaire Series are available from Ipas with some pre-programmed data checks, although these “check”-files may need to be modified depending upon the study design

Finally, a simple yet often overlooked facet of good data management is keeping back-up copies of the dataset The best method is to have multiple copies in separate locations (perhaps one diskette at the PI’s office and one at her or his home) However, in order to protect study participant confidentiality, if the dataset contains any personal identification data (names, addresses, telephone numbers, etc), then all copies of the dataset as well as the questionnaires should be stored in a locked and secure location under the supervision of the PI Except in the cases of follow-up studies, it is usually unnecessary to enter personal identifiers into the dataset

6.2 Data Analysis

The spread of statistics software packages has rendered statistical analysis accessible to anyone with a personal computer However, while user-friendly software has made computing a Mantel-Haensel X^2 , Pearson’s r , or regression coefficient seductively easy, statistical software cannot help a researcher interpret the results or decide whether the statistical test used is appropriate in

the first place Data analysis can be a complex and confusing process and any but the most rudimentary discussion is beyond the scope of this guide^{12 14} Unless the PI has had training in statistics, a biostatistician should be consulted both when designing the study and during analysis

Many researchers may be comfortable with computing and interpreting simple averages, frequencies, and other *descriptive statistics* Common descriptive statistics include

- 1 *means* or *averages*, such as the mean age or the mean uterine size of women presenting for PAC services,
- 2 *percentages*, such as 30% of women requiring PAC services reported having “ever used” a contraceptive,
- 3 *range*, such as the time required to perform sharp curettage procedures ranged from 4 to 1 3 hours

Other descriptive statistics may be less familiar to researchers, including

- 1 other measures of central tendency, such as *median* and *mode*,
- 2 *percentiles*, including *quartiles*,
- 3 measures of data dispersion such as *standard deviation*, *variance*, *standard error of the mean*, *confidence intervals*, and,
- 4 measures of data distribution, which includes *kurtosis* and *skewness*

Descriptive statistics help the researcher understand the characteristics of single variables such as age, ever use of contraceptives, or marital status Also, by computing *cross-tabulations*, a researcher can investigate the distribution of one categorical variable by another variable, such as marital status by method of treating incomplete abortion The next step in the analysis of data involves *inferential statistics*, where the researcher seeks to test theories or make conclusions about a population based on data collected from a sample of that population Inferential statistics often involve computations such as t-tests and ANOVAs, X^2 , correlation coefficients, and regression analyses In PAC OR, inferential statistics would be used when the intention of the study is to measure a statistical difference between groups, such as difference in uterine size between women treated for incomplete abortion with SC versus MVA Another use of inferential statistics would be to investigate factors that influence an outcome of interest, such as predictors of contraceptive acceptance after treatment of incomplete abortion or predictors for high levels of pain reported during treatment

Again, the ease with which researchers can perform statistical testing with the aid of computers software has led to a flood of substandard statistical analyses Common errors include reporting every “significant” finding whether or not the results are reasonable or can be explained by other factors, using an incorrect test for the intended result, and incorrectly interpreting the output from a statistical analysis While occasional errors are unavoidable regardless of training and experience, the following rules can help reduce errors during statistical analysis

- 1 Consult a biostatistician both during study design and analysis if needed,
- 2 Determine the statistical tests needed when designing the study,
- 3 Make sure the results are logical and can be explained when compared with other reported findings or conventional wisdom

For example, if a statistical test is “significant”, consider other factors which may explain the result. The PI should try to ascertain whether there is *confounding*, which occurs when another variable is influencing the result of a particular test. An example would include a study where women receiving MVA reported higher pain scores than women receiving SC, leading a PI to conclude that MVA is a more painful procedure. A deeper investigation might show that women receiving SC were also given more analgesia. Therefore, the correct inference in this fictional study might not be that SC causes less pain, but that the women treated with MVA were given less pain medication. After going to great lengths to carefully design and implement the study, careful attention during data analysis will ensure that the results accurately reflect the data.

7. DISSEMINATION

Often ignored when designing and conducting any type of research, disseminating results to key audiences is critical in order for the results to lead to informed policy and programmatic decisions. Therefore, do not neglect to budget for dissemination activities (printing of final reports, registration and travel to conferences and presentations, reprints of published journal articles, etc.) when designing a study. Ideally, the lessons learned during the project will facilitate improvements at PAC treatment centers beyond the site or sites where the study was conducted. In order to maximize the impact of each study on PAC treatment, researchers should determine the primary audience of the study results while designing the study.

The first step in disseminating the findings is to present the results to the staff at the study site or sites. Ideally, the findings should result in improvements at the sites where the study was conducted. Also, having immediate access to the results at the study site is an important reward for hard work.

Several other venues may be excellent for disseminating results. Bear in mind that there may be a need to re-design the presentation depending on the audience. For a 10-minute presentation to the Minister of Health, considering forgoing a lengthy description of the study design and statistical analysis and instead focus on a few key points illustrated by figures and tables. In contrast, at a regional conference attended by fellow researchers, the audience may be as interested in the study methods as the results. While the possible outlets for dissemination of the study results will vary from country to country, the following suggestions may prove useful depending upon the nature of the study.

- **Reports to source of study funding** Most funding for PAC OR studies today comes from outside sources such as unilateral funding agencies (USAID, DFID, etc.) or private foundations. The PI is usually responsible for reporting study progress and results to the source of funding.
- **Ministry of Health (MOH)** If the study sites were part of the public sector, then it is especially important to provide results to the MOH and other relevant government agencies.
- **Hospital or clinic staff** Once the results have been reported to those providing funds for the study, presenting results to the hospital staff is ideally the first step researchers should take to make the results more widely known.
- **Staff from other hospitals** It may be possible to arrange a presentation that can be attended by providers in the same area as the study site or sites.

- **Local meetings** Do not limit dissemination to health professionals Presentations to local women's groups and educational or political forums may help generate interest in improving delivery of services for PAC patients
- **Conferences** National, regional, and/or international conferences provide an outlet for presentation of results in a timely fashion The PI may be able to present "interim" results if patient recruitment has not ended, such as when only baseline data have been collected in a pre-post intervention study Finally, conferences often have roundtable discussions, where presenters can interact with the audience to get more feedback on the study
- **Professional publications** National, regional, and/or international journals provide a forum similar to conferences, only potentially larger If submitted to peer-reviewed or refereed journals, researchers will benefit by receiving feedback from fellow experts Journal publications have the added benefit of being referenced in databases such as MedLine and PopLine, so that researchers can find the report electronically The impact of much PAC OR has been limited because the results have been limited to "Final Reports" which are normally distributed but to a relatively small number of people However, a drawback to professional publications is that there are often long queues, so that the time from submission to acceptance to publication can often take well over one year!
- **Newsletters, bulletins, and press releases** These are usually brief, focusing on one or two main outcomes, and can be produced inexpensively and quickly
- **Electronic distribution** Increasingly, results from studies can be "published" by "listservs", which send periodic e-mails to registered people who have expressed an interest in subjects like international health, reproductive health, OR, or PAC A wider audience still can be reached via posting results at a website on the Worldwide Web (WWW) Websites that may be interested in posting a brief summary of the findings include Ipas's website dedicated to DATAPAC projects ([http //datapac ipas org](http://datapac.ipas.org)) and the Population Council's OR/Technical Assistance site ([http //www popcouncil org](http://www.popcouncil.org)), and the list is growing daily

No single avenue for dissemination is complete and each has advantages and disadvantages Therefore, when designing the study, plan and budget for several different dissemination activities Aside from self-publication and attending conferences, dissemination is relatively inexpensive compared to other research activities, but nevertheless requires careful planning and considerable time and effort on the part of the PI and research staff

Good luck! We wish you success in designing and carrying out your study and welcome comments, questions, and suggestions about this manual or the study itself Finally, if you conduct PAC OR, we sincerely hope that you will submit copies of your results and questionnaires to DATAPAC to be included in the DATAPAC Database Submitting your work to DATAPAC not only increases your audience, but also provides valuable tools to other PAC OR researchers Address all correspondence to

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DATAPAC Core Questionnaire Series

**DATAPAC CORE QUESTIONNAIRE SERIES FOR
POSTABORTION CARE OPERATIONS RESEARCH**

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Janie Benson (Ipas)
Karen Stein (Population Council)
James Foreit (Population Council)

and

Members of the DATAPAC Technical Working Groups

August 1998
Version 1.2





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Depending upon the module or modules used, recommended citations include

King TDN, Benson J, Stein K, Foreit J, and Members of the DATAPAC Technical Working Groups *Guide to Using the DATAPAC Core Questionnaire Series for Postabortion Care Operations Research* 1998, Ipas Carrboro, NC, USA

King TDN, Benson J, Stein K, Foreit J, and Members of the DATAPAC Statistical Technical Working Group *General Information Questionnaire DATAPAC Module 1* 1998, Ipas Carrboro, NC, USA

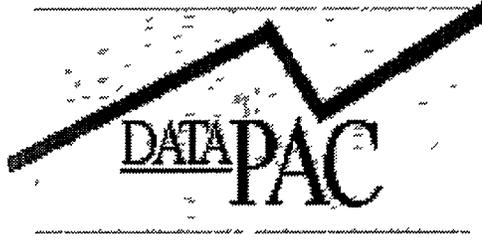
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King TDN, Abernathy M, Hord C, Nicholson LA, Benson J, Johnson BR, and Members of the DATAPAC Cost and Resource Use Technical Working Group *A Guide to Assessing Resource Use in the Provision of Postabortion Care DATAPAC Module 3* 1998, Ipas Carrboro, NC, USA

King TDN, Benson J, Stein K, Foreit J, and Members of the DATAPAC Patient and Provider Perspectives Technical Working Group *Guide to Using the Postabortion Care Patient Exit Interview DATAPAC Module 4* 1998, Ipas Carrboro, NC, USA

Stein K, King TDN, Benson J, Foreit J, and Members of the DATAPAC Clinical and the DATAPAC Patient and Provider Perspectives Technical Working Groups *Guide to Using the Observation of Postabortion Care Services Questionnaire DATAPAC Module 5* 1998, Ipas Carrboro, NC, USA

Benson J, King TDN, Stein K, Foreit J, and Members of the DATAPAC Clinical Technical Working Groups *Guide to Using the Supplies and Equipment Checklist for Postabortion Care Services DATAPAC Module 6*, Ipas Carrboro, NC, USA



DATAPAC Core Questionnaire Series

OVERVIEW

**DATAPAC CORE QUESTIONNAIRE SERIES FOR
POSTABORTION CARE OPERATIONS RESEARCH**

*INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE*



**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
DATAPAC CORE QUESTIONNAIRE SERIES
FOR POSTABORTION CARE
OPERATIONS RESEARCH**

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May 1998
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Four DATAPAC Technical Working Groups were formed to review selected data collection instrument in the series. Participants included

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1. WHAT IS DATAPAC?

Complications during pregnancy affect millions of women worldwide each year, nearly 600 000 of these women die as a result ¹ Women face many risks during pregnancy and childbirth, including *abruptio placentae*, *placenta previa*, preeclampsia as well as complications such as hemorrhage and infections arising from unsafe induced abortion practices Over 70 000 women are estimated to die each year as a consequence of unsafe abortion ² Worldwide, 13% of pregnancy-related deaths are estimated to result from unsafe abortions, with the vast majority of deaths occurring in less developed countries ² Many more women suffer consequences such as pelvic inflammatory disease and sterility Moreover, these figures underestimate the true impact of unsafe abortion as they do not account for the thousands of women who develop complications after a spontaneous abortion

A postabortion care (PAC) approach has been developed to address the issue of maternal morbidity and mortality related to unsafe induced and spontaneous abortion The PAC approach consists of these elements 1) emergency treatment services for postabortion complications, postabortion contraceptive counseling and services, and, 3) links between emergency abortion treatment and comprehensive reproductive-health care ³

The United States Agency for International Development (USAID), private foundations, and other international agencies have funded over 30 PAC operations research (OR) studies since 1990 in Africa, Asia, and Latin America These studies have investigated ways to maximize the quality of PAC services while minimizing costs and resources used A consensus has emerged among individuals and agencies involved in PAC OR that 1) a centralized database of PAC studies is needed, and, 2) core questionnaires should be developed for use in PAC OR projects in various country settings A centralized database would facilitate inter- and intra-regional OR analyses, while using core questionnaires would lead to more comparable and generalizable research findings

In collaboration with USAID, the Population Council, and other organizations, Ipas is coordinating the development of core questionnaires as well as compiling data and supporting documentation from all available PAC OR studies

This project is called "DATAPAC" This guide is part of the DATAPAC Core Questionnaire Series a set of questionnaires and instruction guides providing an overview on how to design and conduct quantitative PAC OR studies

What is DATAPAC?

- **PAC OR Database** Electronic database for conducting secondary analyses of available PAC OR studies
- **Supporting Documentation** Copies of protocols, blank questionnaires, reports, publications & other documents from PAC OR studies
- **Core Questionnaires** Standardized PAC OR questionnaires & protocols in English & Spanish Includes cost study instruments, patient questionnaire, & service delivery observation guide

The DATAPAC Core Questionnaire Series is in modular form that currently includes

- GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 1** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 2** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS:** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 3** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 4** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW.** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 5** **GUIDE TO OBSERVATION OF POSTABORTION CARE SERVICES.** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST:** An inventory of supplies and equipment necessary for providing PAC services

These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the General Information Questionnaire for Postabortion Care Patients (Module 1)*.

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

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2. HOW TO USE THIS GUIDE

This manual discusses the design and implementation of PAC OR studies. Our hope is that the DATA PAC Core Questionnaire Series will be useful both to those who are familiar with OR methods, as well as those for whom PAC OR is new. The various instruments and instruction guides that make up the DATA PAC Core Questionnaire Series are available separately.

Suggestions for how specific questions should be interpreted are presented along with each instrument. We encourage researchers to use the instruments as we have presented them, as this leads to more uniform data and therefore facilitates comparative analyses. However, we understand that the instruments may need to be adapted to reflect the specifics of PAC in each research setting. Therefore, electronic versions of the instruments are available for downloading at the DATA PAC website (datapac.ipas.org) as well as on diskette in Microsoft Word 6.0 (for Windows 3.1 or greater). Also, Epi-Info* and Microsoft Excel files are available to use for entering, cleaning, and analyzing data.

*Epi-Info was developed by the Centers for Disease Control and Prevention and can be downloaded free of charge from www.cdc.gov or obtained (for a fee) by contacting

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3. METHODOLOGY

3.1 Study Objectives

Ultimately, the goal of all PAC OR is to reduce maternal morbidity and mortality associated with unsafe abortion. The immediate objective is then to use OR as a tool to improve the quality of PAC services. Improving PAC services may be accomplished through a variety of means, including reorganizing delivery of services, introducing manual vacuum aspiration (MVA) switching from sharp curettage (SC), also called dilation and curettage (D&C), to for treatment of incomplete abortion, improving infection prevention and pain management practices, providing counseling including information on contraceptives, reducing costs, or, a combination of these options. Postabortion care OR studies generally are designed to demonstrate the feasibility and sustainability of addressing PAC service delivery issues, and to evaluate the impact of changes made to PAC services. Therefore, the study objectives for a particular study depend upon the question or questions a researcher wants to address and the primary audience for dissemination of the study results.

Study objectives should be clearly stated before designing and implementing a study, and should be narrowly focused. Two examples of broad, unfocused study objectives are

“To see if MVA is better than SC for treating patients presenting with incomplete abortion.”

“Is SC more expensive than MVA?”

These objectives could be rephrased to read

“Are there differences in the number of treatment-related infections or trauma when women are treated with either MVA or SC?”

“Are there differences in the amount staff time, medical supplies, and equipment required when women are treated with either MVA or SC? If so, do these differences have an impact on the facilities’ cost of providing services?”

The key is to be certain that the study objectives are stated in a manner conducive to making actionable recommendations for PAC policy and program management. Several resources provide guidance on how to formulate study objectives.^{4,5} Once a researcher has clearly defined the study objective or objectives, designing the study can begin.

3.2 Study Design

3.2.1 Study Types

Numerous study designs have been used in OR to study treating complications of abortion, including quantitative designs such as *descriptive* and *comparative* studies, as well as qualitative designs such as *exploratory* studies incorporating open-ended interviews and focus groups. This guide focuses on two types of quantitative study designs—descriptive and comparative studies. Descriptive studies generally seek to illuminate the availability, quality, and cost of current PAC

services Comparative study designs are useful when the study objective is to measure the effect of an intervention, such as whether the introduction of MVA leads to better quality of care when treating incomplete abortion A further consideration is whether to conduct the study at only one hospital or clinic (*single-site study*) or include two or more sites in the study design (*multi-site studies*) The type of study chosen depends ultimately upon the study objectives

3 2 2 Descriptive and Comparative Studies

Descriptive studies are often cross-sectional in design Cross-sectional studies typically collect data once to provide a “snap shot” of current PAC services and may help illuminate deficiencies in quality of care and inefficiencies in resource use However, cross-sectional studies do not allow researchers to measure the impact of changes in service delivery over time

Comparative studies, in contrast, are designed to measure one treatment protocol against another Examples would include testing SC versus MVA or testing one method of providing postabortion contraceptive services versus another Postabortion care OR comparative studies generally fall into two categories *concurrent-control* and *pre-post intervention* studies In a concurrent-control study (also called *static-group comparison* studies)⁵ of MVA and SC, the *control group* continues to receive the standard treatment, such as SC with heavy sedation and no postabortion contraceptive counseling Patients in the *intervention group* may then receive a modified treatment regimen, such as postabortion contraceptive counseling after treatment with MVA under local anesthesia and/or light sedation Theoretically, this can be done at a single site if the caseload is sufficient to randomize patients into intervention and control groups, and if the hospital staff are proficient and sufficiently motivated to follow different treatment protocols based on the group randomly chosen for each patient

In most settings, however, it is not feasible to randomize patients and use a single-site concurrent-control study design Ideally, introducing MVA for the treatment of incomplete abortion includes more than simply replacing curettes with syringes In order to fully benefit from the use of MVA, services generally must be reorganized For example, the treatment procedure can be moved from the operating theater to a procedure room, general anesthesia or heavy sedation can be replaced with local anesthesia and/or light sedation, most postabortion patients can be treated on an outpatient rather than inpatient basis Based on such changes, it would likely be impossible in most settings to randomly assign some patients to treatment with SC on an inpatient basis and other patients to treatment with MVA on an outpatient basis

As an alternative, researchers will often chose one hospital where SC is used to serve as a control site, and another hospital where services are reorganized and MVA is introduced to represent the “intervention group” (e g a multi-site, concurrent-control study) This design has the advantage of allowing for the collection of data from both comparison groups simultaneously, which can significantly reduce the period of data collection, the overall length of the study, and perhaps reduce study costs Researchers should be cautious, however, if using a concurrent-control design There are ethical issues around withholding superior treatment from the control group Also, with the multi-site concurrent-control design, any difference between intervention and control groups may be due more to the inherent difference between the study sites than the intervention itself

Pre-post intervention studies are comparative studies that begin with a number of patients who are recruited into the study and treated according to standard practices This first period of data

collection is often called the “baseline” or “pre-intervention” phase. Next, an intervention is implemented, such as introducing a postabortion contraceptive counseling program, reorganizing PAC service delivery, and/or training staff in the use of MVA. Patients are then treated according to the new protocol and the results are compared with the data from the baseline phase. The advantage with the pre-post intervention design is that changes in service quality and resources used are more likely to be directly attributable to the changes in services, rather than differences in study sites that may occur in concurrent-control studies. However, pre-post intervention studies typically take longer to complete and may therefore not conform to budget and timeframe requirements. Even so, we recommend pre-post intervention designs as they tend to avoid certain ethical and analysis problems inherent in concurrent-control study designs.

3.2.3 Single-site and Multi-site Studies

If a provider needs to evaluate PAC services at a single facility, and it is not important how this facility compares with other facilities, then a single-site design can be employed. The impact on PAC service quality and resource use of introducing new services (MVA, postabortion contraceptives, etc.) at that site can therefore be assessed by doing a baseline study (pre-intervention) and following up with a post-intervention study after the new service has been introduced.

On the other hand, if researchers want to assess the state of PAC services across systems, regions, or entire countries, such as determining whether implementing MVA and new treatment protocols can improve services at public hospitals in general, then the study would require two or more sites. A multi-site study can be used to compare different facilities, such as facilities using SC versus those that have adopted MVA to treat incomplete abortion. The size of multi-site studies can range from two to an unlimited number of sites.

A type of multi-site study design that is gaining popularity in some areas of OR requires recruiting a large number of study sites and randomizing at the site level, known as *cluster randomization*.⁶ An example of cluster randomization would be to recruit 50 sites that treat women for complications arising from unsafe abortion, then randomize 25 sites to receive an intervention while the remaining sites would continue with their standard treatment protocols. Obviously, a PAC OR study of this size would be expensive and difficult to mount, so the usefulness of cluster randomization is likely limited for PAC studies.

Regardless of the number of sites, researchers should take care to account for differences in factors that are unrelated to whether the site is a control site or an intervention site. For example, in multi-site cost studies, differences in salary levels may not be largely affected by whether MVA or SC is used, but more by different pay scales at each site. One method to control for these differences is to standardize salary costs by calculating an average of the salaries across sites. A full discussion of standardization is beyond the scope of this manual. Please consult a biostatistician when designing and also when analyzing data from multi-site studies.

3.2.4 Participant Selection Criteria

In most cases, study participation should be limited to women presenting for treatment of incomplete abortion (or providers of incomplete abortion services in studies with provider interviews, etc.). However, depending upon the study objectives, other patient selection criteria may be needed. Some studies have focused on women who seek treatment for septic abortions and therefore only patients who presented with septicemia complicating their incomplete

abortions were recruited⁷ Another example includes most PAC OR cost studies, where it is recommended that patients be included only if they present with no major complications other than incomplete abortion and are 12 weeks or less uterine size⁸ For more information on participant selection criteria in cost studies, please consult Module 3 of the DATA PAC Core Questionnaire Series, the *Guide to Assessing Resource Use in the Provision of Postabortion Care*

Principal Investigators (PIs) should avoid being overly restrictive when specifying the patient selection criteria Having a non-restrictive participant selection criteria allows Data Collectors to gather information on the full range of PAC patients The PI then has the opportunity to stratify by certain criteria (age, status at presentation, marital status, etc) when analyzing the data Ultimately, participant selection, either during data collection or the data analysis phase of the study, should be driven by the particular objectives of the study

Regardless of the selection criteria chosen, the PI should make certain that the Data Collectors understand the selection criteria before data collection begins The sample Participant Selection Checklist (Annex 1) should aid Data Collectors when recruiting patients for the study

3 2 5 Sampling, Randomization, and Sample Size

Sampling is the process for determining who will be invited to participate in the study Sampling can take place at the hospital or clinic level For example, if a given country has 100 hospitals or clinics that routinely treat PAC patients, and a researcher chooses to conduct a study at four of these sites, then the researcher has sampled the available study sites Sampling can likewise occur at the patient level, where a hospital may treat 50 PAC patients per month, but a researcher limits data collection to a sample of 20 patients In either case, researchers may choose between having a **randomized sample** or a **convenience sample** Generally, a random sample of sites or patients allows the researcher to generalize the results to the broader population from which the sites or patients were selected

Convenience samples typically fall into four categories purposive, temporal, quota, and “snowball” sampling^{4 5} **Temporal sampling** is the most common type of sampling used in PAC OR studies, and typically includes recruiting all or a portion of women admitted for treatment of incomplete abortion over a given time (e g all women admitted to a clinic in a given month) Similar to temporal sampling is **quota sampling** where, for example, the first 30 women admitted to a hospital for treatment of incomplete abortion would be invited to participate in the study However, with temporal or quota sampling, researchers run a risk of getting a biased or non-representative sample, especially if the intended sample size is small (less than 50 women or two to three sites) or time period is brief (a few weeks or even months) To ensure, for example, that all types of facilities that offer PAC services (public, private, university sponsored teaching hospitals, etc) are represented in the study, the researcher would collect data from each of these kinds of sites This is an example of **purposive sampling** Finally, **snowball sampling** describes a technique where participants in a study are asked to identify other people who may be appropriate candidates for the study (i e ask a woman who has recently received PAC services to identify other women who have received similar services) Snowball sampling can be very useful when attempting to locate people from marginalized populations, such as women who require treatment for complications of an illegally induced abortion and would otherwise be difficult to identify and interview However, confidentiality issues must still be respected when using snowball sampling

A randomized sample should be distinguished from *randomization*, which describes the process by which patients are randomly assigned to intervention groups, such as randomly assigning 10 patients to receive contraceptive counseling, and 10 patients to receive no counseling. Randomization is the best way to reduce the chance of bias from unmeasured factors. However, randomized studies may require that some patients be denied superior care, such as when patients are randomized to a group treated with SC or a group that does not receive contraceptive services. Denying superior care is a critical ethical issue and thus the advantage of randomization, lower risk of bias, must be balanced with patients' rights for the highest quality care available. Also, studies employing randomization are usually more complicated to design and manage and tend to be more expensive than studies with quasi-experimental designs. It must be noted, however, that most statistical tests are designed assuming that randomization has occurred. Therefore, many of the statistical tests used to evaluate PAC OR data (chi-squares, ANOVAs, etc.) should be used with caution when using data from non-randomized samples. Again, we recommend that a PI consult a biostatistician during the design and analysis of PAC OR studies.

Finally, there is the issue of sample size – determining how many clinics or patients to include in a study. Formulas exist to help researchers determine the sample size required to conduct certain statistical tests with a predetermined level of certainty and Epi-Info and other statistical software packages have features to estimate needed sample-size. However, sample sizes in PAC OR have typically been determined by caseload and study budgets. A full discussion of calculating sample sizes, sampling, and randomization and is beyond the scope of this manual, but several resources exist to help guide these decisions.^{4,5,9} Due to the increased costs and ethical issues associated with random sampling and randomization, most PAC OR studies have employed convenience sampling and a non-randomized (quasi-experimental) design.

4. PLANNING THE STUDY

Regardless of the type of study, the planning process remains relatively unchanged for the PI. After designing and planning the study, the PI should pre-test any data collection instruments, collect and analyze data, and then report the results. However, the order of the steps involved in planning a study may vary. For example, in some settings the PI may need to get approval from the Ministry of Health or the agency funding the study before beginning any other activities. In other settings, a Ministry may not be willing to approve a study until the PI has identified key study staff and the research location(s).

Before beginning data collection, the PI should

- Select study staff
- Select sites
- Meet with site staff
- Obtain approval for the study
- Obtain supplies
- Train data collectors

4.1 Select Study Staff

The primary staff needed for a study is a PI and one or several Data Collectors. Larger studies, particularly multi-site studies, may also require Site Coordinators, Data Managers, and Biostatisticians.

4.1.1 The Principal Investigator

The PI for the study will have primary responsibility for coordinating tasks and activities, training and supervising Site Coordinators and Data Collectors, participating in data collection, analyzing data, and developing and disseminating study results. Therefore, the PI should be very familiar with hospital procedures, experienced in the oversight of data collection and analysis, objective and detail oriented. Experience in training would be very useful as the PI is often responsible for training Data Collectors. The PI could be a physician, nurse, hospital administrator, public health specialist, and/or a social scientist. Occasionally, a study will have more than one PI, known as Coinvestigators. Aside from coordinating study activities, the PI is responsible for ensuring that all study staff are thoroughly trained in informed consent requirements and study procedures.

4.1.2 Site Coordinators

In a small study, the PI may have many responsibilities, including supervising Data Collectors and the data collection process. However, in larger studies such as multi-site studies, the PI may not be able to supervise data collection. Therefore, the PI will need to employ Site Coordinators at each site who can monitor the data collection process, review completed forms, and answer questions from Data Collectors, administrators, or the study participants themselves. Like the PI, Site Coordinators should be very familiar with hospital procedures, experienced in the oversight of data collection, objective and detail oriented.

4.1.3 Data Collectors

Candidates for Data Collectors might include off-duty medical residents, social workers, nurses, or students of health-related or social science fields.

The type of study, required sample size, length of data collection period, and projected PAC case-load will determine the number of collectors necessary to conduct the study effectively. For example, in hospitals with a low number of postabortion patients, one to two Data Collectors may be adequate, while in hospitals with high caseloads, several Data Collectors may be needed. If intensive observation is required, such as with the *DATA PAC Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* or the *DATA PAC Guide to Observation of Postabortion Care Services (Module 5)*, extra Data Collectors may be required.

At some sites, many women arrive at night for postabortion care. If the study involves observation of services, it will be necessary to have Data Collectors available both day and night. However, in some settings it may be considered inappropriate, or unsafe, for Data Collectors to stay overnight. In these situations, standard time limits for data collection must be established, for example, 08 00 to 18 00 hours. If the study involves observation of PAC services, data collection should occur for at least seven consecutive days so that data are obtained on both weekdays and weekends as well as all work shifts. The number of Data Collectors and the hours they will actively collect data should be determined prior to initiating the study and the hours of data collection should be the same for all sites if a multi-site study.

Qualities of good Data Collectors

- Patient & objective
- Detail-oriented
- Experienced working in health care settings
- Familiar with supplies & equipment used for PAC
- Familiar with the provision of contraceptive services
- Familiar with logbooks & patient charts
- Able to establish good relationships with staff & patients
- Committed to collecting data for the duration of the study
- Respect confidentiality of study participants

4.2 Select Site or Sites

The primary criterion for selecting sites is the type of health care facility needed as determined by the study objectives. Potential sites include any facility that treats incomplete abortion, including Ministry of Health hospitals, Social Security facilities, private hospitals and other appropriate facilities. The World Health Organization (WHO) has developed a classification system to distinguish between different types of health facilities that consists of Primary Health Centers, First Referral Centers (District Hospitals), Secondary Level Hospitals, and, Tertiary Hospitals. Principal Investigators need to pay particular attention to the fact that different kinds of facilities tend to attract different kinds of patients.

Patient caseload at the site or sites is, in most situations, the second most important criteria when selecting study sites. Caseload also helps determine the number of Data Collectors and days needed for data collection. The most accurate sources of information about the number of cases treated over a given period of time are obstetric-gynecology department logbooks and hospital discharge records, which generally register the name, diagnosis, and date of treatment for each patient. The PI may also want to talk with nurses, midwives, and doctors at the potential research site for a verbal confirmation of the number of patients seen.

Other factors are important when selecting study sites. Site staff need to be at least cooperative with study staff, if not enthusiastic about participating in the study. If the study is designed to measure the impact of changing PAC services, there must be interest at the site in adopting new

services Finally, researchers will need full access to all areas where treatment is provided and approval of hospital authorities is required

Once the site or sites have been chosen, the PI should become familiar with treatment practices at each site Although some hospitals or health systems have written guidelines describing treatment protocols for incomplete abortion, most do not In addition to reading available protocols (where they exist), the PI should observe PAC service delivery and interview staff

4.3 Meet with Site Staff

The PI should involve the site staff with study design as soon as possible in the planning stage The PI should familiarize the staff who work with PAC patients (e.g., ob-gyn, emergency department and contraceptive clinic staff such as physicians, nurses, aides, and midwives) with the objectives of the study and introduce them to the Data Collectors It is important to discuss the purpose of the study, describe the Site Coordinators and Data Collectors' tasks, emphasize that the study will not interfere with current workloads, and explain that the study results will be made available to the staff Lastly, the PI should explain how the study will help administrators improve the efficiency and quality of care offered and that the purpose of the study is not to evaluate individual staff members

4.4 Obtain Approval for the Study

Hospital approval and support for the project is crucial if resulting policy recommendations are to be implemented In many cases, approval will also be needed from local and national government authorities, as well as funding agencies Because PAC OR study may require access to confidential information such as salary documents and patient records, researchers must first obtain written permission from appropriate authorities in order to have access to this information and to all physical areas where incomplete abortion patients are treated

Additionally, researchers are usually required to seek approval from a review committee, sometimes called a Medical Research Council or an Institutional Review Board Review committees are typically mandated to review proposed research projects and determine that the proposed study 1) has sufficient scientific merit, 2) meets established standards for protecting the study participants from harm, 3) guarantees confidentiality, and, 4) ensures that informed consent will be obtained from all participants Whether or not a formal review process is required, researchers are responsible for ensuring that participants recruited into the study are fully informed about the nature of the study and that each participant has indicated that he or she has chosen to participate freely

4.5 Informed Consent

The Data Collector must explain the study to each participant and obtain informed consent to include each participant in the study (participants would include both the patients as well as providers if conducting an observation study) The participant must also be told whether their responses are *anonymous*, *confidential*, or neither

- ***Confidential*** means that the identifying information about the participant such as name, addresses, or identification numbers will be written down and attached to their questionnaires However, this information will not be reported individually or shared with others beyond the study staff

- **Anonymous** means that the neither the participant's name nor any identifying information will be attached to the interview

In many PAC OR studies, it may be easier to assure anonymity to patients than to providers who are on staff at the study site. However, most PAC OR studies require identifying information in order to link the questionnaires with patient charts and other records. Therefore, participants can usually only be guaranteed confidentiality, not anonymity.

An example of recommended informed consent language that assumes confidentiality follows

Hello, my name is [*name of Data Collector*], and we are conducting a study on the quality of care this hospital provides its patients. If you agree to participate, we may observe the care you receive and/or we may ask you a few questions about your medical history and treatment while in the hospital.

Any answers you give are completely CONFIDENTIAL, meaning that no one other than the study staff will be able to see your answers, and your name or address will NEVER be associated with the answers you give. You have every right to refuse to participate in the study. Whether or not you are in the study will not affect your care. If you do agree to be in the study, you may still refuse to answer any question.

If you have any questions about this study later, please contact [Principal Investigator's name and telephone number and/or address]. Do you agree to participate in this study?

More examples of informed consent forms for patients, providers, and administrators are available from Ipas or can be downloaded from <http://datapac.ipas.org>. Written, informed consent is often required by the hospital or study site, and thus the PI should obtain the appropriate form and make it available to the Data Collectors. Even if the study site does not require written consent, it is usually advisable to get written consent from the patient before beginning the interview. Many studies have relied upon oral consent of the participants, but we recommend written consent. A copy of the signed form should be filed with each patient's study records (not hospital records).

4.6 Obtain Supplies

The PI or other research staff will need to collect supplies necessary for data collection, including pens, clipboards, watches, and a white coat or any other uniforms that will allow Data Collectors access to treatment areas.

4.7 Train Data Collectors

In order to ensure that data are collected in a consistent and correct manner, it is critical that the Data Collectors receive comprehensive training on how to administer the data collection instruments used in the study. Comprehensive training should include reviewing the instruments question by question, role playing, and pre-testing the instruments in a hospital setting (supervised by the PI). Data Collectors should be instructed not to discuss the study results with anyone other than the PI, and the importance of patient and provider confidentiality and informed

consent should be repeatedly stressed. It is not unusual for questions raised by the Data Collectors during training to lead to modifications in the instruments themselves.

Once training and pre-testing is completed, a *Guide for Data Collectors* should be drafted. In addition to providing information on how the Data Collectors can contact the PI with questions or concerns, the *Guide Book* should help clarify the questions in the instruments (i.e. definitions of unusual terms, patient selection criteria, appropriate units for measures, cues to start and stop timing of PAC events, etc.)

Depending upon the size and complexity of the study, training of Data Collectors may be spread out over several days. In addition to paying Data Collectors for their time while being trained, it is customary to provide refreshments for Data Collectors during training. A sample agenda is provided below in Figure 1.

Figure 1 Sample Agenda Training Workshops for Data Collectors

<i>Day 1</i>
<ul style="list-style-type: none">• Introductions• Overview of study (if this is a follow-up study, then discuss findings of baseline study)• Roles of Principal Investigator and Data Collectors• Overview of instruments• Ethical guidance (Confidentiality & Informed Consent)
<i>Day 2</i>
<ul style="list-style-type: none">• Review instruments (role plays)
<i>Day 3</i>
<ul style="list-style-type: none">• Pre-test instruments at local hospital or hospitals if practical
<i>Day 4</i>
<ul style="list-style-type: none">• Revise instruments if needed
<i>Day 5</i>
<ul style="list-style-type: none">• Additional training & testing on revised instruments if needed

5. DATA COLLECTION

One method for gathering data is self-administered instruments, such as a questionnaire completed by a patient or provider. However, self-administered instruments have not been widely used in PAC OR to date, and therefore this manual focuses on three methods for collecting data: observation, record review, and interviews. Regardless of the method of data collection, study staff must ensure that the data collected are of high quality and are kept secure so that confidential information is not revealed to people outside of the study team.

5.1 Observing PAC Services

In the DATA PAC Core Questionnaire Series, both the *Guide to Assessing Resource Use in the Provision of Postabortion Care* (Module 3) and the *Guide to Observation of Postabortion Care Services* (Module 5) involve observation of PAC services. There are various steps that a Data Collector can take to ensure that observing PAC services is as unobtrusive as possible.¹⁰

- It is essential to get the consent of both the patient and the provider before observing their interaction. Please see example of informed consent form for patients in Section 4.5 above.
- No more than one person should observe services at any one time.
- Even if the Data Collectors are trained in the provision of PAC services, they should let the provider know that the role of a Data Collector is solely that of observer and not “experts” who can be consulted during the session.
- The Data Collector should also explain to providers that the purpose of the observation is not to assess their personal performance, nor to gather information during the observation that would be provided to their superiors to be used in a performance appraisal. Rather, the purpose of doing the observation is for the monitoring team to assess how PAC services are provided overall at the health care facility. Providers should be told that the observation is only one part of a larger process, with the overall goal of improving PAC services at the health care facility.
- Before the session begins, the Data Collector should find a place to sit or stand so that the patient-provider interaction can be seen clearly. However, it is important that the Data Collector not obstruct either the provider or patient.
- During the session, the Data Collector should remain quiet and still so as not to distract the patient and provider. Writing on the forms should be done as discreetly as possible.
- The Data Collector may want to consider dressing in neutral colored clothing to minimize drawing attention to her or himself.

It is important to note that both providers and patients may behave differently when they know they are being observed. Conducting a number of observations of service provision can help overcome this problem as far as the provider is concerned. It has been shown that people who are repeatedly observed tend to ignore the observer and behave as they would during a routine provider-patient encounter.

5.2 Record Reviews

Reviewing records provides useful data, particularly when combined with data gathered using other methods, such as interviews or observations. Several instruments in the DATA PAC Core Questionnaire Series involve record reviews, including the *Guide to Using the General Information Questionnaire for Postabortion Care Patients* (Module 1) and the *Guide to Using the Clinical Case Report Form for Postabortion Care Patients* (Module 2).

Logbooks can provide a wealth of information about patients who have received services at the health care facility, such as a patient's identification number, age, parity, the date on which she had her procedure, the name of the health care provider who did the procedure, uterine size, the reason for the procedure, the type of procedure used and any complications the patient had when she arrived or that developed during the procedure. Logbooks may also help determine which steps of providing service take the most time, which areas are strongest, or when patients do or

do not receive the follow-up care they need. However, logbooks may be difficult to find, incomplete, not up-to-date or difficult to read.¹⁰

Patient charts are also useful for finding out specific information about care that a particular patient received, and can also provide information similar to what can be found in a logbook. The advantage to using a patient chart is that information in the chart may be more detailed than what is recorded in the logbook.¹⁰ As with logbooks, however, patient charts may be difficult to find, incomplete, not up-to-date or difficult to read.

5.3 Interviewing patients and providers

Currently, the DATAPAC Core Questionnaire Series only includes one interview instrument, the *Guide to Using the Postabortion Care Patient Exit Interview* (Module 4). However, introducing other interview instruments are planned over time, including a "PAC Provider Interview" and perhaps a "Hospital Manager/Administrator Interview". Below are some points to guide Data Collectors when interviewing a patient or provider.¹⁰

- The Data Collector should explain that the purpose of the interview is to help improve PAC services at the health care facility and that interviewee responses and feedback are desired and important.
- Obtaining consent when interviewing patients or providers is vital. It is important to identify whether the interview is confidential or anonymous. This manual provides an example of an informed consent form that assumes responses are confidential.
- The Data Collector should simply read the questions as written, without making any changes in the wording. If participants ask for clarification, the interviewer should simply re-read the question and ask the participant to answer it to the best of their understanding. Re-phrasing or explaining the question may lead the patient or provider to a response. Also, the Data Collector should keep a neutral inflection at all times because the tone in which a question is asked can provide subtle cues to interviewees about how they think an interviewer wishes them to respond.
- For questions that have predetermined response categories or rankings (for example, rarely/never, sometimes, routinely/always), the Data Collector should always read all possible responses, even if the participant answers before the Data Collector has finished reading all possible responses.

Interviewing patients is a delicate task requiring diplomacy. Below are some special points to consider when interviewing women after they have received PAC services at the health care facility.¹⁰

- In order to help set the patient more at ease, the interview should be conducted in a private environment. This may make the woman more comfortable to speak openly about her experience at the health care facility.
- The goal of the interview is to have a conversation with someone who has an important perspective on the quality of PAC services provided at the facility. Approaching the interview from the point of view of wanting to learn from the patient's experience may help the Data Collector be more relaxed with the patient. The more relaxed, open and sincere the interviewer is, the more likely it is that the patient will feel comfortable answering questions openly and honestly.

- Several other factors may help make the patient more comfortable while being interviewed. The interviewer may consider wearing casual clothes rather than a uniform. It may also help if the interviewer is a staff member who is not directly involved in the provision of the woman's care.

The final step in interviewing participants is to thank them for their time and comments!

5.4 Pre-testing Instruments

After modifying the DATAPAC data collection forms to reflect service delivery conditions at the study site, or drafting new forms if necessary, Data Collectors should pre-test them by administering the form(s) to a small, pre-determined number of patients. Pre-testing ideally should be integrated with training of Data Collectors. If feasible, pre-test the instruments with at least 2-4 patients or more. Researchers should pay special attention to how well the data collection forms reflect the reality of the treatment process.

Based on the information from the pretest, the researchers should again adapt the forms to best reflect the treatment process they observed. Once the data collection instruments are finalized, enough forms should be printed for the sample size, plus a few extras in case of errors or loss.

The PI should be prepared to make decisions about the level of detail of data to be collected. For a cost and resource use study, for example, the PI may decide that the prorated costs of certain supplies are too small to include in the calculation of the average cost per patient. It is critical that decisions be made before final data collection begins and that data collection is consistent for all patients observed. Finally, these decisions should be noted in the presentation of study results.

Please note: The PI may need to adapt questionnaires to reflect the requirements of each study. All data collection forms in the DATAPAC Core Questionnaire Series are available on a floppy disk in Word 6.0 format, or may be obtained at the Ipas website (<http://datapac.ipas.org>)

5.5 Data Quality

The keys to good data quality is comprehensive training and strong supervision by the PI and Site Coordinators. In order to ensure that data are consistent and of high quality, Data Collectors must complete the forms systematically for all participants. When a study requires several Data Collectors, it is essential that they be well-trained in order to ensure consistent data collection.

Data Collectors should never try to guess the answer to a question when data are unavailable. For instance, the Data Collector should note on the form any situations when it was not possible to determine when a patient began or ended a particular step in the process. Figure 2 offers additional suggestions for improving the quality of data collection. Also, when interviewing participants, Data Collectors should be instructed to ask each question exactly as it is written. If the question is not understood by the participant, the Data Collector should simply repeat the question as written and instruct the interviewee to answer the question to the best of his or her understanding. If the Data Collector finds that certain questions are being routinely misunderstood, the Site Coordinator or PI should be notified as this might indicate that the question or questions need to be re-written.

Figure 2: Suggestions for Improving the Quality of Data Collection

- The PI or Site Coordinator should be readily available on site to monitor data collection & answer questions
- Consider the whole postabortion care process including the waiting time, not just the details of the uterine evacuation procedure itself
- Determine which types of patients will be included in the study before starting
- Know what to look for before beginning data collection Do not become overburdened with unnecessary information Involve hospital staff early in the study design process If site staff are involved, they will be more likely to encourage changes later that will reduce resource utilization & improve quality of care
- Consistency is essential Be certain to record information the same way for each participant For example, in cost studies, if timing begins when patients register with the receptionist, begin recording for all patients at that time If timing begins after the receptionist has retrieved the patient's file, ensure that all of the patients are timed this way
- Provide a guidebook for the Data Collectors to reference when questions arise about data collection

Finally, Data Collectors should complete a form with ink pens, preferably "ball point" pens If corrections or changes need to be made, the Data Collector should strike through the original answer and write in the new answer and then write their initials by the change (Figure 3)

Figure 3 Suggested way to make changes on data collection forms

Original response	Original response with correction
Marital status <##>	Marital status <##>
1 Married <input checked="" type="checkbox"/> 1	1 Married TK ##
2 Cohabiting, "In union" <input type="checkbox"/> 2	2 Cohabiting, "In union" <input type="checkbox"/> 2
3 Single <input type="checkbox"/> 3	3 Single <input checked="" type="checkbox"/> 3
4 Divorced <input type="checkbox"/> 4	4 Divorced <input type="checkbox"/> 4
5 Widowed <input type="checkbox"/> 5	5 Widowed <input type="checkbox"/> 5

5 6 Data Confidentiality

In order to protect the confidentiality of study participants, arrangements should be made to store completed informed consent and data collection forms in a safe and secure location Completed forms should be locked and access limited to the PI and perhaps the Site Coordinator when appropriate If data are entered into a computer software program such as SAS, SPSS, Epi-Info, Microsoft Excel, or similar software packages, then the data files should be password protected, and any back-up copies of the datasets on floppy diskette locked up as are the completed forms

6. DATA MANAGEMENT AND ANALYSIS

Once data are collected, the next step involves assimilating the data into a form suitable for data analysis Data management is a detail-oriented process that requires the direct supervision of the PI in order to ensure that all the care taken to collect data of high quality is not undermined by sloppy data management practices Depending upon the complexity of the analysis required, a biostatistician may need to be consulted during data analysis Any statistical hypothesis to be

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tested, as well as the approach for testing the hypothesis, should be specified in the Study Proposal during the designing of the study. If there are multiple planned study objectives, such as measuring quality of services, patient satisfaction, and the cost of services, we recommend that the PI specify the primary objective or objectives. Although unplanned analyses may be performed, they should be described as such in study reports as it is difficult to interpret the statistical significance of results from most unplanned statistical tests.

Data management and analysis are topics that usually consume entire books and thus a comprehensive review is beyond the scope of this guide.¹¹ Nevertheless, a brief description of the process follows.

6.1 Data Management

Data management is the process that includes data coding, entry, and cleaning. All three of these procedures are greatly facilitated by a computer and appropriate statistical software. To that end, Ipas provides data entry and cleaning files to be used with Epi-Info, a free statistical software package available from the United States Centers for Disease Control and Prevention.^a

6.1.1 Data coding

Data coding is the process of transforming textual answers on questionnaires into numerical formats so that the answers can be manipulated by statistical software packages such as Epi-Info, SAS, or SPSS. Examples of data coding include coding “yes or no” questions as either 1 (for ‘yes’) and 0 (for ‘no’) or coding “single, married, cohabitating, divorced, or widowed” as “1, 2, 3, 4, or 5”, respectively. To facilitate the coding process, the PI should create a “Code Book”. A Code Book lists each question asked and the possible answers, except for “open” questions, along with the code for each answer. In addition, questionnaires should have the appropriate codes printed on the forms themselves. All DATAPAC questionnaires are pre-coded so that completing the questionnaire and coding it are combined into a single step. Therefore, once the questionnaire is completed and reviewed by the data supervisor or PI, it is time to begin data entry.

During the process of coding data, it is not uncommon to find questions that were answered in ways unintended when the questionnaire was designed. For example, a question designed to have one correct answer, such as “Employment Status”, may have more than one answer checked. The answer to the question “Age” may be illegible, or an accidental stray mark may appear to be an answer to a question. There is no definitive way to code responses in this situation. The PI, usually in consultation with study staff, may try to make a logical guess, or may try to discern the correct answer based on the answer to another question (e.g. if “Age” is illegible, the patient’s age may be calculated from the date of birth in her hospital records). Sometimes the PI will simply code the responses as “other” or better yet, “missing data”, as though the question were unanswered rather than indecipherable. Regardless of how ambiguous responses are coded, it is critical to be consistent. In other words, if an unintelligible response to the question “Employment Status” is coded as “missing” on one form, then all unintelligible responses to that question should be considered “missing”. To facilitate consistency in the coding of these questionable responses, the study staff coding the data should record instances when they were required to make judgments on how to code a response in the study Code Book. The PI is responsible for reviewing the Code Book and approving all such coding judgments.

^a See the “How to Use This Manual” section for more information on how to obtain Epi-Info.

6 1 2 Data entry

Depending upon preference, time, and availability of study staff, the data may either be entered (“keyed”) throughout the study as it is collected, or entered *en masse* once data collection is completed. If the study is large, consider subcontracting a company specializing in data entry. One advantage of entering data throughout the study is that problems with the data may be discovered during data entry, perhaps in time to correct the problem. Also, if data entry is ongoing, then data analysis can begin as soon as data collection ceases. As with all other components of the study, data entry requires patience, persistence, and careful attention to detail.

On a technical note, there are two methods of data entry that can help maintain high data quality. The more rigorous method is usually called *double-keyed-compare-to-zero* or *double-key validation*. These cryptic terms describe a process where the data are actually entered twice on separate occasions (sometimes by one person or team but preferably by two people or teams). Once the data are entered twice, the two datasets are electronically compared and, where the keyed answers to a question differ, the PI may safely assume that one keyed answer is incorrect. The error may then be corrected by reviewing the answer from the questionnaire. Epi-Info and many other software packages have double-key validation features.

The other and less rigorous method to validate the accuracy of data entry is to take a random sample of the questionnaires, typically 10-20%, and hand-check those questionnaires against the data as keyed into the dataset. If the PI finds few (perhaps less than one percent) or no errors, then she or he may have some confidence that the overall quality of the data entry is sufficient. However, if the data entry error rate begins to climb beyond one or two percent, then the PI and study staff may need to visually validate every questionnaire and correct the dataset. Depending upon the sample size and number of questions on the questionnaire(s), it may actually require less time and effort to double-key validate in the first place.

Finally, in the past, software packages have handled missing data differently. SPSS, for example, previously required that missing data be coded and keyed with a user-defined value such as 99, 999, 999, etc., while Epi-Info and SAS allowed missings to be coded as a period (“ ”). With SAS, moreover, the missing data symbol (“ ”) can be combined with a letter to distinguish why the data were considered missing, so that “ a” might mean that the interviewer forgot to ask the question, while “ b” might mean that the patient refused to answer the question. Using periods to represent missing data is now acceptable in SPSS and most other statistical software and is the best method to use when entering data.

Epi-Info files (*.qes) are available from Ipas or the DATA PAC website (www.datapac.ipas.org) to use to enter data collected with the DATA PAC questionnaires.

6 1 3 Data cleaning

Reviewing the Code Book, visually checking the questionnaires, and double-keying the data are actually parts of the “data cleaning” process. After spending a considerable amount of time and money training interviewers and collecting data, insuring that the responses were correctly coded and entered is very important.

The next step to making sure the data are as clean as possible is to try to determine if the data “make sense”. Are the responses to the questions within the expected range? For example, patients requiring PAC services must be of reproductive age, which for most women falls

between the ages of 15 and 45. If the dataset contains records where women in the study are aged 9 or 92, there is most likely an error that must be corrected. Perhaps this is a simple keying error, where a review of the questionnaires shows that the woman supposedly aged 9 is really 19, and the woman reported aged 92 is actually 29 years old. However, sometimes nonsensical responses are recorded on the questionnaire itself, and the data were keyed precisely as recorded on the questionnaire. This is another situation where there is no definitively correct answer. The PI and study staff may try to determine the correct answer from another source, accept the answer as is, or chose to ignore those particular responses during analysis, known as "excluding outliers". It is also very important to remember that an apparently nonsensical response may actually be correct. For example, although rare, women occasionally have been pregnant 15 or more times. Identifying cases where there are unexpected answers such as outliers is usually accomplished by using statistical software to compute descriptive statistics such as a mean, median, mode, range, standard deviation, quartile and frequency distribution for each question coded continuously (i.e. age, years of education, pain on a 1-10 scale, annual income, etc.), and frequency distributions for dichotomous and categorical questions (i.e. marital status, ever/never contraceptive use, employment status, etc.).

The next issue the PI should address when cleaning the dataset is *internal consistency*. Internal inconsistencies arise when the response to one question contradicts the answer to another. An example would be when, according to the questionnaire or dataset, a woman says that she "never" used contraception in one question, but answers in another question that she and her partner were using condoms when she got pregnant. Again, the PI and study staff may try to determine the correct answer from another source, accept the inconsistency as is, or chose to exclude those particular responses during analysis. Epi-Info has a feature to check for internal consistency as well as with-in range values as the data are keyed. Epi-Info files (*.chk) for the DATAPAC Core Questionnaire Series are available from Ipas with some pre-programmed data checks, although these "check"-files may need to be modified depending upon the study design.

Finally, a simple yet often overlooked facet of good data management is keeping back-up copies of the dataset. The best method is to have multiple copies in separate locations (perhaps one diskette at the PI's office and one at her or his home). However, in order to protect study participant confidentiality, if the dataset contains any personal identification data (names, addresses, telephone numbers, etc.), then all copies of the dataset as well as the questionnaires should be stored in a locked and secure location under the supervision of the PI. Except in the cases of follow-up studies, it is usually unnecessary to enter personal identifiers into the dataset.

6.2 Data Analysis

The spread of statistics software packages has rendered statistical analysis accessible to anyone with a personal computer. However, while user-friendly software has made computing a Mantel-Haenszel X^2 , Pearson's r , or regression coefficient seductively easy, statistical software cannot help a researcher interpret the results or decide whether the statistical test used is appropriate in the first place. Data analysis can be a complex and confusing process and any but the most rudimentary discussion is beyond the scope of this guide.^{12, 14} Unless the PI has had training in statistics, a biostatistician should be consulted both when designing the study and during analysis.

Many researchers may be comfortable with computing and interpreting simple averages, frequencies, and other *descriptive statistics*. Common descriptive statistics include

- 1 *means* or *averages*, such as the mean age or the mean uterine size of women presenting for PAC services,
- 2 *percentages*, such as 30% of women requiring PAC services reported having “ever used” a contraceptive,
- 3 *range*, such as the time required to perform sharp curettage procedures ranged from 4 to 13 hours

Other descriptive statistics may be less familiar to researchers, including

- 1 other measures of central tendency, such as *median* and *mode*,
- 2 *percentiles*, including *quartiles*,
- 3 measures of data dispersion such as *standard deviation*, *variance*, *standard error of the mean*, *confidence intervals*, and,
- 4 measures of data distribution, which includes *kurtosis* and *skewness*

Descriptive statistics help the researcher understand the characteristics of single variables such as age, ever use of contraceptives, or marital status. Also, by computing *cross-tabulations*, a researcher can investigate the distribution of one categorical variable by another variable, such as marital status by method of treating incomplete abortion. The next step in the analysis of data involves *inferential statistics*, where the researcher seeks to test theories or make conclusions about a population based on data collected from a sample of that population. Inferential statistics often involve computations such as t-tests and ANOVAs, X^2 , correlation coefficients, and regression analyses. In PAC OR, inferential statistics would be used when the intention of the study is to measure a statistical difference between groups, such as difference in uterine size between women treated for incomplete abortion with SC versus MVA. Another use of inferential statistics would be to investigate factors that influence an outcome of interest, such as predictors of contraceptive acceptance after treatment of incomplete abortion or predictors for high levels of pain reported during treatment.

Again, the ease with which researchers can perform statistical testing with the aid of computers software has led to a flood of substandard statistical analyses. Common errors include reporting every “significant” finding whether or not the results are reasonable or can be explained by other factors, using an incorrect test for the intended result, and incorrectly interpreting the output from a statistical analysis. While occasional errors are unavoidable regardless of training and experience, the following rules can help reduce errors during statistical analysis:

- 1 Consult a biostatistician both during study design and analysis if needed,
- 2 Determine the statistical tests needed when designing the study,
- 3 Make sure the results are logical and can be explained when compared with other reported findings or conventional wisdom

For example, if a statistical test is “significant”, consider other factors which may explain the result. The PI should try to ascertain whether there is *confounding*, which occurs when another variable is influencing the result of a particular test. An example would include a study where women receiving MVA reported higher pain scores than women receiving SC, leading a PI to conclude that MVA is a more painful procedure. A deeper investigation might show that women receiving SC were also given more analgesia. Therefore, the correct inference in this fictional study might not be that SC causes less pain, but that the women treated with MVA were given

less pain medication After going to great lengths to carefully design and implement the study, careful attention during data analysis will ensure that the results accurately reflect the data

7. DISSEMINATION

Often ignored when designing and conducting any type of research, disseminating results to key audiences is critical in order for the results to lead to informed policy and programmatic decisions Therefore, do not neglect to budget for dissemination activities (printing of final reports, registration and travel to conferences and presentations, reprints of published journal articles, etc) when designing a study Ideally, the lessons learned during the project will facilitate improvements at PAC treatment centers beyond the site or sites where the study was conducted In order to maximize the impact of each study on PAC treatment, researchers should determine the primary audience of the study results while designing the study

The first step in disseminating the findings is to present the results to the staff at the study site or sites Ideally, the findings should result in improvements at the sites where the study was conducted Also, having immediate access to the results at the study site is an important reward for hard work

Several other venues may be excellent for disseminating results Bear in mind that there may be a need to re-design the presentation depending on the audience For a 10-minute presentation to the Minister of Health, considering forgoing a lengthy description of the study design and statistical analysis and instead focus on a few key points illustrated by figures and tables In contrast, at a regional conference attended by fellow researchers, the audience may be as interested in the study methods as the results While the possible outlets for dissemination of the study results will vary from country to country, the following suggestions may prove useful depending upon the nature of the study

- **Reports to source of study funding** Most funding for PAC OR studies today comes from outside sources such as unilateral funding agencies (USAID, DFID, etc) or private foundations The PI is usually responsible for reporting study progress and results to the source of funding
- **Ministry of Health (MOH)** If the study sites were part of the public sector, then it is especially important to provide results to the MOH and other relevant government agencies
- **Hospital or clinic staff** Once the results have been reported to those providing funds for the study, presenting results to the hospital staff is ideally the first step researchers should take to make the results more widely known
- **Staff from other hospitals** It may be possible to arrange a presentation that can be attended by providers in the same area as the study site or sites
- **Local meetings** Do not limit dissemination to health professionals Presentations to local women's groups and educational or political forums may help generate interest in improving delivery of services for PAC patients
- **Conferences** National, regional, and/or international conferences provide an outlet for presentation of results in a timely fashion The PI may be able to present "interim" results if patient recruitment has not ended, such as when only baseline data have been collected in a pre-post intervention study Finally, conferences often have roundtable discussions, where presenters can interact with the audience to get more feedback on the study

- **Professional publications** National, regional, and/or international journals provide a forum similar to conferences, only potentially larger. If submitted to peer-reviewed or refereed journals, researchers will benefit by receiving feedback from fellow experts. Journal publications have the added benefit of being referenced in databases such as MedLine and PopLine, so that researchers can find the report electronically. The impact of much PAC OR has been limited because the results have been limited to "Final Reports" which are normally distributed but to a relatively small number of people. However, a drawback to professional publications is that there are often long queues, so that the time from submission to acceptance to publication can often take well over one year!
- **Newsletters, bulletins, and press releases** These are usually brief, focusing on one or two main outcomes, and can be produced inexpensively and quickly.
- **Electronic distribution** Increasingly, results from studies can be "published" by "listservs", which send periodic e-mails to registered people who have expressed an interest in subjects like international health, reproductive health, OR, or PAC. A wider audience still can be reached via posting results at a website on the Worldwide Web (WWW). Websites that may be interested in posting a brief summary of the findings include Ipas's website dedicated to DATA PAC projects ([http //datapac ipas org](http://datapac.ipas.org)) and the Population Council's OR/Technical Assistance site ([http //www popcouncil org](http://www.popcouncil.org)), and the list is growing daily.

No single avenue for dissemination is complete and each has advantages and disadvantages. Therefore, when designing the study, plan and budget for several different dissemination activities. Aside from self-publication and attending conferences, dissemination is relatively inexpensive compared to other research activities, but nevertheless requires careful planning and considerable time and effort on the part of the PI and research staff.

Good luck! We wish you success in designing and carrying out your study and welcome comments, questions, and suggestions about this manual or the study itself. Finally, if you conduct PAC OR, we sincerely hope that you will submit copies of your results and questionnaires to DATA PAC to be included in the DATA PAC Database. Submitting your work to DATA PAC not only increases your audience, but also provides valuable tools to other PAC OR researchers. Address all correspondence to

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Ipas
P O Box 999
Carrboro, NC 27510-0999 USA
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[http //datapac ipas org](http://datapac.ipas.org)

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**DATAPAC Core
Questionnaire Series**

General Information Questionnaire

DATAPAC Module 1

Timothy DN King, Ipas
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and

Members of the DATAPAC Statistical Technical Working Group

June 1998
Version 1.3



INOPAL III

GENERAL INFORMATION QUESTIONNAIRE

DATAPAC Module 1

The DATAPAC General Information Questionnaire (GIQ) serves as the backbone for all other DATAPAC Core Questionnaire Modules. The GIQ collects basic information on the study site and information needed to individually identify each participant. The GIQ is intended for use with other DATAPAC Core Questionnaires, including for example the *Patient Exit Interview*, *Observation of Clinical Services Guide*, and the *Cost and Resource Use Guide*.

General Instructions

- ! **Participant Selection Checklist** Written informed consent. Be sure to complete the checklist and informed consent form *before* beginning data collection. You should have a signed informed consent form on file for every participant in your study, including patients, providers, and administrators when appropriate. If the person is illiterate, then you should have them mark the signature line with an "X". When a person is unable to give informed written consent, such as when they are too medicated or otherwise incapacitated, do not include them in your study. You should also offer to give a copy of the informed consent form to the participant.
- ! Ask every question in the order in which they appear.
- ! Do not discuss a participant's answers with anyone other than the study staff.
- ! Use ball point pen when making corrections. Strike through incorrect answer, make the correction and initial (see example below).
- ! Most data should be available from the patient's record or other written records.
- ! We assume that most hospitals record dates in the form of date/month/year. This clearly varies by country. If you do record dates in the month/date/year format, the accompanying Epi-Info file (giq rec) will need to be modified (if used).

Example. How to correct or make changes to answers

Original response		Original response with correction	
Marital status		Marital status	
1	Married <input checked="" type="checkbox"/> 1	1	Married <input checked="" type="checkbox"/> 1 TK
2	Cohabiting, "In union" <input type="checkbox"/> 2	2	Cohabiting, "In union" <input type="checkbox"/> 2
3	Single <input type="checkbox"/> 3	3	Single <input checked="" type="checkbox"/> 3
4	Divorced <input type="checkbox"/> 4	4	Divorced <input type="checkbox"/> 4
5	Widowed <input type="checkbox"/> 5	5	Widowed <input type="checkbox"/> 5

Special Instructions for Site Information Section

- This section should be completed *before* recruiting a participant in your study
- Question 1 *Pre- and post-intervention studies* Answer this question only if your study involves an intervention such as introduction of MVA, training in contraceptive counseling techniques, integration of PAC services, etc
- Question 2 *Site Identification Number* If you have more than one site in your study, you will need a site identification code
- Questions 3 & 4 *Data Collector Code* and *Site Coordinator Code* We recommend that each Data Collector and Site Coordinator be assigned a code and have their codes entered on the form in place of their names The Supervisor Code refers to the person who is responsible for reviewing the Data Collector's work

Special Instructions for Participant Information Section

- It is likely that most of this information will come from a patient chart or other written records
- Question 10 *Data recorded on this form obtained from* Indicate the source of the data – chart, patient, provider (physician, nurse, midwife, etc), other (friends or family members, other hospital staff) We anticipate that most data will be found on a patient chart or other written record, but this may not always be the case
- Question 11 *Current Date* This is the date that the Data Collector begins filling out the form In some studies, such as a retrospective case record review, this date may not correspond with the date the patient registered in the hospital
- Question 14 *Study Participant ID Code* The key here is to make sure that you have a unique identification number for each participant in your study Also, with a pre- and post-intervention study design, make sure the Patient ID Code uniquely identifies whether the patient participated in the pre-intervention (baseline) or post-intervention (follow-up) phase of data collection For example, in the baseline phase, you may want to assign each Patient ID Code beginning with a "100", so that the first patient would be 1001, the second 1002, etc Similarly, the patients in the follow-up phase could be 2001, 2002, 2003, and so forth
- Question 15 *Hospital Record Number* Many hospitals track patients with chart record numbers, log book numbers, registration numbers, etc If applicable, be sure to record this code in order to facilitate linking your questionnaire to a patient record, or to link patient records in a follow-up study

GENERAL INFORMATION QUESTIONNAIRE

DATAPAC MODULE 1

Patient Selection Checklist	
The patient...	✓ if the answer is <u>YES</u>
Requires emergency treatment for complications arising from spontaneous abortion or induced abortion performed outside of the study site. Complications may include incomplete abortion, sepsis, lacerations, uterine perforations, and other related injuries	<input type="checkbox"/>
Read (or been read) Informed Consent statement <u>and has signed</u> the form below	<input type="checkbox"/>

If both boxes have been checked off, then you may proceed with data collection!

Informed Consent Statement for Patients	
<p>Hello, my name is [<i>name of Data Collector</i>], and in order to improve the quality of services in this hospital, we are observing the care patients receive. If you agree to participate, we may observe the care you receive, review your records, and/or we may ask you a few questions about your medical history and treatment while in the hospital.</p> <p>Any answers you give are completely CONFIDENTIAL, meaning that no one other than the study staff will be able to see your answers, and your name or address will NEVER be associated with our observations or any answer you give. You have every right to refuse to participate in the study. Even if you do agree to be in the study, you may ask to stop participating at any time. Whether or not you are in the study will not affect your treatment.</p> <p>If you agree to participate in this study, please sign below.</p>	
<hr style="width: 80%; margin: 0 auto;"/> <p>Signature of participant</p>	<hr style="width: 80%; margin: 0 auto;"/> <p>Date (dd/mm/yyyy)</p>
<hr style="width: 80%; margin: 0 auto;"/> <p>Witness (usually Data Collector)</p>	
<p>If you have any questions about this study later, please contact [Principal Investigator's name and telephone number and/or address]</p>	

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GENERAL INFORMATION QUESTIONNAIRE

DATAPAC MODULE 1

Instructions for Form

- 1 Answer each question
- 2 Make all marks with a "ball point" pen, and strike through and initial all corrections or changes

Remember to get an Informed Consent Form!

DATAPAC General Information Questionnaire Module 1		
SITE INFORMATION		
1	<i>For pre and post intervention studies</i> This questionnaire is part of the <ol style="list-style-type: none"> 1 Pre-intervention (baseline) phase <input type="checkbox"/>1 2 Post-intervention (follow-up) phase <input type="checkbox"/>2 	
2	<i>For multi-site studies</i> Site ID Number _____	
3	Data Collector code _____	
4	Supervisor code _____	
5	Country _____	
6	State, Province, or Region _____	
7	City _____	
8	Facility Name _____	
9	WHO Center Classification <##> <ol style="list-style-type: none"> 1 Primary Health Center <input type="checkbox"/>1 2 First referral Center (District Hospital) <input type="checkbox"/>2 3 Secondary Level Hospital <input type="checkbox"/>3 4 Tertiary Hospital <input type="checkbox"/>4 5 Other (specify _____) <input type="checkbox"/>5 6 Not applicable <input type="checkbox"/>6 	
10	Facility Sector Type <ol style="list-style-type: none"> 1 MOH/Government <input type="checkbox"/>1 2 Social Security <input type="checkbox"/>2 3 Non-governmental Organization <input type="checkbox"/>3 4 Missionary Hospital <input type="checkbox"/>4 5 Private Hospital <input type="checkbox"/>5 6 Clinic <input type="checkbox"/>6 7 Private Practice or Clinic <input type="checkbox"/>7 8 Other (please specify) _____ <input type="checkbox"/>8 	

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DATAPAC General Information Questionnaire· Module 1

PARTICIPANT INFORMATION									
11	Data recorded on this form obtained from (check all that apply) <#> <table style="width: 100%; margin-top: 5px;"> <tr> <td style="width: 15%;">1 Patient record or chart</td> <td style="text-align: right;"><input type="checkbox"/>1</td> </tr> <tr> <td>2 Patient interview</td> <td style="text-align: right;"><input type="checkbox"/>2</td> </tr> <tr> <td>3 Provider interview</td> <td style="text-align: right;"><input type="checkbox"/>3</td> </tr> <tr> <td>4 Other source (specify _____)</td> <td style="text-align: right;"><input type="checkbox"/>4</td> </tr> </table>	1 Patient record or chart	<input type="checkbox"/> 1	2 Patient interview	<input type="checkbox"/> 2	3 Provider interview	<input type="checkbox"/> 3	4 Other source (specify _____)	<input type="checkbox"/> 4
1 Patient record or chart	<input type="checkbox"/> 1								
2 Patient interview	<input type="checkbox"/> 2								
3 Provider interview	<input type="checkbox"/> 3								
4 Other source (specify _____)	<input type="checkbox"/> 4								
12	Current Date ____/____/____ (dd/mm/yyyy)								
13	Date of hospital registration ____/____/____ (dd/mm/yyyy)								
14	Date of hospital discharge ____/____/____ (dd/mm/yyyy)								
15	Study Participant ID Code _____								
16	Hospital Record Number _____								
17	Participants date of birth ____/____/____ (dd/mm/yyyy)								
18	Participants age ____								

Form completed <input type="checkbox"/> Yes <input type="checkbox"/> No	Date ____/____/____ (dd/mm/yyyy)	Time ____ ____ (24 hour time)		
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; border: none;"> Reviewed by _____ <div style="text-align: center; margin-top: 5px;">Print name</div> </td> <td style="width: 40%; border: none;"> _____ <div style="text-align: center; margin-top: 5px;">Signature</div> </td> </tr> </table>			Reviewed by _____ <div style="text-align: center; margin-top: 5px;">Print name</div>	_____ <div style="text-align: center; margin-top: 5px;">Signature</div>
Reviewed by _____ <div style="text-align: center; margin-top: 5px;">Print name</div>	_____ <div style="text-align: center; margin-top: 5px;">Signature</div>			

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**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
CLINICAL CASE REPORT FORM FOR
POSTABORTION CARE PATIENTS**

DATAPAC Module 2

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and

Members of the DATAPAC Clinical
Technical Working Group

14 June 1998
Version 1.2



INOPAL III

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Sally Girvin (*AVSC*)
David Grimes (*Family Health International*)
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What is DATAPAC?

The DATAPAC *Guide to Using the Clinical Case Report Form for Postabortion Care Patients* is part of the DATAPAC Core Questionnaire Series, a set of questionnaires and instruction guides that provide an overview on how to design and conduct quantitative postabortion care (PAC) operation research (OR) studies. The DATAPAC Core Questionnaire Series is in modular form and currently includes

- Module 1** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 2** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 3** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 4** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 5** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 6** **GUIDE TO USING THE OBSERVATION OF POSTABORTION CARE SERVICES QUESTIONNAIRE** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

The DATAPAC Core Questionnaire Series is designed to be a guide for rapidly assessing the quality and cost-effectiveness of PAC services. These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the DataPAC Core Questionnaire Series For Postabortion Care Operations Research (Module 1)*.

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols

For more information, please contact

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or visit our website at

datapac.ipas.org

and reports These resources are free to anyone interested in PAC OR Please contact Ipas for more information or to make contributions to DATAPAC

Overview

The DATAPAC *Guide to Using the Clinical Case Report Form for Postabortion Care Patients* (Module 2) should be used to gather data from primarily from written hospital records such as medical charts. Information may also be extracted from Log Books from Registration, Obstetrics/Gynecology Ward, Operating Theater, Emergency Room, and/or the Family Planning Clinic. This questionnaire is part of the DATAPAC *Core Questionnaire Series*, a set of questionnaires and instruction guides intended to provide an overview on how to design and conduct quantitative operations research (OR) studies on postabortion care (PAC). For more information on DATAPAC or on designing and conducting PAC OR studies, please see the *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (Module 1).

General Instructions for Completing Case Report Form

- ! **Informed Consent Form:** You should have a signed Informed Consent Form on file for every participant in your study. The forms should be locked and accessible only to research staff. Those patients unable to give informed written consent, such as when they are too medicated, in too much pain or discomfort, or otherwise incapacitated, should not be included in the study. You should also offer to give a copy of the form to each participant. The *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (King et al, 1998) provides an example of an informed consent form, and copies of these forms can be obtained from Ipas.
- ! **Participant Selection Checklist:** Be sure to complete the checklist and informed consent form *before* beginning data collection.
- ! Only place *Patient's Study ID Code* on the form if you will need to link data from this questionnaire to data from other data collection instruments. This can best be accomplished, for example, by using the *DATAPAC General Information Questionnaire Module 1 (GIQ)*, and then using the *Patient Study ID Code* from the GIQ to link to other questionnaires such as the *DATAPAC Postabortion Care Patient Exit Interview Module 4*. The *Patient Study ID Code* is a unique number for each participating patient and is assigned by the study staff.
- ! Do not discuss the data with anyone other than the study staff.
- ! Use a ballpoint pen when making corrections. Strike through incorrect answer, make the correction and initial (see example below).

Example How to correct or make changes to answers

Original response		Original response with correction	
Marital status		Marital status	
1	Married <input checked="" type="checkbox"/>	1	Married <input checked="" type="checkbox"/> TK
2	Cohabiting, "In union" <input type="checkbox"/>	2	Cohabiting, "In union" <input type="checkbox"/>
3	Single <input type="checkbox"/>	3	Single <input checked="" type="checkbox"/>
4	Divorced <input type="checkbox"/>	4	Divorced <input type="checkbox"/>
5	Widowed <input type="checkbox"/>	5	Widowed <input type="checkbox"/>

Clinical Case Report Form for Postabortion Care Patients DATAPAC Module 2

Patient Selection Checklist	
The patient ..	✓ if the answer is <u>YES</u>
Requires emergency treatment for complications arising from spontaneous abortion or abortion that was induced outside of the study site. Complications may include incomplete abortion, sepsis, lacerations, uterine perforations, and other related injuries	<input type="checkbox"/>
Has read, or been read, <u>and has signed</u> the <i>Informed Consent Form for Patients</i>	<input type="checkbox"/>

Only if both boxes have been checked, then you may proceed with data collection!

Instructions

- 1 All data should come from the patient's chart, log books, and other written records
- 2 Attempt to answer each question, except those questions indicated by the "skip" patterns
- 3 Make all marks with a "ball point" pen, and strike through and initial all corrections or changes
- 4 Please refer to instructions above or the *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (Module 1) if you have any questions

Remember to complete the Informed Consent Form!

DATA PAC Clinical Case Record Form (Module2)

Date of Form Completion	___/___/___ <i>dd/mm/yyyy</i> <input type="checkbox"/> Not recorded
Patient's Chart Number ID Code _____	
Patient's Study ID Code _____	
Was the patient asked to give her written informed consent before receiving medical treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient unable to give informed consent <input type="checkbox"/> Not recorded
Patient's Age	___
Date of Admission	___/___/___ <i>dd/mm/yyyy</i> <input type="checkbox"/> Not recorded
Time of Admission	_____ (24 hour time) <input type="checkbox"/> Not recorded
Primary staff member who evaluated woman at time of presentation 1 Obstetrician/Gynecologist (OB/GYN) 2 General Physician 3 Resident Physician or Resident OB/GYN 4 Medical Intern 5 Nurse or Nurse Midwife 6 Nursing assistant 7 Midwife (trained or untrained) 8 Receptionist, Secretary, Custodian, etc 9 Other (please specify) _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> Not recorded
Date of last menstrual period	___/___/___ <i>dd/mm/yyyy</i> <input type="checkbox"/> Not recorded
How was pregnancy confirmed? (Check all that apply) 1 History of LMP 2 History of symptoms 3 Pelvic examination 4 Urinary HCG 5 Serum HCG 6 Ultrasound 7 Not confirmed	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> Not recorded
How many previous pregnancies (excluding current pregnancy)	<##>
How many children delivered live	<##>
How many children delivered stillborn	<##>
How many previous spontaneous abortions (excluding current pregnancy)	<##>
How many previous induced abortions (excluding current pregnancy)	<##>

DATAPAC Clinical Case Record Form (Module2)	
Abortion Status at Time of Presentation 1 Complete abortion (No products of conception remaining) 2 Threatened abortion (Continued pregnancy that is bleeding) 3 Inevitable abortion 4 Nonviable pregnancy	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not recorded
Woman's Condition at Time of Arrival 1 Good 2 Fair/Stable 3 Poor 4 Critical (shock) 5 Dead on Arrival	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Bleeding 1 None 2 Mild, <250 ml 3 Moderate (250 – 499 ml) 4 Severe (>500 ml)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not recorded
Number of Units of Blood Transfused	_____ <input type="checkbox"/> None <input type="checkbox"/> Not recorded
Patient's Temperature	_____ °C <input type="checkbox"/> Not recorded
Vaginal Discharge 1 None 2 Clear 3 Serosanguinous 4 Purulent 5 Could not determine, obscured by blood	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Foreign Body Penetration indicate highest level of intrusion 1 None evident 2 In vagina 3 In cervix 4 In uterus 5 In abdomen	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Abdomen 1 Soft, nontender 2 Soft, tender 3 Firm, tender 4 Acute abdomen (Tender, rigid, rebound, guarding)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not recorded
Number pelvic exams during this hospitalization	<##>
Uterus (By palpation) 1 Normal 2 Gravid 3 Boggy 4 Firm 5 Prolapsed	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded

DATA PAC Clinical Case Record Form (Module2)

Estimated uterine size (weeks) based on bimanual exam?	___ ___ <input type="checkbox"/> Not recorded
Estimated uterine size (cm) based on bimanual exam?	___ ___ <input type="checkbox"/> Not recorded
Method of Uterine Size Assessment 1 Fundal height by abdominal examination 2 Bimanual uterine palpation 3 Uterine sound 4 Ultrasound 5 Other (please describe)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Uterine Perforation 1 None 2 Suspected by history or clinical examination 3 Present by clinical examination 4 Present on radiological examination 5 Present during surgery	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Cervix 1 Closed 2 Open 3 Not examined 4 Not recorded	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not recorded
Cervical Trauma 1 None 2 Irritation 3 Mild Laceration(s) 4 Severe Laceration(s) 5 Chemical Burn(s)	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Other Symptoms 1 Dehydration 2 Poisoning 3 Chemical burns to throat 4 Abdominal lacerations or contusions 5 Pubis or rib fracture(s) 6 Vaginal lacerations or burns 7 Urethral damage 8 Bladder trauma 9 Intestinal perforation 10 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> Not recorded
Clinical History Taken? (If NO skip to Question ##)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Did woman give history of	
Hemorrhage prior to presentation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Fever prior to presentation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded

DATAPAC Clinical Case Record Form (Module2)

Vaginal discharge prior to presentation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Vomiting prior to presentation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Passage of clots > 8cm	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Intense pain?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Dizziness?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Loss of consciousness?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
Number of days prior to presentation abortion occurred by history from woman or the person who accompanied her	##
Number of days woman has been symptomatic	##
Did woman seek care elsewhere prior to coming here? <Y> If no, skip to question If yes, continue below	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded

For each condition below, please check appropriate response

Condition	Yes	No	Not recorded	Notes
Bleeding disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anesthetic complications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drug allergy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Current anemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diabetes mellitus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Heart disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pulmonary disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seizures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Steroid use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alcohol abuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drug abuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other current RTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

For each below, circle the appropriate response

Upon Examination, was woman found to have any underlying medical condition of

DATA PAC Clinical Case Record Form (Module 2)

Condition	Yes	No	Not recorded	Notes
Respiratory system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cardiovascular system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vagina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cervix	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Uterine size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anatomy				
Position				
List the results of the following laboratory examinations				
Test	Results			Not recorded
Hemoglobin				<input type="checkbox"/>
Hematocrit				<input type="checkbox"/>
RH factor				<input type="checkbox"/>
Urinary Pregnancy Test				<input type="checkbox"/>
Chlamydia				<input type="checkbox"/>
Gonorrhea				<input type="checkbox"/>
Syphilis				<input type="checkbox"/>
HIV				<input type="checkbox"/>
Bacterial Vaginosis				<input type="checkbox"/>
Other reproductive tract infection (please specify)				<input type="checkbox"/>
Was treatment for incomplete abortion required or performed?				<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not recorded

DATAPAC Clinical Case Record Form (Module2)		
	Primary procedure(s) performed (Check all that apply) 1 None, woman sent away or left prior to procedure 2 Observation only 3 Observation and examination only 4 Repair of lacerations or other trauma 5 Fluid replacement 6 Antibiotics 7 Transfusion 8 MVA 9 EVA 10 D&C 11 MVA or EVA plus D&C 12 Hysterotomy 13 Laparotomy for uterine exploration or reparations 14 Hysterectomy 15 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> Not recorded
	Type of staff member performing the treatment of incomplete abortion procedure? 1 Obstetrician/Gynecologist Specialist or Consultant 2 Obstetrician/Gynecologist 3 General Physician 4 Nurse Midwife 5 Nurse 6 Nursing Assistant 7 Trained Midwife 8 Untrained Midwife 9 Trained TBA or LHV 10 Untrained TBA or LHV 11 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> Not recorded
	Medication grid	
	Was cervical dilation required? If NO, skip to Question ##	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not recorded
	Type of dilation 1 Rigid 2 Laminaria	

DATA PAC Clinical Case Record Form (Module 2)

<p>Primary procedure(s) performed (Check all that apply)</p> <p>16 None, woman sent away or left prior to procedure</p> <p>17 Observation only</p> <p>18 Observation and examination only</p> <p>19 Repair of lacerations or other trauma</p> <p>20 Fluid replacement</p> <p>21 Antibiotics</p> <p>22 Transfusion</p> <p>23 MVA</p> <p>24 EVA</p> <p>25 D&C</p> <p>26 MVA or EVA plus D&C</p> <p>27 Hysterotomy</p> <p>28 Laparotomy for uterine exploration or reparations</p> <p>29 Hysterectomy</p> <p>30 Other (please specify) _____</p>	<p>✓ all that apply</p> <p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/>7</p> <p><input type="checkbox"/>8</p> <p><input type="checkbox"/>9</p> <p><input type="checkbox"/>10</p> <p><input type="checkbox"/>11</p> <p><input type="checkbox"/>12</p> <p><input type="checkbox"/>13</p> <p><input type="checkbox"/>14</p> <p><input type="checkbox"/>15</p> <p><input type="checkbox"/> Not recorded</p>
<p>What time did the primary procedure(s) begin?</p>	<p>___ am or pm (24 hour time)</p> <p><input type="checkbox"/> Not recorded</p>
<p>Where was the primary procedure(s) performed?</p> <p>1 Emergency room/department standard treatment room</p> <p>2 Emergency department obstetric treatment room</p> <p>3 Emergency department gynecology treatment room</p> <p>4 Emergency department abortion treatment room</p> <p>5 Labor/birthing room</p> <p>6 Gynecology ward</p> <p>7 Operating room or theater</p> <p>8 Other (please specify) _____</p>	<p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/>7</p> <p><input type="checkbox"/>8</p> <p><input type="checkbox"/> Not recorded</p>
<p>Was anesthesiologist present during primary procedure</p>	<p><Y></p>
<p>How was abortion completion confirmed</p> <p>1 Concurrent hysterectomy performed</p> <p>2 Uterus contracted</p> <p>3 Post evacuation curettage</p> <p>4 POC/tissue seen</p> <p>5 Ultrasound</p> <p>6 Other (please specify) _____</p>	<p>✓ all that apply</p> <p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/> Not recorded</p>
<p>Date when primary procedure(s) complete</p>	<p>___ / ___ / ___ <i>dd/mm/yyyy</i></p> <p><input type="checkbox"/> Not recorded</p>
<p>Time when primary procedure(s) complete</p>	<p>___ am or pm (24 hour time)</p>
<p>Where was woman sent to recover?</p> <p>1 Left in treatment room</p> <p>2 Gyne ward</p> <p>3 Post partum area</p> <p>4 Labor area</p> <p>5 Waiting room</p> <p>6 Designated recovery area</p> <p>7 Sent home</p>	<p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/>7</p> <p><input type="checkbox"/> Not recorded</p>

DATAPAC Clinical Case Record Form (Module2)	
During recovery, what were vital signs?	
Temperature	<input type="checkbox"/> Not recorded
Blood pressure	<input type="checkbox"/> Not recorded
Heart rate	<input type="checkbox"/> Not recorded
Respiratory rate	<input type="checkbox"/> Not recorded
Did any post-procedure complications develop after treatment but before discharge? If NO, skip to Question	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not recorded
If YES, check all that apply 1 Dehydration/insufficient fluid replacement 2 Anemia/insufficient blood replacement 3 Complications of anesthesia (please specify) 4 Adverse drug reaction (please specify) _____ 5 Fever 6 ***Bacteremia/sepsis 7 Pneumonia 8 Urinary tract infection 9 Cervicitis 10 Endometritis 11 Vaginal or perineal laceration 12 Endocervical laceration 13 Exocervical laceration 14 Bladder perforation/urinary incontinence 15 Uterine perforation 16 Peritonitis 17 Retained POC 18 Ongoing or ruptured ectopic pregnancy 19 Hemorrhage 20 ***Septic shock 21 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> Not recorded
Condition at discharge 1 Good – Fully recovered 2 Fair – Afebrile, no bleeding/discharge, weak 3 Stable – Light discharge or bleeding, weak 4 Poor – Febrile, moderate discharge or bleeding 5 Dead	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not recorded
Was woman given post discharge follow-up appointment? If NO, skip to Question ##	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not recorded
If yes, on what date was the follow-up date scheduled?	_____/_____/_____ <i>dd/mm/yyyy</i> <input type="checkbox"/> Not recorded

DATAPAC Clinical Case Record Form (Module2)

	<p>Discharge instructions given (Check all that apply)</p> <p>1 None 2 How to use medications or change dressings 3 Information on return of fertility 4 Signs of infection/complications 5 Where or when to seek additional care 6 When to resume normal activities 7 When to resume sexual activity 8 Family planning</p>	<p>✓ all that apply</p> <p><input type="checkbox"/>1 <input type="checkbox"/>2 <input type="checkbox"/>3 <input type="checkbox"/>4 <input type="checkbox"/>5 <input type="checkbox"/>6 <input type="checkbox"/>7 <input type="checkbox"/>8 <input type="checkbox"/> Not recorded</p>
	<p>To what other clinic(s) was the patient referred? (Check all that apply)</p> <p>1 None 2 Family Planning 3 MCH 4 Infertility 5 RTI/HIV/AIDS 6 Antenatal 7 Post partum 8 Cancer/PAP 9 Primary health care 10 Mental Health 11 Social services 12 Other (please specify) _____</p>	<p>✓ all that apply</p> <p><input type="checkbox"/>1 <input type="checkbox"/>2 <input type="checkbox"/>3 <input type="checkbox"/>4 <input type="checkbox"/>5 <input type="checkbox"/>6 <input type="checkbox"/>7 <input type="checkbox"/>8 <input type="checkbox"/>9 <input type="checkbox"/>10 <input type="checkbox"/>11 <input type="checkbox"/>12 <input type="checkbox"/> Not recorded</p>
	<p>Date of patient's discharge</p>	<p>____/____/____ <i>dd/mm/yyyy</i> <input type="checkbox"/> Not recorded</p>
	<p>Time of patient's discharge</p>	
<p>FOLLOW-UP VISIT TO FACILITY <i>(If no follow up visit, then CRF is complete)</i></p>		
	<p>Did woman return for additional postabortion care services following discharge? <i>(If NO then Case Record Form is complete)</i></p>	<p><input type="checkbox"/>Yes <input type="checkbox"/>No (CRF complete) <input type="checkbox"/>Not recorded</p>
	<p>Was the return visit scheduled or unscheduled?</p>	<p><input type="checkbox"/>Scheduled <input type="checkbox"/>Unscheduled <input type="checkbox"/>Not recorded</p>
	<p>For what type of care did the patient return? (Check all that apply)</p> <p>1 Post procedure check-up (no significant complications) (skip to question) 2 Complications 3 Contraceptive counseling (skip to question) 4 Other (please specify) _____</p>	<p>✓ all that apply</p> <p><input type="checkbox"/>1 <input type="checkbox"/>2 <input type="checkbox"/>3 <input type="checkbox"/>4 <input type="checkbox"/> Not recorded</p>

DATAPAC Clinical Case Record Form (Module2)		
	Primary staff member evaluating woman at follow-up visit was? 1 Obstetrician/Gynecologist Specialist or Consultant 2 Obstetrician/Gynecologist 3 General physician 4 Nurse midwife 5 Nurse 6 Nursing assistant 7 Trained midwife 8 Untrained midwife 9 Trained TBA or LHV 10 Untrained TBA or LHV 11 Other (please specify) _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> Not recorded
	Abortion complications discovered at scheduled follow-up visit (Check all that apply) 1 None 2 Bleeding 3 Pain 4 Fever 5 Discharge 6 Infection of sutures 7 Dehiscence 8 Retained POC 9 Continuing pregnancy 10 Ectopic pregnancy 11 Adverse experience with medication 12 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> Not recorded
	Did record indicate symptoms where related to original postabortion procedure?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not recorded
	Procedure(s) performed at the scheduled follow-up visit (Check all that apply) 1 None 2 History 3 Clinical examination, excluding pelvic 4 Clinical examination, including pelvic 5 Laboratory studies 6 Radiological studies 7 Repeat MVA 8 D&C 9 Laparoscopy 10 Laparotomy 11 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> Not recorded
	That treatments were given at the time of follow-up visit? (Check all that apply) 1 None 2 Contraceptive provision 3 Pain medication 4 Antibiotics 5 Intravenous fluid replacement 6 Transfusion 7 Other (please specify) _____	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> Not recorded

DATAPAC Clinical Case Record Form (Module2)

	<p>Condition at discharge from follow-up visit</p> <p>1 Good – Fully recovered</p> <p>2 Fair – Afebrile, no bleeding/discharge, weak</p> <p>3 Stable – Light discharge or bleeding, weak</p> <p>4 Poor – Febrile, moderate discharge or bleeding</p> <p>5 Dead</p> <p>6 Other (please specify) _____</p>	<p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/> Not recorded</p>
	<p>Was woman given additional follow-up appointment? (In NO, then CRF is complete)</p>	<p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No (CRF complete)</p> <p><input type="checkbox"/>Not recorded</p>
	<p>If YES, when was additional follow-up appointment?</p>	<p>____/____/____</p> <p><i>dd/mm/yyyy</i></p>
	<p>Where discharge instructions given after the follow-up visit? (Check all that apply)</p> <p>1 None</p> <p>2 How to use medications or change dressings</p> <p>3 Return of fertility</p> <p>4 Signs of infection/complications</p> <p>5 Where or when to seek additional care</p> <p>6 Resumption of normal activities</p> <p>7 Resumption of sexual activity</p> <p>8 Family planning</p> <p>9 Reassurance regarding future fertility</p> <p>10 Other (please specify) _____</p>	<p><input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/>1</p> <p><input type="checkbox"/>2</p> <p><input type="checkbox"/>3</p> <p><input type="checkbox"/>4</p> <p><input type="checkbox"/>5</p> <p><input type="checkbox"/>6</p> <p><input type="checkbox"/>7</p> <p><input type="checkbox"/>8</p> <p><input type="checkbox"/>9</p> <p><input type="checkbox"/>10</p> <p><input type="checkbox"/> Not recorded</p>
<p align="center"><i>Be sure to check over your answers and have the completed form reviewed by your supervisor</i></p>		

**INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE**



**DATAPAC Core
Questionnaire Series**

A GUIDE TO

**ASSESSING RESOURCE USE IN THE
PROVISION OF POSTABORTION CARE**

DATAPAC MODULE 3

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ABBREVIATIONS

ALOS	Average length of stay
D&C	Dilation and Curettage, see also SC
DATAPAC	International Postabortion Care Operations Research Database
DB	Database
EVA	Electric Vacuum Aspiration
FP	Family Planning
IEC	Information, Education, and Communication
IRB	Institutional Review Board
MVA	Manual Vacuum Aspiration
OR	Operations Research
PAC	Postabortion Care
SC	Sharp Curettage, see also D&C
TWG	Technical Working Group
USAID	United States Agency for International Development
VA	Vacuum Aspiration, see also MVA or EVA
WWW	World Wide Web

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WHAT IS DATAPAC?

Complications during pregnancy affect millions of women worldwide each year, nearly 600 000 of these women die as a result ¹ Women face many risks during pregnancy and childbirth, including *abruptio placentae*, *placenta previa*, preeclampsia as well as complications such as hemorrhage and infections arising from unsafe induced abortion practices Over 70 000 women are estimated to die each year as a consequence of unsafe induced abortion ² Worldwide, 13% of pregnancy-related deaths are estimated to result from unsafe induced abortions, with the vast majority of deaths occurring in less developed countries ² Many more women suffer consequences such as pelvic inflammatory disease and sterility Moreover, these figures underestimate the true impact of unsafe abortion as they do not account for the thousands of women who develop complications after a spontaneous abortion

A postabortion care (PAC) initiative has been developed to address the issue of maternal morbidity and mortality related to unsafe induced and spontaneous abortion The PAC initiative consists of these elements 1) emergency treatment services for postabortion complications, 2) postabortion contraceptive counseling and services, and, 3) links between emergency abortion treatment and comprehensive reproductive-health care ³

The United States Agency for International Development (USAID), private foundations, and other international agencies have funded over 30 PAC operations research (OR) studies since 1990 in Africa, Asia, and Latin America These studies have investigated ways to maximize the quality of PAC services while minimizing costs and resources used A consensus has emerged among individuals and agencies involved in PAC OR that 1) a centralized database of PAC studies is needed, and, 2) core questionnaires should be developed for use in PAC OR projects in various country settings A centralized database would facilitate inter- and intra-regional OR analyses, while using core questionnaires would lead to more comparable and generalizable research findings

What is DATAPAC?

- **PAC OR Database** Electronic database for conducting secondary analyses of available PAC OR studies
- **Supporting Documentation** Copies of protocols, blank questionnaires, reports, publications & other documents from PAC OR studies
- **Core Questionnaires** Standardized PAC OR questionnaires & protocols in English & Spanish

In collaboration with USAID, the Population Council, and other organizations, Ipas is coordinating the development of core questionnaires as well as compiling data and supporting documentation from all available PAC OR studies This project is called **DATAPAC** This guide is part of the DATAPAC Core Questionnaire Series, a set of questionnaires and instruction guides providing an overview on how to design and conduct quantitative PAC OR studies

The DATAPAC Core Questionnaire Series is in modular form that currently includes

- Overview** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 1** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 2** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 3** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 4** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 5** **GUIDE TO OBSERVATION OF POSTABORTION CARE SERVICES** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, researchers designing a PAC "Cost Study" could consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the General Information Questionnaire for Postabortion Care Patients (Module 1)*.

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

For more information, please contact

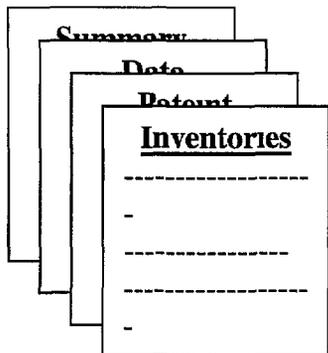
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HOW TO USE THIS MANUAL

Four types of forms are presented for use in conducting cost and resource use studies



- 1 **Inventory Forms** are used to gather background data on incomplete abortion services, including facility policies and practices, supplies, equipment, and staff salaries. Inventories are typically completed only once at the beginning of the study.
- 2 **Patient Observation Forms** comprise the bulk of the study, each of these forms should be completed for each study participant.
- 3 **Data Analysis Worksheets** are then used to compile data from the Patient Observation Forms.
- 4 **Summary Sheets** Calculations on the Data Analysis Worksheets are then transferred to the Summary Sheets to facilitate comparisons of time and costs associated with various models for treating incomplete abortion.

These forms are presented with detailed explanations in the Data Collection Forms and Data Analysis sections. Researchers should note that the forms and worksheets presented in this guide may need to be adapted to reflect the details of incomplete abortion treatment services in their research settings. All sample data collection forms are included on diskette in Microsoft Word 6.0 (for Windows 3.1 or greater), and data analysis worksheets are available as Microsoft Excel spreadsheets. All forms and instruction guides may also be obtained from the DATAPAC website at <http://datapac.ipas.org>

INTRODUCTION

Estimating the Cost of Treating Incomplete Abortion

Hospital management of incomplete abortion (which often results from unsafe induced or spontaneous abortion) consumes a large proportion of already scarce resources in the developing world. Studies have shown that up to 60% of obstetric-gynecology department budgets are spent to treat incomplete abortion.^{4,6} In most countries, standard treatment models include treating incomplete abortion in a facility operating room using sharp curettage (SC), also commonly called dilation and curettage (D&C). Patients are routinely anesthetized or heavily sedated and are therefore often required to remain in the recovery area for several hours after the treatment procedure. However, adopting the PAC model of treating incomplete abortion can improve PAC quality as well as reduce resource use and costs. The PAC model typically includes changing the organization of services to provide incomplete abortion as an outpatient service and replacing SC in the operating room with manual vacuum aspiration (MVA) in a procedure room. Manual vacuum aspiration, when used for uterine sizes of less than 13 weeks, is not only equally effective but also safer than SC.⁷

Until recently, the cost-effectiveness of the PAC model has been little researched. For example, a 1995 literature review of 99 studies on the complications of unsafe abortion in Sub-Saharan Africa reported only three published cost studies.⁸ However, recent years have seen a substantial increase in PAC OR, including cost studies, so that the methodology described here has now been used in over twenty studies in one-half dozen countries in Africa and Latin America.^{9,13} A comparative analysis of these studies was conducted and the results showed that reorganizing services including a switch to MVA reduced the average length of stay (ALOS) by an average of 30 percent and costs to the clinic by 60 percent.¹⁴ To partially control for unmeasured bias in these weighted averages, a subset analysis of patients recruited only for pre- and post-intervention studies was done. The results showed that reorganizing services and adding MVA led to an approximate 50 percent decline in both ALOS and treatment costs, respectively, but only when switching to MVA was accompanied by adequate provider training and reorganization of service delivery. Indeed, data from studies in Ecuador and Egypt have documented cases where switching to MVA without concurrently modifying services increased the cost of providing PAC services. For example, in two studies where MVA cannulae were not sterilized and reused, switching to MVA increased costs by over 20 percent.¹¹ Another study reported that switching to MVA increased ALOS and therefore costs when patients treated with MVA were detained on average 10.6 hours after the procedures even though they had not been heavily sedated and therefore could have been safely discharged much earlier.¹⁰

Overall, cost studies using the Ipas methodology have shown that adopting the PAC model leads to substantial reductions in ALOS and expenses only when 1) the adoption of MVA technology is accompanied by reorganization of services (e.g. outpatient treatment, better discharge protocols), and, 2) improvements in case management are made such as replacing the use of heavy sedation or general anesthesia with local anesthesia when medically appropriate. Furthermore, a review of these studies suggest that the bulk of PAC costs, regardless of whether MVA or SC was used, can be attributed to personnel salaries and costs associated with in-patient, over-night stays. Finally, the studies also revealed that more data need to be collected on out-of-

pocket expenses to the patient as well as the cost of providing contraceptive counseling and referral for gynecologic services when appropriate

This guide describes a step-by-step methodology for rapidly documenting patient flow, assessing staff efficiency, and estimating the cost of the first two elements of the PAC model. The first edition of this manual was written by Ipas in 1993 and has been used to conduct several cost and resource use studies in Africa and Latin America.¹⁵ This edition has been modified to address issues such as out-of-pocket expenses, inflation, contraceptive services, and other issues not covered in the original manual.

This guide is not intended to address all issues pertinent to quality and effectiveness of PAC services. For example, using this manual will help researchers document how much it costs to add contraceptive counseling services to treatment services, but will not help determine whether contraceptive counseling is effective (i.e. contraceptive use increases or number of repeat abortions decrease). If you are interested in these or other related issues, please consult other guides in the *DATAPAC Core Questionnaire Series*.

What is Cost Research?

The simple term "cost research" belies a complicated field of inquiry where terms are used such as cost-benefit, cost-effectiveness, opportunity costs, fixed and variable costs, direct and indirect costs--often without a clear or consistent understanding of each concept. The research design proposed here describes a cost-effectiveness methodology. In cost-effectiveness research, data are collected on both the cost of services as well as the effectiveness of different treatment models. Thus a ratio of cost to effectiveness can be calculated for various treatments and compared. However, this manual begins with the assumption that MVA and SC are equally effective for appropriate cases.⁷ Therefore, even though a cost-effectiveness methodology is described, there is no need to collect effectiveness data, but to instead simply compare the costs of the various treatment models. A full discussion of cost-effectiveness research is well beyond the scope of this manual. Fortunately, many excellent resources are available,^{16, 19} and a glossary is provided as part of this guide.

This manual may be used to answer questions such as the following

- ? *What costs are related to treating incomplete abortion?*
- ? *What is the cost difference between standard treatment protocols and the PAC model to treat incomplete abortions?*
- ? *What costs are associated with integrating contraceptive services?*

METHODOLOGIC ISSUES

Any health research project, whether assessing costs, quality of care, clinical efficacy or other related topics, requires that the same basic steps be taken in the design, implementation, analysis, and dissemination of results. A more complete discussion of PAC OR methodology in general is presented elsewhere,^{20,21} but a discussion of methodological issues specific to cost and resource use studies follows.

Study Objectives

The first step of any study is for the Principal Investigator (PI) to clearly define the objective of the study. This study methodology can be used to investigate several objectives related to the provision of PAC services:

- 1 Analyze patient flow (i.e. how patients move from one area to the next) within a given health care institution,
- 2 Compare resources used and costs when using either SC or MVA for emergency treatment of incomplete abortion, and,
- 3 Estimate marginal cost increases of adding contraceptive counseling or other reproductive health services to incomplete abortion treatment services.

Table 1 links the three primary research objectives listed above with the four types of forms, explaining which data collection instruments are appropriate for each objective and suggesting potential applications of the results. Note that documenting the resources used in treating patients or adding additional services refers to both time and cost, and thus uses all of the forms. Documenting patient flow involves only a subset of the forms, since it only measures a patient's time expended during the treatment process.

Table 1 Possible study objectives for PAC OR

Objective	Data Collection Instruments Needed	Use of Research Results
1 Analyze patient flow	<ul style="list-style-type: none"> • <i>Inventory Form 1</i> • <i>Patient Observation Form 1</i> 	<ul style="list-style-type: none"> • Reduce waiting time in treatment process • Improve staff efficiency • Be able to more accurately plan staffing needs
2 Document resources used & costs	<ul style="list-style-type: none"> • <i>All forms</i> 	Same as Objective 1 plus <ul style="list-style-type: none"> • Improve organization of PAC services • Recommend ways to reduce costs of treating incomplete abortion • Identify the most cost-effective technique for uterine evacuation (SC versus MVA)
3 Estimate costs of integrating contraceptive services	<ul style="list-style-type: none"> • <i>All forms</i> 	Same as Objective 1 & 2 plus <ul style="list-style-type: none"> • Recommend ways to reduce costs of integrating contraceptive services

Study Design

Cost and resource use studies have typically been *concurrent-control* or *pre- and post-intervention* in design¹⁴ Concurrent-control studies, also called static-group comparison studies, have been multi-site studies where one or more facilities that treated patients with the standard model were compared with another facility or facilities that had adopted the PAC model However, a significant problem with the concurrent-control designs is that it is often difficult or impossible to determine whether differences between study sites are due to PAC training and reorganization of services, or due to other differences in each site²²

Pre- and post-intervention studies begin with a number of patients who are recruited into the study and treated according to the standard model This initial period of data collection is often called the “baseline” or “pre-intervention” phase Next, an intervention is implemented, such as introducing a postabortion contraceptive counseling program, reorganizing PAC service delivery, and/or training staff in the use of MVA Patients are then treated according to the new protocol and the results are compared with the data from the baseline phase The advantage with the pre and post- intervention design is that changes in service quality and resources used are more likely to be directly attributable to the changes in services, rather than inherent differences in study sites that may occur in concurrent-control studies However, pre and post-intervention studies typically take longer to complete and may therefore not conform to budget and timeframe requirements Regardless, pre and post-intervention designs are recommended as they tend to avoid certain analysis problems inherent in concurrent-control study designs

Patient Selection Criteria

When recruiting patients to participate in a cost study, we recommend that selection be limited to women presenting with symptoms of incomplete abortion, whether the incomplete abortion results from spontaneous abortion or abortion induced outside of the study site The uterine size should be less than 13 weeks as determined by bi-manual pelvic exam and confirmed if possible by reported date of last menstrual period (LMP) Finally, study participants should not present with septicemia, intra-abdominal injury or other related complications The rationale for not including women with other major complications includes⁹

- 1 Treatment of septicemia, heavy bleeding, and other complications should be identical regardless of whether MVA or SC was used to resolve the incomplete abortion Therefore, the costs associated with treating these patients would likely depend more on the severity of the additional complication than on whether MVA or SC was used
- 2 Treating other major complications tends to prolong facility stays and thus dramatically increase associated costs Including these patients in your study would therefore bias the results in favor of the model (standard or PAC) that had fewer patients with other major complications
- 3 It is relatively rare in many settings for patients to present with other severe complications^{23,24} Thus, excluding these patients should not jeopardize your ability to recruit a sufficient number of patients into the study

RECOMMENDED PATIENT SELECTION CRITERIA FOR COST STUDIES

Only include women with

- 1 Incomplete abortion, either due to spontaneous or induced abortion
- 2 Less than 13 weeks gestation
- 3 No additional complications

Depending upon the study objectives, other criteria can be used if desired (e.g., patients presenting with severe complications, women greater than 13 weeks uterine size), however we suggest keeping the patient selection criteria simple. The PI should make certain that the Data Collectors understand the selection criteria before data collection begins. A *Participant Selection Checklist* (Figure 1) should aid Data Collectors when recruiting patients for the study.

Figure 1. Sample Patient Selection Checklist

Patient Selection Checklist	
	✓ if the answer is <u>YES</u>
<i>Patient has</i>	
Incomplete abortion resulting from spontaneous abortion or induced abortion performed outside of the study site	<input type="checkbox"/>
Estimated uterine size of 12 weeks or less	<input type="checkbox"/>
No other major complications, such as sepsis or uterine perforation	<input type="checkbox"/>
Read (or been read) Informed Consent statement <u>and has signed</u> the form below	<input type="checkbox"/>
If <u>all four</u> boxes have been checked off, then you may proceed with data collection!	

Sampling and Sample Size

A convenience sample of between 10-15 patients is recommended for each group: those treated with the standard model (usually SC in operating room) and then those treated with the PAC model (usually MVA in procedure room). Based on a number of studies conducted to date, this sampling and sample size is adequate when used to examine a procedure that is specific, well-defined, and subject to little variation, such as emergency treatment of first-trimester incomplete abortion in hospital settings. Except in cases where patients present with other severe complications (i.e., septic shock, severe hemorrhage, etc.), treatment procedures and resources used for incomplete abortion generally are similar for all patients.

Although the recommended sample size is small, it is usually adequate because the recommended patient selection criteria (Figure 1) are narrowly focused. Bear in mind, however, depending whether statistical tests are desired, a larger sample size may be required. Consulting a biostatistician during the study design process is very useful. Also remember that, regardless of what may be required from the viewpoint of statistical validity, some administrators or policymakers may need a larger sample to be convinced of the need to change protocols and practices.

Data Collection Instruments and Techniques

This manual describes two complementary rapid-assessment data collection techniques:

1. Documentation and calculation of all costs and resources used in the provision of PAC services, and,

- 2 A time and motion study of the patient's treatment at all stages of her facility stay, from arrival and registration through recovery and discharge

The instruments used to collect data for these techniques are outlined in Table 2

Table 2 Inventory, Patient Observation, Worksheet, and Summary Forms

Forms	Description/Title
Inventory Forms (IF)	For background data on facility policies & practices
IF1	Facility abortion care practices
IF2	Salary Costs of Abortion Care Personnel
IF3	Availability and Costs of Medication, Supplies & Miscellaneous Instruments for MVA and/or SC
Patient Observation Forms (POF)	For tracking each patient through the entire treatment process
POF1	Time Consumed for Patients & Personnel for Uterine Evacuation Procedure
POF2	Costs of Medication, Supplies & Miscellaneous Instruments Used for MVA and/or SC
Data Analysis Worksheets (DAW)	For compiling data from the POFs & to estimate treatment costs and length of stay for each patient
DAW1	Patient Time Worksheet
DAW2	Provider Salary Worksheet
DAW3	Costs of Medication, Supplies & Miscellaneous Instruments
Final Summary Sheets (FS)	For estimating total average costs and ALOS
FS1	Average Duration of Patient Stay
FS2	Average Total Cost of Patient Stay

For more guidance, please refer to the section on data collection techniques in the *Guide to Using the DATAPAC Core Questionnaire Series for Postabortion Care Operations Research*

Measuring Costs

The cost study portions of this manual are designed to help researchers estimate two kinds of costs to the facility – *fixed* as well as *variable* costs. Fixed costs are expenses that tend to remain constant regardless of the treatment model used, such as building leases and permanent staff salaries.¹⁷ In contrast, variable costs are defined as costs that are likely to vary depending upon the model of treating incomplete abortion, such as supplies and medication costs.¹⁷ Another point of interest in PAC OR is *marginal* cost, or the cost of adding additional services to programs already operating.¹⁶ Examples of marginal costs include additional costs incurred when increasing the number of women receiving treatment for incomplete abortion or adding contraceptive counseling to incomplete abortion treatment services.

Regardless of the type of cost – fixed, variable, marginal – researchers should note that accurate data on the costs of certain items or services are often unavailable. For example, users of the original version of this guide often have reported that *capital costs*, data on items expected to last for more than one year such as buildings or vehicles, are often difficult to estimate. There are two

options for handling costs that are difficult to estimate 1) make a “best-guess” of the cost based on available information, or, 2) choose to disregard the particular item or service in the analysis Regardless of which option is chosen, the PI should state explicitly in any reports or presentations what the choice was and why The PI should also discuss the impact of this decision on the final cost estimates

Also, it is important to note that the *DATA PAC Core Questionnaire Series* addresses both costs to the facility as well as costs to the patient such as *patient fees* and other *out-of-pocket expenses* Other out-of-pocket expenses include transportation costs and situations where patients are required to pay for medications, supplies, and/or food in addition to the fees Since the methodology discussed in the guide is based on patient observation with little or no direct interaction with the patient beyond obtaining informed consent, it is recommended that costs to the patient be collected as part of a comprehensive patient interview Therefore, questions on patient expenses have been provided as part of the *DATA PAC Guide to Using the Postabortion Care Patient Exit Interview* (Module 4)

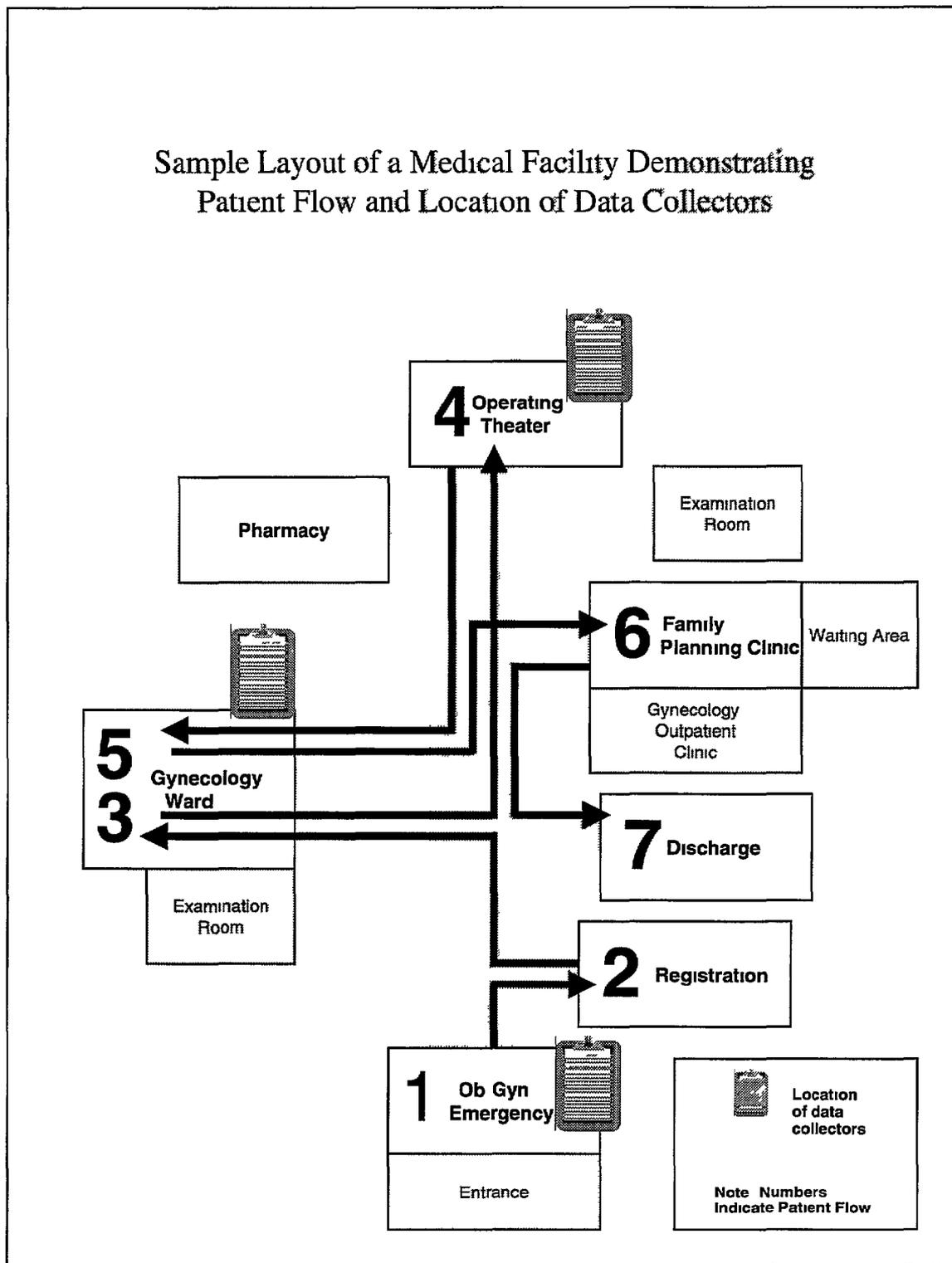
Measuring Time

Compared to measuring costs, measuring time is relatively straightforward However, one difficulty is determining at what time one component of treatment begins and when it ends For example, when does the study “begin”? Is it when the patient enters the facility, is identified as needing treatment for incomplete abortion, gives her consent to participate in the study, begins the treatment process, or at some other time? Does her stay end when she is discharged or when she actually leaves the facility? Does the treatment of incomplete abortion begin when the patient is taken into the operating or procedure room or when the procedure begins? There are no definitive answers for these questions, but the key to accurate ALOS estimates is to define standard start and stop markers for each phase of the treatment process and communicate them to the Data Collectors before the study begins These start and stop makers should be stated in any reports or presentations of study results

Data Collectors

The number of patients treated per day and the routes they follow within the facility determine how many Data Collectors will be required for the study To assess how many Data Collectors will be needed, draw a map of the facility that indicates the route that patients follow starting at registration and ending where they are discharged from the facility The map will enable the PI to gauge how much area one person can realistically cover Data Collectors stationed at each of several key locations (registration, operating room, and recovery area) may be necessary if patient volume is high or distances between locations are great Figure 2 shows the layout and patient flow at a typical clinic with locations where Data Collectors might be stationed

Figure 2



A time and motion study with a cost component is time-consuming and very detail-oriented. Depending upon caseload and number of Data Collectors, data collection typically requires a minimum of one to two weeks for each phase of the study (pre- and post-intervention) or at each study site. Data Collectors need to consistently and precisely record many details about the abortion treatment process. The PI or Site Coordinator should be available to monitor a portion of or all data collection to ensure that the data are being collected consistently and accurately. Also, for conducting multi-site studies, the PI and Data Collectors must be very careful to collect data consistently at each of the service delivery sites so that the results will be comparable. Other issues relevant to multi-site studies are discussed in more detail in the *Guide to Using the DATAPAC Core Questionnaire Series for Postabortion Care Operations Research*.

Key Assumptions

Any methodology has strengths and weaknesses. This guide was designed with the goal of helping researchers rapidly assess PAC costs while keeping the study relatively inexpensive to implement. The guide is also intended to help generate results that are readily interpretable by administrators, managers, and policymakers. However, with every attempt to simplify and streamline the approach, assumptions were made which affect the interpretation and generalizability of results.

Opportunity costs

Most of the savings generated by adopting the PAC model have been in the form of *opportunity* costs. For example, many studies have shown that treating incomplete abortion with MVA is less expensive than with SC. However, in most facilities, this translates into freeing up resources for use with other services rather than reducing actual expenditures overall. For example, if adopting the PAC model for treating incomplete abortion reduces ALOS by 10 hours, this does not mean that staff will work less hours per week and administrators will withhold 10 hours worth of salary from the providers and other staff. In reality, reducing ALOS allows staff to spend proportionally more time and supplies treating other types of patients.

Bed occupancy

This methodology is based on the assumption that bed occupancy rates approach, if not exceed, 100%. High bed occupancy rates, while common in many low-resource settings, are not universal. The fact that our methodology depends upon high bed occupancy rates can best be explained by an illustrative, albeit unlikely, example.

Suppose a researcher conducts a cost study in a facility where only 10% of beds are filled, supplies are routinely discarded unused after their expiration dates have passed, and the staff, with little to do, spend much of their work time reading or watching television. Although underutilized, supplies and equipment are paid for and the staff receive paychecks. Based on an "opportunity cost" model, it could therefore be argued that treating a PAC patient (or any other patient) costs little or nothing beyond what is already spent maintaining a nearly empty facility.

Alternatively, if your beds are full, supplies are being used, and your staff are overworked, then treating PAC patients requires pulling resources from other obstetric and gynecology services. In this scenario, reducing ALOS and the resources required to treat PAC patients frees up staff and resources and therefore creates more opportunity to care for other patients. There is therefore a savings in "opportunity" costs.

Cost of a PAC intervention

To date, only one cost and resource use study has reported the cost of training providers to use MVA.²⁵ Although this information is very useful when planning a PAC intervention, this guide does not include instructions for estimating these costs. In order to make a fair comparison between the cost of treating incomplete abortion with the standard model and with the PAC model, a researcher would need access to the costs of the PAC model intervention as well as the costs of the traditional incomplete abortion training that providers received in medical school. As it is likely impossible to accurately estimate the cost of the standard model training, including training and other related costs of a PAC intervention in the comparison would result in an underestimate of the financial benefit of adopting the PAC model.

Contraceptive commodity costs

Integrating contraceptive counseling and method provision is one component of the PAC model. The questionnaires in this guide are designed to collect data on contraceptive counseling and also commodities (i.e. pills, condoms, diaphragms, IUDs, etc.). However, just as it is recommended that PAC intervention costs not be included when comparing the cost of standard model with the PAC model, it is also recommended not to include commodity costs. The rationale for this is twofold: 1) contraceptive commodities are often subsidized in part by Ministries of Health and/or international donors, and thus it is often difficult to gauge the actual cost of each method, and, 2) many facilities already have contraceptive commodities in their family planning clinics and simply provide them to the emergency rooms for PAC patients. Also, in some settings, PAC patients receive contraceptive counseling from family planning clinic personnel. Thus, it is unclear how to apportion contraceptive commodity and counseling costs to the family planning clinic and/or to PAC services. For simplicity when estimating PAC costs, it is recommended that contraceptive commodity costs be ignored, but to attribute all contraceptive counseling costs for incomplete abortion patients, including counselors' salaries and information materials, to incomplete abortion treatment services. As with intervention costs, contraceptive commodity costs can be reported separately if these data are important to facility administrators or policymakers.

DATA COLLECTION FORMS

Inventory Forms

Modify these tables as necessary to reflect the service delivery characteristics at your site

To guarantee that the cost information necessary for later calculations is actually available, the researcher should be certain that she or he has access to the necessary cost data before measuring the use of resources. Then, the researcher should determine unit costs for instruments, supplies, and medications prior to beginning any data collection. The three inventory forms are intended to be completed at the beginning of the study at each site.

DATAPAC Inventory Form 1 Facility Postabortion Care Practices

DATAPAC Inventory Form 1 is used to describe the facility's PAC practices and should be completed by the PI. Many facilities do not have written treatment protocols. What is needed here is a description of actual practice. It is important to fully describe

- registration and admission practices
- location and condition of waiting room facilities
- the examination process
- the evacuation procedure
- recovery
- postabortion contraceptive counseling and methods provision
- discharge protocols

The information gathered at this stage in the process might influence later data collection. Information to complete this form should be obtained by interviewing several knowledgeable providers, such as doctors or nurses who care for abortion patients and the provider or social worker responsible for postabortion contraceptive counseling and provision. Data Collectors should confirm inventory information during pre-testing by observing what occurs to PAC patients from registration and admission to recovery and discharge. The PI should then use the information recorded on *Inventory Form 1* to adapt the other forms to reflect practices at that particular site.

In a descriptive or cross-sectional cost study, the Inventory Forms are typically completed only once (for each site). In a pre- and post-intervention study, *Inventory Form 1* is generally completed once during the baseline phase of the study when the standard model is used and then again after the intervention when the PAC model has been adopted. Consider, however, that at some sites, the procedures for treating women with incomplete abortion may differ substantially depending when the woman arrives to the facility. Therefore, the PI may need to complete this form several times to capture the range of treatment practices on day versus the night shifts or weekdays versus weekends.

DATA PAC Inventory Form 1 · Facility Postabortion Care (PAC) Protocols and Practices

Instructions for Use This form is generally completed once for each different procedure observed (MVA, SC, etc) Complete the form by reading any written protocols available for each type of procedure, interviewing several knowledgeable staff and observing actual treatment practices

Facility Name _____

Date (___/___/___) dd/mm/yyyy

Shift Observed Morning Day/Evening Night Other _____

Treatment procedure used EVA MVA SC or D&C MVA with SC

✓ if written protocols/policies are available (attach if possible)

PRE-PROCEDURE

Registration and Admission Practices

Location and Description of Waiting Room Facilities

Preliminary Examination Practices

PROCEDURE

Preparation and Evacuation Practices (including pre-operative information/counseling, administration of anesthesia, analgesia, and/or sedatives, and locations for each procedure)

POST-PROCEDURE

Recovery and Post-Operative Counseling Practices

DATA PAC Inventory Form 1 Facility Postabortion Care (PAC) Protocols and Practices

Instructions for Use This form is generally completed once for each different procedure observed (MVA, SC, etc) Complete the form by reading any written protocols available for each type of procedure, interviewing several knowledgeable staff and observing actual treatment practices

Postabortion Contraceptive Services (including information and counseling given to patients, types of methods dispensed, location of counseling and method provision)

Overnight Admission Practices

Discharge Practices (including existence of any standard discharge times and reasons any patient stays after official discharge)

Reproductive Health Services and Referral

Miscellaneous Notes

DATAPAC Inventory Form 2 Salary Costs of Postabortion Care Personnel

DATAPAC Inventory Form 2 should be completed by the researcher after an interview with the facility's Personnel Director and ideally, a review of salary ranges for all categories of personnel. The form is used to calculate the salaries of personnel who are involved in the provision of PAC services. Use each person's annual salary and fringe benefits as the basis for "salary per week". Fringe benefits are anything the employee receives in addition to his or her regular annual salary, such as health insurance, sick or vacation leave, or a "13th month" paycheck. Fringes also include anything the employer has to pay for the employee in addition to his or her regular salary such as unemployment insurance, social security, workman's compensation or retirement pensions. The important thing is to be consistent in the way salaries and fringes are calculated. For example, if employees at all levels receive a 13th month paycheck, be sure to include the correct 13th month amount for all personnel observed.

The first column on *Inventory Form 2* lists the various personnel categories that may have contact with patients receiving postabortion care and the stage in the treatment process at which this contact would occur. Each personnel category should be listed on the form only once for each stage of the postabortion treatment process. For example, if all categories of nurses are paid from the same range of salary, "nurse" should appear only once.

The second column (A) is used to record the salary per week for each personnel category. When the members of a particular category of provider have a range of salaries (often related to seniority), use the midpoint between the highest and lowest salaries in the category.

The third column (B) is used to record the fringe benefits per week for each personnel category. This information may be difficult to obtain but is vital to determining cost as accurately as possible. The facility's Personnel Director should be a good starting point for this information. Generally, fringe benefits are calculated as a percentage of an employee's annual salary. Remember to include all fringe benefits, examples of which are listed above.

The third column (C) is used to record the length of the "official" workweek. Frequently, personnel are paid for an eight-hour shift, but in reality, stay on-site fewer than eight hours. Their salary should be calculated based on the number of hours for which they are paid, rather than the number they actually work. This simplifies data collection by making it unnecessary for researchers to observe providers and collect time cards. The last column (D) is to record the salary per minute.

For example, look at the calculations for a Head Nurse's Salary listed under "Pre-Procedure Personnel" on *Inventory Form 2*. This nurse is paid a yearly salary of US\$15,002. The calculations were made as follows:

- 1 Determine the salary per week by dividing the annual salary by 52 weeks in the year, place result in column A. $\$15,002 \text{ divided by } 52 = 288.50$
- 2 Determine the weekly fringe benefits total by dividing yearly fringe benefits (in this case, health insurance, sick and vacation leave and 13th month paycheck for an annual total of \$2,000) by 52 and place result in column B. $\$2,000 \text{ divided by } 52 = 38.46$
- 3 Determine the length of the official workweek and place in column C. *40 hours*

- 4 Add weekly salary and fringe benefits (columns A & B) and divide by the number of hours "officially" worked per week (column C) to get hourly salary, and then divide this by 60 minutes to get salary per minute, place figure in column D \$326.96 divided by 60 = \$5.45 per hour divided by 60 minutes per hour = \$0.09 per minute

Data Collectors should enter all monetary information in local currency. If it is intended to publish the results to a wider audience (which we recommend!), then researchers should consider converting monetary units to US Dollars during the data analysis. Also, please note that if a pre- and post-intervention study is planned, then the researcher should convert the cost estimates to US dollars using a single exchange rate to control for currency fluctuations.

NOTE DATAPAC Inventory Form 2 should be completed only once, at the beginning of the study

DATAPAC Inventory Form 2: Salary Costs of Postabortion Care Personnel	
Interviewer's Name _____	Date (dd/mm/yyyy) (____/____/____)
Staffperson's Name _____	Time of Interview (24 hour clock) _____
Staffperson's Position _____	Location of Interview _____
Instructions for Use This form should be completed only once. Collect the information necessary to complete this form from interviews with appropriate administrative personnel or from files located in the administrative office. Specify the type of staff category and/or the person's rank in the spaces provided.	

DATAPAC Inventory Form 2: Salaries of Postabortion Care Personnel				
TYPE OF PERSONNEL	A	B	C	D
	Salary per Week (Yearly Salary/52)	Fringe Benefits (Yearly Amount/52)	Length of Official Work Week Hours	Salary per minute $D = ((A+B)/C)/60$
PRE-PROCEDURE PERSONNEL				
Receptionist				
Doctor (specify rank) _____				
Nurse (specify rank) _____				
Nurse (specify rank) _____				
Orderly				
Other (specify) _____				
PROCEDURE PERSONNEL				
Nurse (specify rank) _____				
Nurse (specify rank) _____				
Doctor (specify rank) _____				
Doctor (specify rank) _____				
Other (specify) _____				
POST-PROCEDURE PERSONNEL				
Orderly				
Doctor (specify rank) _____				
Nurse (specify rank) _____				
Nurse (specify rank) _____				
Family planning clinic staff (specify) _____				
Social Worker				
Kitchen Staff				
Janitor				
Cashier				
Other (specify) _____				
Notes The equation for calculating salary per minute should be interpreted as follows: add the figure in column A to the figure in column B and divide by the figure in column C to get the salary per hour, and then divide this number by 60 to obtain the salary per minute (column D).				

DATA PAC Inventory Form 3 Availability and Costs of Medication, Supplies and Miscellaneous Instruments for Postabortion Care Services

DATA PAC Inventory Form 3 should be completed at the beginning of the study. This form contains a checklist and a cost column for medications, supplies and medical instruments that could be used in the provision of PAC services. Items not used at your site should be deleted from the form. Add any items that are used but not listed. Researchers should obtain this information by talking with facility staff and observing which items are available for use in the procedure room(s) or at other locations (e.g., recovery area) where care is offered. For those items which are available, the researcher should interview the facility Purchasing Director, the facility store clerk, pharmacist, or facility central administration personnel to obtain cost information. *It is important to note that Total Cost of the Item refers to the cost of the item as a whole as it is received in the facility (e.g., entire bottle of aspirin, entire box of gauze)*

If these sources cannot provide costs for the items listed, the researcher should contact a local medical equipment distributor (although these costs may be higher than costs subsidized by some public-sector facilities). Costs of MVA instruments may be obtained from the facility, the MOH (if they have purchased the instruments), or Ipas. Previously, in many studies MVA equipment has been either donated or subsidized during the study period. However, in order to produce a more realistic estimate of MVA costs, we recommend that the researcher use an MVA cost equal to the actual cost of procuring MVA equipment without donations or subsidies.

The cost of contraceptive commodities should be based on what the facility paid for them. Many times, however, these commodities are donated or subsidized by outside organizations. If this is the case, it is recommended to use the donor costs (i.e., what the outside agency actually paid to purchase these contraceptives). This will reflect the most accurate cost of providing postabortion contraception services.

Many facilities use pre-packaged kits that contain all instruments which may be needed during a certain procedure. If this is the case, it is recommended to eliminate cost information for each individual instrument and provide instead the cost of the entire kit.

The data collected on this form will then be used on Patient Observation Form 2 to help determine the costs of medication, instruments, and supplies used for each patient.

NOTE Inventory Form 3 should be completed only once, at the beginning of the study, and applied to both pre- and post-intervention data.

DATAPAC Inventory Form 3 Costs of Supplies & Equipment for Postabortion Care Services	
Interviewer's Name _____	Date (dd/mm/yyyy) (___/___/___)
Staffperson's Name _____	Time of Interview (24 hour clock) _____
Staffperson's Position _____	
Instructions for Use This form should be completed once only Collect the necessary cost information from central supply, central stores, pharmacy, or purchasing department	

Inventory Form 3: Costs of Supplies & Equipment for Postabortion Care Services		
Cost Items for Postabortion Care Procedures	Tick (✓) if this item is available	A Total cost of item when purchased (e.g., entire bottle of aspirin)
Drugs/Pain Control		
Narcotic Analgesia (specify) _____	<input type="checkbox"/>	
Anxiolytic (specify) _____	<input type="checkbox"/>	
Non-Narcotic Analgesia (specify) _____	<input type="checkbox"/>	
Local Anesthetic (specify) _____	<input type="checkbox"/>	
Antibiotics (specify) _____	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Miscellaneous Instruments		
Basin (kidney/825 ml)	<input type="checkbox"/>	
Cup (solution/180 ml)	<input type="checkbox"/>	
Gloves	<input type="checkbox"/>	
Masks	<input type="checkbox"/>	
Flashlight (Torch)	<input type="checkbox"/>	
Curette (uterine sharp/7 mm)	<input type="checkbox"/>	
Curette (uterine sharp/12 mm)	<input type="checkbox"/>	
Dilators	<input type="checkbox"/>	
Forceps (hysterectomy)	<input type="checkbox"/>	
Forceps (ovum delee)	<input type="checkbox"/>	
Forceps (sponge-holding)	<input type="checkbox"/>	
Forceps (uterine tenaculum)	<input type="checkbox"/>	
Needles (hypodermic 90 x 152 mm) x 12	<input type="checkbox"/>	
Scissors (uterine/200 mm)	<input type="checkbox"/>	
Syringe (anaesthetic)	<input type="checkbox"/>	
Syringe (hypodermic)	<input type="checkbox"/>	
Tubal Ligation Kit	<input type="checkbox"/>	

Inventory Form 3: Costs of Supplies & Equipment for Postabortion Care Services		
Cost Items for Postabortion Care Procedures	Tick (✓) if this item is available	A Total cost of item when purchased (e.g., entire bottle of aspirin)
Clamp (Towel Jones 9cm)	<input type="checkbox"/>	
Knife-Blade (for minor surgery)	<input type="checkbox"/>	
Retractor (Langenbek 60 x 20 mm)	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Miscellaneous Materials		
Clothing (gowns, robes, etc)	<input type="checkbox"/>	
Bed linens	<input type="checkbox"/>	
Drapes, sheets, & other linens	<input type="checkbox"/>	
Gauze	<input type="checkbox"/>	
Cotton	<input type="checkbox"/>	
Alcohol	<input type="checkbox"/>	
Disinfectant (specify) _____	<input type="checkbox"/>	
Soap (specify) _____	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Food (supplied by facility)		
Meal #1	<input type="checkbox"/>	
Meal #2	<input type="checkbox"/>	
Meal #3	<input type="checkbox"/>	
Meal #4	<input type="checkbox"/>	
Meal #5	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
MVA Parts		
Single-Valve Syringe (SVS) with 3 cc Silicone	<input type="checkbox"/>	
Double-Valve Syringe (DVS)w/Adapters and 3 cc Silicone	<input type="checkbox"/>	
MVA Cannulae		
4 mm Standard	<input type="checkbox"/>	
5 mm Standard	<input type="checkbox"/>	
6 mm Standard	<input type="checkbox"/>	
7 mm Standard	<input type="checkbox"/>	
8 mm Standard	<input type="checkbox"/>	
9 mm Single-Scoop Aperture	<input type="checkbox"/>	

Inventory Form 3· Costs of Supplies & Equipment for Postabortion Care Services

Cost Items for Postabortion Care Procedures	Tick (✓) if this item is available	A Total cost of item when purchased <i>(e g , entire bottle of aspirin)</i>
10 mm Single-Scoop Aperture	<input type="checkbox"/>	
12 mm Single-Scoop Aperture	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Sterilization/Disinfection		
Glutaraldehyde	<input type="checkbox"/>	
Bleach	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Modern Contraceptive Commodities		
Condoms	<input type="checkbox"/>	
Spermicide (foam, gel/jelly, film, etc) _____	<input type="checkbox"/>	
Diaphragm	<input type="checkbox"/>	
Combined Oral Contraceptive (specify) _____	<input type="checkbox"/>	
Progestin-only Pill	<input type="checkbox"/>	
Injectable (specify) _____	<input type="checkbox"/>	
Implant (Norplant®)	<input type="checkbox"/>	
IUD (specify) _____	<input type="checkbox"/>	
Female sterilization	<input type="checkbox"/>	
Male sterilization	<input type="checkbox"/>	
Education materials on lactational amenorrhea (LAM)	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	
Other (specify) _____	<input type="checkbox"/>	

DATAPAC Inventory Form 4 Overhead and Hospitalization Costs Based on Expenditures from Previous Year

Hospital overhead or general and administrative (G&A) such as the cost for electricity, water, building repairs or maintenance can be the most difficult category of cost to assess. In many cases, public facilities receive subsidies on utilities and other expenses, and therefore the amount they pay does not realistically reflect the true cost. As with MVA kits, the researcher should try to estimate the actual cost for each category, not a subsidized expenditure. This will allow facility administrators and policy makers to plan for the future with the most accurate cost information possible.

The PI should be able to complete Inventory Forms 4 and 5 with information obtained from the facility's administrative offices. This information is the expenditures for the last 12 months for overhead budget categories such as administrators' salaries, capital goods, and office supplies. These forms will help determine cost-per-bed-minute. Use Inventory Form 4 to record the costs that comprised overhead for the previous twelve-month period, and use Inventory Form 5 to calculate cost-per-bed-minute of treating postabortion patients. As with all the forms in this manual, these forms may need to be significantly modified to reflect the differences in each facility.

Annualizing Equipment and Furniture Costs

Capital goods are items that have a useful life of greater than one year. In a cost and resource use study, capital goods might include exam tables or sterilizers. As such, a capital good's purchase price is not equal to its cost, but the true cost will be spread out over the useful life of the item. Annualization is the method used to estimate capital costs. Janowitz and Bratt (1994) explain the mechanics of annualization:

“The technique we use to estimate capital costs is called ‘annualization’. Essentially, we calculate the amount of the good that is used up (depreciated) in the period of time corresponding to the cost study. Depreciation is only one part of the annual cost of a capital good. The other part is an allowance that represents the interest that could have been earned if the program had invested the funds used to purchase the item. This component is usually referred to as the ‘opportunity cost of capital’.”¹⁶

Calculating an annual cost of capital is facilitated by creating an annualization table. To create this table, the researcher needs three figures: 1) an estimate of the replacement cost of the item, 2) an estimate of the useful life of the item, and 3) an estimate of the discount rate. The replacement cost is what the capital good would cost if purchased new today. The discount rate reflects the rate of return on investments the program could have made if it had not used its money on the capital good. The economic planning office within the finance ministry in the country should have this number. If not, larger development organizations (e.g., the World Bank) have discount rates for each country that they use for project planning purposes.

To use the annualization table, find the discount rate you plan to use in the discount rate column. Next, find the row that corresponds to the estimated useful life of the item. The annualization factor is found where the column and the row intersect. Simply divide the replacement cost of the item by the annualization factor from the table.

For example, suppose a facility had a sterilizer with a replacement cost of \$10,000 and an estimated useful life of 10 years. The discount rate you have chosen is 6%. The annualization factor from the table is 7.360.

$$\$10,000 / 7.360 = \$1,359$$

Thus the annual cost of the sterilizer would be \$1,359.

To calculate the annualized building costs, Janowitz and Bratt (1994) again explain:

“To determine the replacement cost for a building at its current site you need to determine the cost of the land and the current construction cost for a similar building. The original construction cost should not be used. If current construction costs are not available, the cost per square meter of similar types of construction in the area may be used. This information can sometimes be found in recent government contracts for similar building or from construction trade groups.”¹⁶

NOTE Inventory Form 4 should be completed only once, at the beginning of the study.

DATAPAC Inventory Form 4 Overhead and Hospitalization Costs Based on Expenditures for the Previous Year

Instructions for Use This form should be completed only once. Collect the necessary information from interviews with appropriate administrative personnel or through files from the administrative offices

Overhead Cost Items	Actual Annual Expenditure
Administrators' & Directors' Salaries (1 Year & Fringe Benefits)	
Administrative/Office Supplies (including Communications)	
Cleaning Supplies & Equipment (including Laundry)	
Water	
Electricity, Oil, Gas, & Cooking Fuel	
Security	
Ambulance Maintenance (including gas & oil) and Driver Salary	
Communications (phone, fax, etc)	
Other (specify) _____	
Other (specify) _____	
Annualized Costs (only include items over US\$100)	
Exam Table	
Sterilizer	
Operating Table	
Rolling supply cart	
Laparoscope	
Mobile Operating Light	
Other (specify) _____	
Other (specify) _____	
Rent or Annualized Building Costs	
Total Overhead Costs for Previous Twelve-Month Period:	

DATAPAC Inventory Form 5 Average Cost Per Bed-Minute

Usually overhead is comprised of the fixed costs of operating the facility (see list on Interview Form 4, previous page) To calculate overhead cost per patient, the researcher must reduce the total yearly overhead cost to an overhead cost-per-bed-minute (thus, cost-per-bed-minute = yearly overhead/number of bed-days for previous twelve-month period/1440 minutes per day) To calculate "bed-days" we recommend multiplying the total number of facility beds (Beds) by bed occupancy rate (i.e., the average number of beds full on any given day) (Occ) by 365 days per year (Days) For example

$$900 \text{ Beds} * 80 \text{ Occupancy} * 365 \text{ Days} = 262,800 \text{ Bed-Days}$$

If, for a given facility, yearly overhead is US\$321,213.00, then

$$\$321,213.00 / 262,800 \text{ bed-days} / 1440 \text{ minutes} = \$0.0008 \text{ per-bed-minute}$$

Thus, if a patient spends 3,500 minutes in the facility for treatment of incomplete abortion, her portion of the overhead cost would be

$$3,500 * 0.0008 = \text{US\$}2.80 \text{ (this type of calculation will occur on Data Analysis Worksheet 4)}$$

If occupancy rates are not known, one may assume an occupancy rate of 100%, however, using a higher-than-actual occupancy rate will underestimate the true cost-per-bed-minute. Also remember that if the researcher wants to compare resources expended at more than one service delivery site, she or he must use the same method of calculating overhead at each study site. Actual overhead costs will vary from one facility to another (even within the same health care system).

NOTE Inventory Form 5 should be completed only once, at the beginning of the study

DATAPAC Inventory Form 5 Average Cost Per Bed-Minute

Instructions for Use This form should be completed only once. Collect the necessary information from interviews with appropriate administrative personnel or files

A Total Overhead Costs for Previous Year (from Inventory Form 4)	B Number of Beds in Facility	C Daily Occupancy Rate	D Number of Bed- Days for Previous Twelve-Month Period* D=[(B*C)*365]	E Cost-Per-Bed- Day* E=(A/D)	F Cost-Per-Bed- Minute* F=E/1440

***NOTES** The number of bed-days for the previous twelve-month period is calculated by finding the average number of beds occupied on any particular day (column B multiplied by column C) multiplied by 365 days in the year

The cost-per-bed-day should be calculated by dividing the total overhead costs for the previous twelve-month period by the number of bed-days for the previous twelve-month period (A divided by D)

The cost-per-bed-minute calculation should be interpreted as follows divide cost-per-bed-day by 1440 minutes in the day

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Patient Observation Forms

Modify these tables as necessary to reflect the service delivery characteristics at your site

Once the background information has been collected and recorded on Inventory Forms 1-5, the patient observation phase of the study can begin. Consistency in data collection across sites is absolutely essential during this phase of the study.

DATA PAC Patient Observation Form 1 Time Consumed for Patients and Personnel during Postabortion Care

DATA PAC Patient Observation Form 1 is designed to describe patient flow, or the steps the patient goes through from arrival to discharge. After completing this form, the researcher will know how much time one particular patient spent throughout her PAC treatment process (for pre-procedure, procedure, and post-procedure care), as well as the personnel resources expended in providing that care.

As patient management practices often vary significantly between health systems and individual facilities, this form must be adapted to fit the specifics of each site. The easiest way to adapt this form to a particular site is to literally walk the patient's route. Begin with the entrance to the facility and continuing through treatment, recovery, post-procedure counseling and discharge areas (see Inventory Form 1 Facility Postabortion Care Practices). Although some facilities or health systems have written guidelines describing treatment protocols for incomplete abortion, most do not. In addition to reading the protocols (where they exist), the PI and Data Collectors should familiarize themselves with all aspects of the treatment process by observing care and interviewing staff. Researchers should also be aware that postabortion counseling and contraceptive method provision can occur at various stages of a patient's stay in the facility, and this should be reflected in the forms.

Please note Once the PI is familiar with the patient management system, she or he will need to adapt each form to reflect the characteristics of the system used at that site. All data collection forms are therefore included with this guide on a floppy disk in Microsoft Word for Windows 6.0 format.

The first column lists the steps the patient goes through from registration to discharge. Columns A and B indicate the time the **patient** begins and ends a particular step in the process, including time spent waiting for the providers to care for her. Column C is used to calculate the amount of time that the **patient** spends at each step in the process.

The fifth column ("Personnel Used") lists the personnel who work with the patient at each step. Columns D and E refer to the time each **provider** begins and ends interactions with the patient at that step. Column F is used to record the calculation of the total amount of time that the **provider** spent with that patient at each step in the process. Columns G and H provide the final calculation of salary cost per patient for each provider.

Note Columns C, F, and H should only be computed after the entire form is completed for each patient. The Microsoft Excel spreadsheet available from Ipas will make these computations automatically.

The "Provider Total Minutes Spent" will generally be less than the "Patient Total Minutes Spent" for each step, since the patient frequently waits for care. However, during the evacuation procedure, however, the total time spent by all staff will probably be greater than patient time since several members of the team will be providing care to a single patient. The amount of time that providers spend reviewing patient charts and updating patient records should also be included as time spent treating the patient. However, Data Collectors should only record time that providers spend focusing on the patient whom they are tracking at that time, for example, if a nurse is in the recovery ward, but is caring for another patient, her time should not be recorded or calculated as part of the "Provider Total Minutes Spent" for the patient being tracked.

In many cases, a particular type of provider will spend time with the patient more than once. For example, a nurse's aide may attend the patient upon arrival at the emergency room, during the exam in the treatment area, and during the evacuation. Record each of these treatment "encounters" in the appropriate box on the form.

Instructions for calculating 24-hour time into minutes are given in the "Instructions for Use" section of the table. Please note the calculation of minutes for when the patients are required to stay overnight. In this situation, calculate the number of minutes from the "Time In" figure in column A until midnight (24 00 in 24-hour time) for the first day, and then add the number of minutes from the second day (from 0 00 until "Time End" in column B) to that figure. For example, if a patient registers at 20 49 one evening (or 20 hours * 60 minutes per hour + 49 minutes = 1249 minutes) and is discharged at 09 07 the following morning (or 9 hours * 60 minutes per hour + 7 minutes = 547 minutes), then the total length of stay would be calculated as follows: there are 1440 minutes in one day (24 hours * 60 minutes per hour), so $1440 - 1249 = 191$ minutes + 547 minutes = 738 minutes.

NOTE Patient Observation Form 1 must be completed for every patient observed during the data collection period.

DATAPAC Patient Observation Form 1 Time Consumed During Provision of Postabortion Care	
Observer's Name _____	Date (dd/mm/yyyy) (____/____/____)
Patient ID# _____	Attending Physician _____
Treatment procedure used <input type="checkbox"/> EVA <input type="checkbox"/> MVA <input type="checkbox"/> SC or D&C <input type="checkbox"/> MVA with SC	
<p>Instructions for Use One of these forms should be completed for each patient Use 24-hour time, and convert the times in columns A, B, D, and E into minutes so that columns C and F can be easily calculated To convert the times into minutes multiply the number of hours by 60 and add the minutes to that figure [e g, 18 23 becomes (18*60)+23=1103, or the 1103rd minute of the day]</p> <p>Instructions for Use Complete columns A, B, D and E at the time of observation DO NOT transfer the information from column D of Inventory Form 2 to column G or calculate columns C, F or H until after the patient has left the room or until the daily data collection has been completed</p>	

DATAPAC Patient Observation Form 1 Time Consumed During Provision of Postabortion Care									
	A	B	C		D	E	F	G	H
PATIENT TIME	Time Begin	Time End	Patient Total Minutes Spent	STAFF USED	Time Begin	Time End	Staff Total Minutes Spent	Salary Per Minute (from Inventory Form 2)	Salary Cost Per Patient†
			C=B A				F=E D		H=F*G
PRE-PROCEDURE									
Registration				Receptionist					
Waiting Room				None					
Exam Room				Doctor					
				Nurse					
Transport to Ward				Orderly					
Pre-Procedure Ward				Nurse 1					
				Nurse 2					
Transport to Procedure Room				Orderly					
Total Patient Pre-Procedure Time (Sum pre-procedure times for patient in column C)				Total Provider Pre-Procedure Costs (Sum pre-Procedure salary costs for Providers in column H)					

DATA PAC Patient Observation Form 1 Time Consumed During Provision of Postabortion Care										
	A	B	C		D	E	F	G	H	
PATIENT TIME	Time Began	Time End	Patient Total Minutes Spent	STAFF USED	Time Began	Time End	Staff Total Minutes Spent	Salary Per Minute (from Inventory Form 2)	Salary Cost Per Patient†	
			C=B - A				F=E - D		H=F x G	
PROCEDURE										
Prep				Nurse 1						
				Nurse 2						
Evacuation				Doctor 1						
				Doctor 2						
				Nurse						
Total Patient Procedure Time (Sum procedure times for patient in column C)				Total: Provider Procedure Costs (Sum procedure Salary costs for providers in column H)						

DATAPAC Patient Observation Form 1 Time Consumed During Provision of Post-abortion Care

	A	B	C		D	E	F	G	H
PATIENT TIME	Time Begun	Time End	Patient Total Minutes Spent	STAFF USED	Time Begun	Time End	Staff Total Minutes Spent	Salary Per Minute (from Inventory Form 2)	Salary Cost Per Patient [†]
			C=B A				F=E D		H=FxG

POST-PROCEDURE

Transport to Recovery				Orderly					
Recovery Room				Nurse 1					
				Nurse 2					
Contraceptive Counseling & Method Provision				Social Worker					
				Nurse 1					
Overnight Stay				Nurse 1					
				Nurse 2					
				Kitchen Help					
				Janitor					
Discharge				Receptionist					
Total. Patient Post-Procedure Time (Sum post-procedure times for patient in column C)				Total Provider Post-Procedure Costs (Sum post-Procedure salary costs for providers in column H)					

Discharge Date (dd/mm/yyyy) (___/___/___) **Discharge Time** (24 hour clock) _____

[†]The calculation for Salary Cost Per Patient should be interpreted as follows multiply the figure in column F by the figure in column G

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DATAPAC Patient Observation Form 2 Costs of Medication, Supplies and Miscellaneous Instruments Used for Postabortion Care Procedures

DATAPAC Patient Observation Form 2 is used to calculate the cost of instruments, equipment, supplies, contraceptive commodities and medication used for each patient. The data collected on the *DATAPAC Patient Observation Form 2* should show the number of units of all instruments and supplies used for each patient. As care for most patients will follow the standard or PAC model, there probably will be very little variation in the number of units used for each patient.

A cost-per-patient can be determined for all drugs and commodities by dividing the total item cost by the number of units in the item and then multiplying by the number of units used for each patient. For example, suppose a full bottle of aspirin containing 1,000 pills can be purchased for US\$ 2.00, but patients are given (and charged for) only one pill at a time. The cost of aspirin used for a particular patient can be obtained by dividing the item cost by the number of units in the item ($\$2/1,000 \text{ pills} = \$0.002 = \text{unit cost, or cost-per-pill}$) and then multiplying by the number of units given to the patient (e.g., 2 aspirin). In another example, if a patient uses $1\frac{1}{2}$ units of IV solution and the remaining $\frac{1}{2}$ of the second unit is thrown away, the cost of the IV solution used is the cost of two full units, rather than the $1\frac{1}{2}$ units that were actually consumed.

Notes for calculating MVA costs

Previously, in many studies MVA equipment has been either donated or subsidized during the study period. However, in order to produce a more realistic estimate of MVA costs, it is recommended that the PI use an MVA cost equal to the actual cost of procuring MVA equipment without donations or subsidies.

When completing this form for patients treated with MVA, it is also recommended that the PI use 50 and 20 for the number of uses per syringe and cannula, respectively (Column B). There is anecdotal evidence that certain facilities use these instruments for many more procedures, but using these figures will usually result in conservative cost results (i.e., using the estimates of 50 and 20 will slightly overestimate the cost of care per patient treated with MVA). Thus, if providers are sterilizing or disinfecting MVA syringes and cannulae more than 50 and 20 times, respectively, then facilities will spend even less on MVA instruments (and hence the PAC model) than the results indicate.

Overall, the researcher must be consistent from one patient to another in assessing unit costs!

NOTE Patient Observation Form 2 must be completed for every patient observed during data collection

DATAPAC Patient Observation Form 2. Costs of Supplies & Equipment Used for PAC Services	
Observer's Name _____	Date (dd/mm/yyyy) (____/____/____)
Patient's Name _____	
Patient ID# _____	Attending Physician _____
Treatment procedure used <input type="checkbox"/> EVA <input type="checkbox"/> MVA <input type="checkbox"/> SC or D&C <input type="checkbox"/> MVA with SC	
Instructions for Use One of these forms should be completed for each patient	

DATAPAC Patient Observation Form 2 Costs of Supplies & Equipment Used for PAC Services						
		A	B	C	D	E
Cost Items for MVA or Sharp Curettage Procedures	✓ if used	Item Cost (Column A from Inventory Form 3)	Units in Each Item (e.g., 100 aspirin in 1 bottle)	Cost Per Unit†	Number of Units Used	Cost for this Patient†
				C=A/B		E=C*D
Drugs/Pain Control						
Narcotic Analgesia (specify) _____	<input type="checkbox"/>					
Anxiolytic (specify) _____	<input type="checkbox"/>					
Non-Narcotic Analgesia (specify) _____	<input type="checkbox"/>					
Local Anaesthetic (specify) _____	<input type="checkbox"/>					
Antibiotics (specify) _____	<input type="checkbox"/>					
Other (specify) _____	<input type="checkbox"/>					
Total Drugs/Pain Control Cost for this Patient (sum drug costs in column E)						
Miscellaneous Instruments						
Basin (kidney/825ml)	<input type="checkbox"/>					
Cup (solution/180ml)	<input type="checkbox"/>					
Gloves	<input type="checkbox"/>					
Masks	<input type="checkbox"/>					
Torch (flashlight) (2-cell)	<input type="checkbox"/>					
Curette (uterine sharp/7mm)	<input type="checkbox"/>					
Curette (uterine sharp/12mm)	<input type="checkbox"/>					
Dilators	<input type="checkbox"/>					
Forceps (hysterectomy)	<input type="checkbox"/>					
Forceps (ovum delee)	<input type="checkbox"/>					
Forceps (sponge-holding)	<input type="checkbox"/>					
Forceps (uterine tenaculum)	<input type="checkbox"/>					
Needles (hypodermic 90x152mm)x12	<input type="checkbox"/>					

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DATA PAC Patient Observation Form 2 Costs of Supplies & Equipment Used for PAC Services

		A	B	C	D	E
Cost Items for MVA or Sharp Curettage Procedures	✓ if used	Item Cost (Column A from Inventory Form 3)	Units in Each Item (e.g., 100 aspirin in 1 bottle)	Cost Per Unit†	Number of Units Used	Cost for this Patient†
				C=A/B		E=C*D
Scissors (uterine/200mm)	<input type="checkbox"/>					
Sound (uterine Simpson/300 mm)	<input type="checkbox"/>					
Speculum (small)	<input type="checkbox"/>					
Speculum (medium)	<input type="checkbox"/>					
Speculum (large)	<input type="checkbox"/>					
Syringe (anaesthetic)	<input type="checkbox"/>					
Syringe (hypodermic)	<input type="checkbox"/>					
Tubal Ligation Kit	<input type="checkbox"/>					
Clamp (Towel Jones 9cm)	<input type="checkbox"/>					
Knife-Blade (for minor surgery)	<input type="checkbox"/>					
Retractor (Langenbek 60 x 20 mm)	<input type="checkbox"/>					
Other (specify) _____	<input type="checkbox"/>					
Total Misc Instruments Cost for this Patient (Sum misc. instr. costs in column E)						
Miscellaneous Materials						
Gauze	<input type="checkbox"/>					
Cotton	<input type="checkbox"/>					
Alcohol	<input type="checkbox"/>					
Disinfectant (specify) _____	<input type="checkbox"/>					
Soap (specify) _____	<input type="checkbox"/>					
Other (specify) _____	<input type="checkbox"/>					
Total Misc Materials Cost for this Patient (Sum misc. materials costs in column E)						
MVA Syringes						
Single Valve Syringe (SVS) with 3cc Silicone	<input type="checkbox"/>		50			
Double Valve Syringe (DVS) w/Adapters & 3cc Silicone	<input type="checkbox"/>		50			
Total MVA Parts Cost for this Patient (Sum parts costs in column E)						
Cannulae						
4mm Standard	<input type="checkbox"/>		20			
5mm Standard	<input type="checkbox"/>		20			

DATAPAC Patient Observation Form 2 Costs of Supplies & Equipment Used for PAC Services						
		A	B	C	D	E
Cost Items for MVA or Sharp Curettage Procedures	✓ if used	Item Cost (Column A from Inventory Form 3)	Units in Each Item (e.g., 100 aspirin in 1 bottle)	Cost Per Unit†	Number of Units Used	Cost for this Patient†
				C=A/B		E=C*D
6mm Standard	<input type="checkbox"/>		20			
7mm Standard	<input type="checkbox"/>		20			
8mm Standard	<input type="checkbox"/>		20			
9mm Single Scoop Aperture	<input type="checkbox"/>		20			
10mm Single Scoop Aperture	<input type="checkbox"/>		20			
12mm Single Scoop Aperture	<input type="checkbox"/>		20			
Other (specify) _____	<input type="checkbox"/>		20			
Total Cannulae Cost for this Patient (Sum cannulae costs in column E)						
Sterilization/Disinfection						
Glutaraldehyde	<input type="checkbox"/>					
Bleach	<input type="checkbox"/>					
Other (specify) _____	<input type="checkbox"/>					
Total Sterilization Cost for this Patient (Sum sterilization costs in column E)						
Contraceptive Commodities						
Condoms	<input type="checkbox"/>					
Spermicide (foam, gel/jelly, film, etc) _____	<input type="checkbox"/>					
Spermicide (foam, gel/jelly, film, etc) _____	<input type="checkbox"/>					
Diaphragm	<input type="checkbox"/>					
Combined Oral Contraceptive (specify) _____	<input type="checkbox"/>					
Combined Oral Contraceptive (specify) _____	<input type="checkbox"/>					
Combined Oral Contraceptive (specify) _____	<input type="checkbox"/>					
Progestin-only Pill	<input type="checkbox"/>					
Injectable (specify) _____	<input type="checkbox"/>					
Implant (Norplant®)	<input type="checkbox"/>					
IUD (specify) _____	<input type="checkbox"/>					
IUD (specify) _____	<input type="checkbox"/>					
Female sterilization	<input type="checkbox"/>					
Male sterilization	<input type="checkbox"/>					

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DATAPAC Patient Observation Form 2: Costs of Supplies & Equipment Used for PAC Services

		A	B	C	D	E
Cost Items for MVA or Sharp Curettage Procedures	✓ if used	Item Cost (Column A from Inventory Form 3)	Units in Each Item (e.g., 100 aspirin in 1 bottle)	Cost Per Unit†	Number of Units Used	Cost for this Patient†
				$C=A/B$		$E=C*D$
Education materials for contraceptive methods	<input type="checkbox"/>					
Other (specify) _____	<input type="checkbox"/>					
Total Contraceptive Commodities Cost for this Patient (Sum contraceptive costs in column E)						

†The equation for calculating cost per unit should be interpreted as follows: divide the total item cost by the number of units per item ($C=A/B$)

The equation for calculating cost for this patient should be interpreted as follows: multiply the cost per unit by the number of units used for this patient ($E=C*D$)

DATA ANALYSIS ISSUES

The Data Analysis section describes each Data Analysis Worksheets and Final Summary Sheets in detail. The Data Analysis Worksheets are available to pool your data from the Inventory and Observation Forms, and Microsoft Excel spreadsheets are available from Ipas for data entry and basic analysis. The totals from the Data Analysis Worksheets can then be used to fill in the Final Summary sheets.

The basic calculations used to determine the cost and ALOS in each stage of the process are sums, averages, and ranges, rather than potentially complicated inferential statistical procedures. However, PI should explore the data and be creative in the way results are presented. For example, using data collected on *Patient Observation Form 1*, researchers for a study in Oaxaca, Mexico created a ratio to gauge the “efficiency” of PAC providers.²⁵ For each phase of treatment, the researchers divided the amount of time patients interacted with providers by the total amount of time patients spent in each phase. The resulting ratio showed that, while the amount of time staff provided services fell by 25%, the proportion of time patients spent with providers increased by over 10%. Thus, providers became more efficient so that patients’ ALOS decreased. Other studies have multiplied the total number of incomplete abortion cases per year by the total opportunity cost savings per patient (*Final Summary Sheet 2*) to estimate the total opportunity cost savings to a facility per year.

Researchers should also remember that when conducting pre- and post-intervention cost studies, salary and overhead costs should only be estimated once during the baseline data collection phase and then applied to both baseline and follow-up phase cost estimates. If done in this way, then there is no need to “control” or account for inflation from the time the pre-intervention and post-intervention data are collected. Finally, when conducting concurrent-control or other multi-site studies, researchers should consider standardizing costs (salaries, supplies, equipment, and overhead) across sites so that differences between sites are more influenced by the intervention than by differences in salaries and unit costs between sites. More information on standardizing data can be found in the *Guide for Using the DATAPAC Core Questionnaire Series for Postabortion Care Operation Research*.²¹

As with all other forms and instructions described in this manual, the Data Analysis Worksheets may need to be modified to best suit the circumstances at your study site or sites.

Data Analysis Worksheets

After completing data collection, the next step is to analyze the data to address the research objectives. The worksheets should be completed only after all data collection has been completed.

Pre-programmed Microsoft Excel spreadsheets are available from Ipas for data entry. Once the numbers are entered, Microsoft Excel will perform the calculations. However, the data analysis for this study is not difficult. For researchers without access to spreadsheet software, these calculations can easily be done by hand or with a calculator. Instructions for using the Data Analysis Worksheets appear at the top of each worksheet, and are explained below. Modify these worksheets (and the corresponding Microsoft Excel spreadsheets) as necessary to reflect the service delivery characteristics at your site.

DATA PAC Data Analysis Worksheet 1 Patient Time Worksheet

To calculate the total amount of time each **patient** spends in the facility (including waiting time), prepare *DATA PAC Data Analysis Worksheet 1* using data from *Patient Observation Form 1*. Follow these steps to prepare the worksheet:

- 1 In the first column, list the facility identification number of each patient for whom a Patient Observation Form 1 has been completed,
- 2 Enter the time subtotal for each of the three time frames (pre-procedure, procedure, and post-procedure) for each patient from the column C subtotals on Patient Observation Form 1,
- 3 Sum each row (horizontally) and write the total in the "Total Patient Time" column, **
- 4 Sum all of the "Total Patient Time" figures to get "Total Time" for all patients, **
- 5 Count the number of patients listed in column one and place this number in the "Number of Patients" box,
- 6 Divide the "Total Time" number by the "Number of Patients" number and place this figure in the "Average Time/Patient" box, and, **
- 7 Write the lowest and highest times from the "Total Patient Time" column in the "Range of Times" box.

NOTE If this is a comparison study, **Data Analysis Worksheet 1** must be completed once to compile information on those patients treated with the standard model and once for those patients treated with the PAC model.

** This is calculated automatically in the Microsoft Excel worksheet.

DATAPAC Data Analysis Worksheet 1. Patient Time Worksheet

Data Collector's Name _____ **Date completed** (dd/mm/yyyy) (___/___/____)

Data Collector's ID# _____

Treatment procedure used EVA MVA SC or D&C MVA with SC

Instructions for Use Complete one form for each group of patients by type of treatment (EVA, MVA, SC, MVA & SC)

- 1 In the first vertical column list the name or facility identification numbers of all patients
- 2 Enter the time subtotal for each of the three time frames (pre-procedure procedure and post procedure) for each patient from the column C subtotals on Patient Observation Form 1
- 3 Sum each row (horizontally) and write the total in the 'Total Patient Time' column
- 4 Sum all of the 'Total Patient Time' figures to get 'Total Time' for all patients
- 5 Count the number of patients listed in column one and place this number in the 'Number of Patients' box
- 6 Divide the 'Total Time' number by the 'Number of Patients' number and place this figure in the 'Average Length of Stay (ALOS)' box
- 7 Write the lowest and highest times from the 'Total Patient Time' column in the 'Range of Times' box

DATAPAC Data Analysis Worksheet 1: Patient Time Worksheet

#	Patient ID #	Pre-Procedure Time	Procedure Time	Post-Procedure Time	Total Patient Time
1	_____				
2	_____				
3	_____				
4	_____				
5	_____				
6	_____				
7	_____				
8	_____				
9	_____				
10	_____				
11	_____				
12	_____				
13	_____				
14	_____				
15	_____				

Sum of Total Patient Time	
Number of Patients	
Average length of stay (ALOS)	
Range of Times	to

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DATAPAC Data Analysis Worksheet 2 Provider Salary Worksheet

Prepare the *DATAPAC Data Analysis Worksheet 2* to calculate the cost of the **provider** time spent on total patient care. These worksheets are based on the data collected on the *DATAPAC Patient Observation Form 1*. Follow these steps to prepare the worksheet.

- 1 In the first column, list the facility identification numbers of all patients that the providers treated,
- 2 Enter the cost subtotal of provider time spent with each patient for each of the three time frames (pre-procedure, procedure, and post-procedure) from the column H subtotals on Patient Observation Form 1,
- 3 Sum each row (horizontally) and write the total in the "Total Provider Salary Cost" column, **
- 4 Sum all of the "Total Provider Salary Cost" figures to get "Total Salary Cost" for all providers, **
- 5 Count the number of patients listed in column one and place this number in the "Number of Patients" box,
- 6 Divide the "Total Salary Cost" number by the "Number of Patients" number and place this figure in the "Average Cost/Patient" box, and, **
- 7 Write the lowest and highest figures from the "Total Provider Salary Cost" column in the "Range of Costs" box.

NOTE If this is a comparison study, the *DATAPAC Data Analysis Worksheet 2* must be completed once to compile information on salary costs for those providers who treated patients with the standard model and once to compile information on salary costs for providers who treated patients with the PAC model.

** This is calculated automatically in the Microsoft Excel worksheet.

DATAPAC Data Analysis Worksheet 2: Provider Salary Worksheet

Data Collector's Name _____	Provider Name &/or ID# _____
Data Collector's ID# _____	Date completed (dd/mm/yyyy) (____/____/____)
Treatment procedure used <input type="checkbox"/> EVA <input type="checkbox"/> MVA <input type="checkbox"/> SC or D&C <input type="checkbox"/> MVA with SC	
Instructions for Use Complete one form for each provider who treated study patients (including physicians, nurses, etc.) 1 In the first vertical column, list the name or facility identification numbers of all patients that the providers treated 2 Enter the cost subtotal of provider time spent with each patient for each of the three time frames (pre procedure procedure and post procedure) from the column H subtotals on Patient Observation Form 1 3 Sum each row (horizontally) and write the total in the Total Provider Salary Cost column 4 Sum all of the Total Provider Salary Cost figures to get Total Salary Cost for all providers 5 Count the number of patients listed in column one and place this number in the Number of Patients box 6 Divide the Total Salary Cost number by the Number of Patients number and place this figure in the Average Cost/Patient box 7 Write the lowest and highest figures from the Total Provider Salary Cost column in the "Range of Costs" box	

DATAPAC Data Analysis Worksheet 2: Provider Salary Worksheet

#	Patient ID #	Pre-Procedure Salary Cost	Procedure Salary Cost	Post-Procedure Salary Cost	Total Provider Salary Cost
1	_____				
2	_____				
3	_____				
4	_____				
5	_____				
6	_____				
7	_____				
8	_____				
9	_____				
10	_____				
11	_____				
12	_____				
13	_____				
14	_____				
15	_____				
Total Salary Cost					_____
Number of Patients					_____
Average Cost per Patient					_____
Range of Costs					_____ to _____

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DATAPAC Data Analysis Worksheet 3 Costs of Medication, Supplies and Miscellaneous Instruments

To determine the cost of materials and drugs used for each patient observed, prepare the *DATAPAC Data Analysis Worksheet 3* by following these steps

- 1 In the first vertical column, list the facility identification numbers of all patients for which a Patient Observation Form 1 was completed,
- 2 Enter the cost subtotal for each type of medication, instrument, material, parts and cannulae (if MVA) and contraceptive commodity, or process used for each patient (from Patient Observation Form 2) in the appropriate column,
- 3 Sum each row (horizontally) and write the total in the "Total Cost for Each Patient" column, **
- 4 Sum all of the "Total Cost for Each Patient" figures and write the answer in the "Total Cost" box, **
- 5 Count the number of patients listed in column one and place this number in the "Number of Patients" box,
- 6 Divide the "Total Cost" number by the "Number of Patients" number and place this figure in the "Average Cost/Patient" box, and,**
- 7 Write the lowest and highest figures from the "Total Cost for Each Patient" column in the "Range of Costs" box

NOTE If this is a comparison study, the DATAPAC Data Analysis Worksheet 3 should be completed once to compile information on medication and supplies used for patients treated with the standard model and once for patients treated with the PAC model

** This is calculated automatically in the Microsoft Excel worksheet

DATAPAC Data Analysis Worksheet 3: Costs of Medication, Supplies and Miscellaneous Instruments

Data Collector's Name _____ **Provider Name &/or ID#** _____

Data Collector's ID# ___ ___ ___ **Date completed (dd/mm/yyyy)** (___ / ___ / ___)

Treatment procedure used EVA MVA SC or D&C MVA with SC

Instructions for Use Complete one form for each group of patients by type of treatment (EVA, MVA, SC, MVA & SC)

- 1 In the first vertical column, list the name or facility identification numbers of all patients
- 2 Enter the cost subtotal for each type of medication instrument or process used for each patient (from Patient Observation Form 2) in the appropriate column
- 3 Sum each row (horizontally) and write the total in the "Total Cost for Each Patient" column
- 4 Sum all of the "Total Cost for Each Patient" figures and write the answer in the "Total Cost" box
- 5 Count the number of patients listed in column one and place this number in the "Number of Patients" box
- 6 Divide the "Total Cost" number by the "Number of Patients" number and place this figure in the "Average Cost/Patient" box
- 7 Write the lowest and highest figures from the "Total Cost for Each Patient" column in the "Range of Costs" box

DATAPAC Data Analysis Worksheet 3: Costs of Medication, Supplies and Miscellaneous Instruments

#	Patient I D	Drugs/Pain Control	Misc Instruments	Misc Materials	MVA Syringe (if applicable)	MVA Cannulae (if applicable)	Equipment Sterilization/Disinfection	Other	Total Cost for Each Patient
1	_____								
2	_____								
3	_____								
4	_____								
5	_____								
6	_____								
7	_____								
8	_____								
9	_____								
10	_____								
11	_____								
12	_____								
13	_____								
14	_____								
15	_____								
								Total Cost	
								Number of Patients	
								Average Cost per Patient	
								Range of Costs	

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DATAPAC Final Summary Sheets

Complete the final summary sheets by transferring information from the Data Analysis Worksheets. Any differences between time spent and resources utilized in treating those patients who were treated with the standard model versus those patients treated with the PAC model should be readily apparent, given the layout of these forms.

DATAPAC Final Summary Sheet 1 Average Duration of Patient Stay

DATAPAC Final Summary Sheet 2 Average Cost of Patient Stay

Following the directions on the Final Summary Sheets, transfer information from the Data Analysis Worksheets to highlight time and cost differences between those patients treated with SC and those treated with MVA.

NOTE Modify these tables as necessary to reflect the service delivery characteristics at your site. The final summary sheets should be completed only once, and should be the last forms completed.

DATAPAC Final Summary Sheet 1: Average Length of Patient Stay (ALOS)				
Instructions for Use Average Length of Stay (ALOS) and time ranges are located on the bottom of the DATAPAC Data Analysis Worksheet 1				
	A	B	C	D
Time Component	Standard Model	PAC Model	Difference	Difference (%)
			A B=C	(B/A)*100=D
ALOS				%
Range of Times per Patient	to	to		

DATAPAC Final Summary Sheet 2 Average Total Cost of Patient Stay				
Instructions for Use Average Salary Costs per Patient are from the DATAPAC Data Analysis Worksheet 2 Average Medication, Supplies, & Miscellaneous Costs per Patient are from DATAPAC Data Analysis Worksheet 3				
	A	B	C	D
Cost Components	Standard Model	PAC Model	Difference	Difference (%)
			A B=C	(B/A)*100=D
Average Salary Cost				
Average Cost of Medication, Supplies, & Miscellaneous Instruments				
Average Costs of Contraceptive Commodities				
TOTAL				
Range	to	to		

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DISCUSSION

Now that data collection and analysis have been completed, it is time to use the results to improve PAC services. For instance, by following patients from admission to discharge, you will be able to recognize points in the treatment process where women wait excessively, or where supplies and medications are either underutilized or used excessively. These situations contribute significantly to ALOS and treatment costs.

It is important to be able to highlight the areas where modifications in practice would improve the quality of care and/or reduce the use of resources associated with the care. The PI will need to be able to suggest to administrators ways to take advantage of the findings of the study such as through patient management changes and adaptations to new treatment-related protocols.

Taking Action on Time Data

Interview Form 1 is the first resource that will provide insight into patient waiting time. A patient flow map, similar to Figure 1, is also a useful resource to use when addressing the root causes behind long waits at a particular site. These resources, along with Patient Observation Form 1 and, ultimately, Data Analysis Worksheet 1 will help the researcher determine if and where potential changes in patient management are needed. Time data can be used to set goals for patient flow, to streamline patient routes, or to alter staffing patterns to accommodate patients.²⁶ Some suggestions for using data to change practices follow.

Set Goals for Patient Flow The time data from Data Analysis Worksheet 1 are especially useful for setting goals to reduce waiting time by a given percentage within a given period of time. The time data can also be used to set goals for having patients spend at least a certain percentage of time with providers, as opposed to just waiting in rooms or being shuffled from one location to another. These goals must be realistic, however, and are highly dependent on streamlining patient routes.

Streamline Patient Routes An enormous number of possibilities exist for improving patient flow. A few suggestions are presented below.

- Minimize the number of service stops a patient makes²⁶ (e.g., change the location of the procedures from the high-demand operating room to a procedure room in the outpatient or gynecology area),
- Reduce the number of steps in the treatment process and streamline patient flow to minimize the number of staff patients see,²⁶ with this change, patients are not constantly being moved to another room, and, most likely, to another waiting area to enter that new room,
- Use patient waiting time as productively as possible (e.g., if patients are having to wait a long time for providers to discharge them, make sure that contraceptive counseling is presented to them during their wait), and,
- Assess administrative and medical protocols (e.g., do discharge protocols contribute to unnecessarily long stays?)

Alter Staffing Patterns to Accommodate Patients Many of the changes that streamline patient flow require changes in staffing patterns. If the results of the study indicate that patients are spending an excessively long time in any of the stages of care (pre-procedure, procedure, or post-procedure), the researcher should determine at which stage this is occurring and then work to alleviate the congestion. There are many ways by which to smooth patient flow. For instance, if the patients are spending most of their time waiting to see providers, the researcher might suggest that administrators schedule additional staff if possible. If patients are spending an unreasonably long time at a particular step in the treatment process, the researcher may recommend that certain staff need additional training in providing particular PAC services or that the extra time might be spent providing other services, such as contraceptive counseling.

Taking Action on Cost Data

The cost data collected during this study are intended to indicate the most cost-efficient model for uterine evacuation procedures at the facility or facilities. However, cost data can also be used to reduce waste, set standards for productivity, make comparisons over time and across clinics, plan for change, and determine charges for services.²⁷ Some suggestions for ways in which these data can be used to inform policy changes follow.

Choosing between the standard model and PAC models If one model for treating incomplete abortion is much more expensive than another, the researcher should then identify the basis of this difference. For example, if the DATAPAC Final Summary Sheet 2 (costs) shows that one procedure is much less expensive than the other, the researcher can review the worksheets to look for differences between the costs of the two models. The researcher might then see that medication costs are higher for the more expensive procedure (from Data Analysis Worksheet 3). Investigating further, she or he might consult a sample of Patient Observation Forms 2 for both models to determine whether different medications or equipment are indeed responsible for the cost differential. If so, the researcher can then recommend to the site staff to adopt the less expensive model while being careful to maintain or improve quality of care. Reviewing data from completed cost studies, differences in costs and resources used typically arise when

- More staff are needed to provide services, such as the need for an anesthesiologist when women put under general anesthesia for treatment with SC,
- There are differences in the types of medication or equipment used for the two models, or,
- One procedure requires longer facility stays, such as when women are made to wait longer before treatment with SC in order for an operating room to become available.

Reduce Waste The researcher may also attempt to identify trends and examine the data collected on previous forms to discover the source of the wastage. In the above example, for instance, the researcher may find that certain medications are being prescribed and administered unnecessarily, such as heavy sedatives when in fact light sedatives are medically sufficient.

Plan for Change These data can help administrators determine their staffing needs for both the standard model and the PAC model in the short- and long-run. For instance, if administrators are planning to change from a mixture of MVA and SC procedures to using only MVA for all

appropriate cases, the provider time data from the Data Analysis Worksheet 2 and the Patient Observation Form 1 can be used to determine the number of staff needed to handle the caseload

Determine Charges for Services If cost recovery through the use of user fees is one of the goals of the site managers, these data will highlight the variable cost of providing services to patients. If limited cost recovery is attempted, these data can be used to educate patients on the proportion of their service costs that they will be expected to contribute. For example, data from cost and resource use studies were used to reduce patient fees when, after adopting the PAC model, patient fees were reduced by 50% and 75% in Peru and Paraguay, respectively.^{28 29}

CONCLUSION

This guide is designed to provide a 'first step' for researchers interested in identifying the time and resource utilization costs of providing services for the treatment of incomplete abortion. As noted throughout the guide, some issues are not covered fully or at all in this treatment of conducting a cost and resource use study. Therefore, researchers are encouraged to refer to other DATAPAC Core Questionnaire Modules and also the other excellent sources referenced in this guide.

As with any research project, PAC cost and resource use studies require considerable time and energy by both the research team and the site staff who will be using the results of the study to implement changes in practices. Nevertheless, the benefits of conducting PAC OR are enormous. Ultimately, we hope this manual will help all those who provide PAC services identify numerous opportunities for saving time and money while improving the quality of care that patients receive.

Good luck! We wish you success in carrying out your study and welcome comments, questions, and suggestions about this manual or the study itself. Address all correspondence to

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GLOSSARY

Average cost	Also Average total cost This is the mean of the Total cost, or the average cost attributable to providing a service such as emergency treatment of incomplete abortion
Common cost	When doing a comparative cost analysis, such as comparing SC and MVA procedures, common costs are those that are identical regardless of which procedure is used. An example might be where the cost of a pair of exam gloves is the same regardless of whether MVA or SC is used to treat the incomplete abortion
Direct cost	Costs that are directly attributable to PAC services, such as the salary of the provider performing the treatment or the costs of medical supplies used by the PAC patient
Fixed cost	Costs that remain constant (or almost constant) regardless of case load. Examples typically include overhead costs that change little whether a clinic averages one PAC patient per day or per month
Indirect cost	Costs that are not directly attributable to PAC services, such as the salary of administrative personnel who handle patient records but have no direct contact with patients
Marginal cost	The cost of providing an additional service, such as the cost of adding postabortion contraceptive counseling services to already existing contraceptive services
Non-common cost	When doing a comparative cost analysis, such as comparing SC and MVA procedures, non-common costs are those that are unique for the procedure used. An example might be where the cost of MVA cannulae, which are only used during an MVA procedure
Opportunity cost	Savings that occur by modifying PAC services are usually savings in "opportunity costs." For example, many studies have shown that treating incomplete abortion with MVA is less expensive than with SC. However, in most facilities, this translates into freeing up resources for use with other services (e.g., freeing up physician & nurse time to work on other obstetric cases) rather than reducing actual expenditures overall
Overhead cost	Costs typically associated with the maintenance of a facility such as costs for electricity, water, vehicle maintenance, & heating fuel
Total cost	The entire cost associated with providing a service, including direct & indirect costs, fixed & variable costs, etc
Variable cost	Costs that vary dependent on caseload. Typically includes the cost of certain medical equipment & supplies (MVA syringes and cannulae) that change depending on whether a clinic averages one PAC patient per day or per month

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*INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE*



**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
POSTABORTION CARE PATIENT
EXIT INTERVIEW
DATAPAC Module 4**

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Technical Working Group

June 1998
Version 1.3



What is DATAPAC?

The DATAPAC *Guide to Using the Postabortion Care Patient Exit Interview* is part of the DATAPAC Core Questionnaire Series, a set of questionnaires and instruction guides that provide an overview on how to design and conduct quantitative postabortion care (PAC) operation research (OR) studies. The DATAPAC Core Questionnaire Series is in modular form and currently includes

- Overview** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 1** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 2** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 3** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 4** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 5** **GUIDE TO USING THE OBSERVATION OF POSTABORTION CARE SERVICES QUESTIONNAIRE** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

The DATAPAC Core Questionnaire Series is designed to be a guide for rapidly assessing the quality and cost-effectiveness of PAC services. These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the DataPAC Core Questionnaire Series For Postabortion Care Operations Research (Module 1)*

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

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Overview

The DATAPAC *Guide to Using the Postabortion Care Patient Exit Interview* (Module 4) is intended to be given to PAC patients after they have received all PAC-related services but before they leave the hospital. This questionnaire is part of the DATAPAC *Core Questionnaire Series*, a set of questionnaires and instruction guides intended to provide an overview on how to design and conduct quantitative operations research (OR) studies on postabortion care (PAC). For more information on DATAPAC, please see the *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (Module 1).

General Instructions for Interviewing PAC Patients

Interviewing patients about a sensitive subject is a delicate task. There are various steps that a Data Collector can take to ensure that a patient interview is as successful as possible.¹

- ! The Data Collector should explain that the purpose of the interview is to help improve PAC services at the health care facility and that the patient's responses are desired and important.
- ! **Informed Consent Form** You should have a signed *Informed Consent Form* on file for every participant in your study. The forms should be locked and accessible only to research staff. Those patients unable to give informed written consent, such as when they are too medicated, in too much pain or discomfort, or otherwise incapacitated, should not be included in the study. It is also important to identify whether the interview is *confidential* or *anonymous*. This manual provides an example of a consent form that assumes responses are confidential. You should also offer to give a copy of the form to each participant.

The *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (Module 1) also provides examples of informed consent forms for patients, providers, and other hospital staff, and copies of these forms can be obtained from Ipas.

- ! Allow the patient to refuse to answer any question, or to discontinue the interview completely.
- ! If patient says "I don't understand the question" or "what do you mean" or otherwise seems confused, **do not elaborate on or rephrase the question**, simply read the question again as it is written and ask them to answer it to the best of their understanding.
- ! Interview the participant in a private location, especially a location where the patient's answers cannot be overheard by non-study staff.
- ! Do not discuss the interview with anyone other than the study staff.
- ! Several other things can help make the patient more comfortable while being interviewed. The interviewer may want to wear everyday clothes, rather than a uniform. It may also help

¹ Otsea K, Benson J, Measham D, Thorley M, Lidh R. Program monitoring manual for postabortion care. Ipas, Carboro, North Carolina. 1998.

if the interviewer is a staff member who is not directly involved in the provision of the woman's care

How to Complete this Form

- ! **Participant Selection Checklist:** Be sure to complete the checklist and informed consent form *before* beginning data collection
- ! Ask every question in the order in which they appear and in the way they are written. The parts of each question that are to be read to the patient are in **bold**
- ! For questions that have predetermined response categories or rankings (for example, rarely/never, sometimes, routinely/always), the Data Collector should always read all possible responses, even if the participant answers before the Data Collector has finished reading all possible responses
- ! Only place *Patient's Study ID Code* on the form if you will need to link data from this questionnaire to data from other data collection instruments. This can best be accomplished, for example, by using the *DATAPAC General Information Questionnaire Module 1 (GIQ)*, and then using the *Patient Study ID Code* from the GIQ to link to other questionnaires such as the *DATAPAC Postabortion Care Patient Exit Interview Module 4*, or the *DATAPAC Clinical Case Report Form for Postabortion Care Patients Module 2*. The *Patient Study ID Code* is a unique number for each participating patient and is assigned by the study staff
- ! Use a ballpoint pen when making corrections. Strike through incorrect answer, make the correction and initial (see example below)

Example: How to correct or make changes to answers

Original response		Original response with correction	
Marital status <##>		Marital status <##>	
1	Married <input checked="" type="checkbox"/>	1	Married <input checked="" type="checkbox"/>
2	Cohabiting, "In union" <input type="checkbox"/>	2	Cohabiting, "In union" <input type="checkbox"/>
3	Single <input type="checkbox"/>	3	Single <input checked="" type="checkbox"/>
4	Divorced <input type="checkbox"/>	4	Divorced <input type="checkbox"/>
5	Widowed <input type="checkbox"/>	5	Widowed <input type="checkbox"/>

POSTABORTION CARE PATIENT EXIT INTERVIEW DATAPAC Module 4

Patient Selection Checklist	
	✓ if the answer is <u>YES</u>
Patient has...	
Requires emergency treatment for complications arising from spontaneous abortion or induced abortion performed outside of the study site. Complications may include incomplete abortion, sepsis, lacerations, uterine perforations, and other related injuries	<input type="checkbox"/>
Read (or been read) Informed Consent statement below	<input type="checkbox"/>

If both boxes have been checked off, then you may proceed with data collection!

Informed Consent Statement	
<p>Hello, my name is [<i>name of Data Collector</i>], and in order to assess the quality of services in this hospital, we are conducting interviews with some patients. If you agree to participate, we may observe the care you receive, review your records, and/or we may ask you a few questions about your medical history and treatment while in the hospital.</p> <p>Any answers you give are completely CONFIDENTIAL, meaning that no one other than the study staff will be able to see your answers, and your name or address will NEVER be associated with the answers you give. You have every right to refuse to participate in the study. Whether or not you are in the study will not affect your treatment. If you do agree to be in the study, you may still refuse to answer any question or stop answering questions altogether.</p> <p>If you agree to participate in this study, please sign below.</p>	
<p>_____</p> <p>Signature of participant</p>	<p>_____</p> <p>Date (dd/mm/yyyy)</p>
<p>_____</p> <p>Witness (usually Data Collector)</p>	
<p>If you have any questions about this study later, please contact [<i>Principal Investigator's name and telephone number and/or address</i>]</p>	

POSTABORTION CARE PATIENT EXIT INTERVIEW	
5	Are these earnings <input type="checkbox"/>1 1 Paid in cash <input type="checkbox"/>2 2 Paid in kind <input type="checkbox"/>3 3 Both in cash and in kind <input type="checkbox"/>4 4 Other (please explain) _____ <input type="checkbox"/> No data
6	Are you able to read and write (<i>in any language</i>)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
7	How many years of education have you completed? _____ <input type="checkbox"/> No data
8	What is your marital status? <input type="checkbox"/>1 1 Single <input type="checkbox"/>2 2 Married (only wife) <input type="checkbox"/>3 3 Married (co-wife) <input type="checkbox"/>4 4 Cohabiting <input type="checkbox"/>5 5 Divorced <input type="checkbox"/>6 6 Widowed <input type="checkbox"/>7 7 Other (please explain) _____ <input type="checkbox"/> No data
REPRODUCTIVE HISTORY	
<i>Now I would like to ask you a few questions about any past pregnancies</i>	
	How many times have you ever been pregnant (including this one)? _____ If the answer is "1", then skip to Access to Care Section <input type="checkbox"/> No data
	How many children have you had that were born alive, even if they died shortly after birth? _____ <input type="checkbox"/> No data
	How many children have you had that were delivered stillborn? _____ <input type="checkbox"/> No data
	How many times have you miscarried? _____ <input type="checkbox"/> No data
	What was the outcome of your last (not current) pregnancy? (Choose only one) <input type="checkbox"/>1 1 Live birth <input type="checkbox"/>2 2 Stillborn <input type="checkbox"/>3 3 Miscarriage <input type="checkbox"/> No data
	When was your last pregnancy completed (prior to current pregnancy)? _____ / _____ mm/yyyy <input type="checkbox"/> No data
ACCESS TO CARE	
<i>Now I would like to ask you a few questions about how you got to this facility, and how easy or difficult it was for you to get treated here</i>	
	How long did it take you to get to this facility once you decided to come? _____ hours minutes <input type="checkbox"/> No data

POSTABORTION CARE PATIENT EXIT INTERVIEW	
<p>How did you get to this facility?</p> <p>1 Private car</p> <p>2 Taxi</p> <p>3 Bus</p> <p>4 Ambulance</p> <p>5 Walking</p> <p>6 Other (please explain)</p>	<p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> No data</p>
<p>Why did you come to this facility for help? (Choose all that apply)</p> <p>1 Closest to your home</p> <p>2 Only facility that you know of</p> <p>3 You were told by a friend or family member</p> <p>4 You were told by a medical person</p> <p>5 Other (please explain)</p>	<p><input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> No data</p>
<p>Did you first go to another place for treatment of your symptoms, and then were told to come here?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> No data</p>
<p>Where you sent home and asked to come back for treatment later?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> No data</p>
<p>Did anyone accompany you to the hospital? (If NO, skip to Question)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (skip to</p> <p><input type="checkbox"/> No data</p>
<p>If YES, who accompanied you to the hospital? (Choose all that apply)</p> <p>1 Husband or partner</p> <p>2 Parent(s)</p> <p>3 Another family member</p> <p>4 Friend(s)</p> <p>5 Neighbor</p> <p>6 Other (please explain)</p>	<p><input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> No data</p>
<p>Once you got to the facility, did you have any difficulty locating services? (Choose all that apply)</p> <p>1 No</p> <p>2 Not enough signs</p> <p>3 Not enough information</p> <p>4 Not enough money to pay for services</p> <p>5 Hospital staff were unhelpful</p> <p>6 Other (please explain)</p>	<p><input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> No data</p>
<p>Did anyone or anything stop or delay you from getting services? (Choose all that apply)</p> <p>1 No</p> <p>2 Services were closed</p> <p>3 I needed identification</p> <p>4 I had to pay fees before getting services</p> <p>5 I had to buy supplies before getting services</p> <p>6 Other (please explain)</p>	<p><input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> No data</p>

POSTABORTION CARE PATIENT EXIT INTERVIEW	
Please estimate the amount of time (in hours and minutes) that you waited from the time that you arrived until a provider examined you?	<div style="text-align: right;"> <u> </u> <u> </u> <i>hours</i> <i>minutes</i> </div> <input type="checkbox"/> No data
While you were waiting for treatment, did you spend most of your time (Choose only one) <ol style="list-style-type: none"> 1 Seated (in a chair or on a bench) 2 Seated or lying down on floor 3 Lying down on gurney, stretcher, or bed 4 Standing 5 Walking 6 Other (please explain) 	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> No data
How many vaginal exams did you have while you were being treated at this facility?	<div style="text-align: right;"> <u> </u> <u> </u> <input type="checkbox"/> No data </div>
After your treatment, please estimate the amount of time (in hours and minutes) you waited in the procedure area before being taken to a recovery area	<div style="text-align: right;"> <u> </u> <u> </u> <i>hours</i> <i>minutes</i> </div> <input type="checkbox"/> No data
Also, please estimate the amount of time (in hours and minutes) you waited in the recovery area to be discharged?	<div style="text-align: right;"> <u> </u> <u> </u> <i>hours</i> <i>minutes</i> </div> <input type="checkbox"/> No data

PATIENT AND PROVIDER INTERACTION

Now I would like to ask you a few questions about how you were treated by the staff at this facility	
Did the provider who treated you tell you his or her name?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
During your treatment, did the staff members call you by your name?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Before your treatment procedure, did a physician or nurse talk to you about the cause of your medical problem?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Before your treatment procedure, did a physician or nurse talk to you about the treatment so that you understood what was going to be done?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
After the procedure, were you told about the results of your treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Were you asked if you had any questions about your condition or your treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
If you asked questions about your condition or your treatment, were your questions answered so that you could understand?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No questions <input type="checkbox"/> No data

POSTABORTION CARE PATIENT EXIT INTERVIEW	
	Overall, do you feel like you were treated kindly or with respect at this facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
PAIN AND PAIN MANAGEMENT	
Now I would like to ask you some questions about any pain or discomfort you may have felt while being treated at this facility	
	On a scale of 0 to 10, where 0 is "no pain" and 10 is the worst pain you can imagine, please rate the pain you felt <u>while waiting for treatment</u> _____ <input type="checkbox"/> No data
	Where you asked about being in pain <u>while waiting for treatment</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
	If you said that you were in pain, were you offered any pain medication <u>while waiting for treatment</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No pain <input type="checkbox"/> No data
	On a scale of 0 to 10, where 0 is "no pain" and 10 is the worst pain you can imagine, please rate the pain you felt <u>during the procedure</u> _____ <input type="checkbox"/> No data
	Where you asked about being in pain <u>during the procedure</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
	If you said that you were in pain, were you offered any pain medication <u>during the procedure</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No pain <input type="checkbox"/> No data
	Where you conscious or awake <u>during the procedure</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
	On a scale of 0 to 10, where 0 is "no pain" and 10 is the worst pain you can imagine, please rate the pain you felt <u>while waiting in the recovery area</u> _____ <input type="checkbox"/> No data
	Where you asked about being in pain <u>while waiting in the recovery area</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
	If you said that you were in pain, were you offered any pain medication <u>while waiting in the recovery area</u> ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No pain <input type="checkbox"/> No data
EXPENSES FOR PATIENT	
I would now like to ask you a few questions about how much it cost you are your family to pay for services here	
	Please estimate how much it cost you to travel to the facility (<i>In local currency</i>) _____ <input type="checkbox"/> No data
	How much did you or your family have to pay in fees to this facility? (<i>In local currency</i>) _____ <input type="checkbox"/> No data
	Did you or your family have to pay extra for medications and supplies? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data

POSTABORTION CARE PATIENT EXIT INTERVIEW

If YES, then how much did you or your family spend for medications and supplies? (In local currency) _____	<input type="checkbox"/> No data
Were you required to pay the fees or pay for medications and supplies <u>before</u> receiving any treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Did you have to buy food while you were receiving treatment at this facility? If NO, skip to Question ##	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
If YES, then how much did you or your family spend for food for you while you were at the facility? (In local currency) _____	<input type="checkbox"/> No data
Did you have to pay for anything else while receiving treatment at this facility? (In local currency) If NO, then skip to Question ##	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to <input type="checkbox"/> No data
If YES, then what else did you have to pay for and how much did it cost? (Please list items and costs below)	
What did you think of the costs for your treatment?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> No data
1 Too little 2 They were okay 3 Too much 4 Other (please explain) _____	

CONTRACEPTIVE KNOWLEDGE AND USE

I would know like to ask you a few questions about your use of contraceptives	
Before coming to the hospital this time, had you ever <u>heard about</u> methods to prevent pregnancy? If NO skip to ??	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Before coming to the hospital this time, had you ever <u>used</u> a method to prevent pregnancy? If NO skip to ??	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
What method(s) of contraception have you ever used? (Choose all that apply)	<input checked="" type="checkbox"/> all that apply
1 Condom (Male or Female)	<input type="checkbox"/> 1
2 Spermicide (Foam, Tablet, Gel, Jelly, Film)	<input type="checkbox"/> 2
3 Diaphragm or Cervical Cap	<input type="checkbox"/> 3
4 Oral Contraceptives (Combined Oral Contraceptive, Progestin-only Pill)	<input type="checkbox"/> 4
5 Injectable (Depo-Provera, Net-pellets)	<input type="checkbox"/> 5
6 Implant (Norplant)	<input type="checkbox"/> 6
7 IUD	<input type="checkbox"/> 7
8 Female Sterilization	<input type="checkbox"/> 8
9 Male Sterilization	<input type="checkbox"/> 9
10 Lactational amenorrhea	<input type="checkbox"/> 10
11 Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings method)	<input type="checkbox"/> 11
12 Withdrawal	<input type="checkbox"/> 12
13 Traditional Methods (Herbs, etc)	<input type="checkbox"/> 13
14 Other (specify) _____	<input type="checkbox"/> 14 <input type="checkbox"/> No data

POSTABORTION CARE PATIENT EXIT INTERVIEW	
Were you or your partner using a contraceptive method when you became pregnant this time? If NO skip to ??	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to <input type="checkbox"/> No data
If "YES", what method were you using? (Choose all that apply) 1 Condom (Male or Female) <input type="checkbox"/> 2 Spermicide (Foam, Tablet, Gel, Jelly, Film) <input type="checkbox"/> 3 Diaphragm or Cervical Cap <input type="checkbox"/> 4 Oral Contraceptives (Combined Oral Contraceptive, Progestin-only Pill) <input type="checkbox"/> 5 Injectable (Depo-Provera, Net-pellets) <input type="checkbox"/> 6 Implant (Norplant) <input type="checkbox"/> 7 IUD <input type="checkbox"/> 8 Female Sterilization <input type="checkbox"/> 9 Male Sterilization <input type="checkbox"/> 10 Lactational amenorrhea <input type="checkbox"/> 11 Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings method) <input type="checkbox"/> 12 Withdrawal <input type="checkbox"/> 13 Traditional Methods (Herbs, etc) <input type="checkbox"/> 14 Other (please explain) _____ <input type="checkbox"/> <input type="checkbox"/> No data	<input checked="" type="checkbox"/> all that apply
If you were not using a contraceptive method when you got pregnant this time, why not? (Choose all that apply) 1 Current pregnancy was planned <input type="checkbox"/> 2 Not planning to have sex <input type="checkbox"/> 3 Contraceptives not available <input type="checkbox"/> 4 Cost of contraceptives(s) <input type="checkbox"/> 5 Partner opposed <input type="checkbox"/> 6 Concerns about contraceptive (side effects, health risks, etc) <input type="checkbox"/> 7 Religious or moral reasons <input type="checkbox"/> 8 Other (please explain) _____ <input type="checkbox"/> <input type="checkbox"/> No data	<input checked="" type="checkbox"/> all that apply
Did you plan this pregnancy at this time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Did you want or desire this pregnancy at this time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Do you desire a future pregnancy? 1 No - Never <input type="checkbox"/> 2 Yes - Immediately (within 3 months) (If YES then skip to next Section) <input type="checkbox"/> 2 (go to #) 3 Yes - Within two years <input type="checkbox"/> 4 Yes - More than two years <input type="checkbox"/> 5 Other (please explain) _____ <input type="checkbox"/> <input type="checkbox"/> No data	<input type="checkbox"/> No data
Did you request a contraceptive method or methods during your treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to #) <input type="checkbox"/> No data

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POSTABORTION CARE PATIENT EXIT INTERVIEW	
	✓ all that apply
If YES, what contraceptive method or methods did you want? (Choose all that apply)	<input type="checkbox"/> 1
1 Condom (Male or Female)	<input type="checkbox"/> 2
2 Spermicide (Foam, Tablet, Gel, Jelly, Film)	<input type="checkbox"/> 3
3 Diaphragm or Cervical Cap	<input type="checkbox"/> 4
4 Combined Oral Contraceptives	<input type="checkbox"/> 5
5 Progestin-only Pill (Mim-Pill)	<input type="checkbox"/> 6
6 Injectable (Depo-Provera, Net-pellets)	<input type="checkbox"/> 7
7 Implant (Norplant)	<input type="checkbox"/> 8
8 IUD	<input type="checkbox"/> 9
9 Female Sterilization	<input type="checkbox"/> 10
10 Male Sterilization (information for your partner)	<input type="checkbox"/> 11
11 Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings method)	<input type="checkbox"/> 12
12 Withdrawal	<input type="checkbox"/> 13
13 Traditional Methods (Herbs, etc)	<input type="checkbox"/> 14
14 Other (please explain) _____	<input type="checkbox"/> No data
Were you given the contraceptive method or methods you wanted?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No (go to #)
	<input type="checkbox"/> No data
	✓ all that apply
If NO, then why were you told that you could not have the contraceptive or contraceptives you wanted? (Choose all that apply)	<input type="checkbox"/> 1
1 Contraceptive was not available	<input type="checkbox"/> 2
2 Contraceptive was not recommended for medical reasons	<input type="checkbox"/> 3
3 Other (please explain) _____	<input type="checkbox"/> No data
Were you given a contraceptive method or methods? (If NO, then skip to Question ##)	<input type="checkbox"/> Yes
	<input type="checkbox"/> No (go to #)
	<input type="checkbox"/> No data
	✓ all that apply
If YES, what contraceptive method or methods were you given? (Choose all that apply)	<input type="checkbox"/> 1
1 Condom (Male or Female)	<input type="checkbox"/> 2
2 Spermicide (Foam, Tablet, Gel, Jelly, Film)	<input type="checkbox"/> 3
3 Diaphragm or Cervical Cap	<input type="checkbox"/> 4
4 Combined Oral Contraceptives	<input type="checkbox"/> 5
5 Progestin-only Pill (Mim-Pill)	<input type="checkbox"/> 6
6 Injectable (Depo-Provera, Net-pellets)	<input type="checkbox"/> 7
7 Implant (Norplant)	<input type="checkbox"/> 8
8 IUD	<input type="checkbox"/> 9
9 Female Sterilization	<input type="checkbox"/> 10
10 Male Sterilization (information for your partner)	<input type="checkbox"/> 11
11 Periodic Abstinence (Rhythm/Calendar, Basal Body Temperature, Cervical mucus/ Billings method)	<input type="checkbox"/> 12
12 Withdrawal	<input type="checkbox"/> 13
13 Traditional Methods (Herbs, etc)	<input type="checkbox"/> 14
14 Other (please explain) _____	<input type="checkbox"/> No data

POSTABORTION CARE PATIENT EXIT INTERVIEW		
If you were given CONDOMS, were you told (Choose all that apply)		
1	That you have the right to choose whether or not to use condoms?	<input checked="" type="checkbox"/> all that apply
2	How to properly place a condom on the penis (or insert a FEMALE CONDOM into the vagina)?	<input type="checkbox"/> 1
		<input type="checkbox"/> 2
3	Where to get additional condoms when you run out?	<input type="checkbox"/> 3
4	To always have your partner put on the condom before his penis penetrates your vagina (or to insert a FEMALE CONDOM before his penis penetrates your vagina)?	<input type="checkbox"/> 4
5	To always remove the condoms before your partner loses his erection?	<input type="checkbox"/> 5
6	To use a new condom each time you have sex?	<input type="checkbox"/> 6
7	How to store the condoms?	<input type="checkbox"/> 7
8	That condoms may help protect you against sexually transmitted infection such as HIV?	<input type="checkbox"/> 8
		<input type="checkbox"/> 9
9	What to do if you miss a period?	<input type="checkbox"/> 10
10	Other (please explain)	<input type="checkbox"/> No data
If you were given SPERMICIDES (FOAM, TABLET, GEL, JELLY, FILM), were you told (Choose all that apply)		
		<input checked="" type="checkbox"/> all that apply
1	That you have the right to choose whether or not to use spermicides?	<input type="checkbox"/> 1
2	How to properly insert spermicides into the vagina?	<input type="checkbox"/> 2
3	Where to get additional spermicides when you run out?	<input type="checkbox"/> 3
4	To always insert the spermicide into your vagina at least one hour before his penis penetrates your vagina?	<input type="checkbox"/> 4
		<input type="checkbox"/> 5
5	To re-insert more spermicide each time you have sex?	<input type="checkbox"/> 6
6	That spermicides may help protect you against sexually transmitted infection such as HIV?	<input type="checkbox"/> 7
		<input type="checkbox"/> 8
7	What sort of side-effects you might have while using spermicides (itching, discomfort)?	<input type="checkbox"/> 9
8	What to do if you miss a period?	<input type="checkbox"/> No data
9	Other (please explain)	
If you were given a DIAPHRAGM OR CERVICAL CAP, were you told (Choose all that apply)		
		<input checked="" type="checkbox"/> all that apply
1	That you have the right to choose whether or not to use a diaphragm or cervical cap?	<input type="checkbox"/> 1
2	To always use your diaphragm or cervical cap with a spermicide?	<input type="checkbox"/> 2
3	How to correctly insert your diaphragm or cervical cap?	<input type="checkbox"/> 3
4	To check and make sure your diaphragm or cervical cap is properly inserted before having sex again?	<input type="checkbox"/> 4
		<input type="checkbox"/> 5
5	You should check to make sure the diaphragm or cervical cap is not cracked or broken before you use it?	<input type="checkbox"/> 6
6	That diaphragms and cervical caps may help protect you against sexually transmitted infection such as HIV?	<input type="checkbox"/> 7
		<input type="checkbox"/> 8
7	What sort of side-effects you might have while using a diaphragm or cervical cap (discomfort, etc)?	<input type="checkbox"/> 9
8	What to do if you miss a period?	<input type="checkbox"/> No data
9	Other (please explain)	

POSTABORTION CARE PATIENT EXIT INTERVIEW

<p>If you were given COMBINED ORAL CONTRACEPTIVES (the PILL), were you told (Choose all that apply)</p>	<p>✓ all that apply</p>
<p>1 That you have the right to choose whether or not to use the Pill? <input type="checkbox"/></p>	<p><input type="checkbox"/>1</p>
<p>2 How to get more Pills when you run out? <input type="checkbox"/></p>	<p><input type="checkbox"/>2</p>
<p>3 That you should take a Pill everyday, regardless of whether or not you plan to have sex that day? <input type="checkbox"/></p>	<p><input type="checkbox"/>3</p>
<p>4 To try to take the Pill at the same time each day (such as first thing in the morning)? <input type="checkbox"/></p>	<p><input type="checkbox"/>4</p>
<p>5 What to do if you forget to take a Pill one day? <input type="checkbox"/></p>	<p><input type="checkbox"/>5</p>
<p>6 That the Pill does not help protect you from sexually transmitted infections such as HIV <input type="checkbox"/></p>	<p><input type="checkbox"/>6</p>
<p>7 What sort of side-effects you might have while using the Pill (changes in your menstrual patterns, weight gain, etc)? <input type="checkbox"/></p>	<p><input type="checkbox"/>7</p>
<p>8 That you should not use the Pill if you are breast-feeding <input type="checkbox"/></p>	<p><input type="checkbox"/>8</p>
<p>9 What to do if you miss a period? <input type="checkbox"/></p>	<p><input type="checkbox"/>9</p>
<p>10 Other (please explain) <input type="checkbox"/></p>	<p><input type="checkbox"/>10</p>
<p>8 That you should not use the Pill if you are breast-feeding <input type="checkbox"/></p>	<p><input type="checkbox"/> No data</p>
<p>9 What to do if you miss a period? <input type="checkbox"/></p>	
<p>10 Other (please explain) <input type="checkbox"/></p>	
<p>If you were given PROGESTIN-ONLY PILLS (the Mini-PILL), were you told (Choose all that apply)</p>	<p>✓ all that apply</p>
<p>1 That you have the right to choose whether or not to use the Mini-Pill? <input type="checkbox"/></p>	<p><input type="checkbox"/>1</p>
<p>2 How to get more Mini-Pills when you run out? <input type="checkbox"/></p>	<p><input type="checkbox"/>2</p>
<p>3 That you should take a Mini-Pill everyday, regardless of whether or not you plan to have sex that day? <input type="checkbox"/></p>	<p><input type="checkbox"/>3</p>
<p>4 To try to take the Mini-Pill at the same time each day (such as first thing in the morning)? <input type="checkbox"/></p>	<p><input type="checkbox"/>4</p>
<p>5 What to do if you forget to take a Mini-Pill one day? <input type="checkbox"/></p>	<p><input type="checkbox"/>5</p>
<p>6 That the Mini-Pill does not help protect you from sexually transmitted infections such as HIV <input type="checkbox"/></p>	<p><input type="checkbox"/>6</p>
<p>7 What sort of side-effects you might have while using the Mini-Pill (changes in your menstrual patterns, weight gain, etc)? <input type="checkbox"/></p>	<p><input type="checkbox"/>7</p>
<p>8 That it is okay to use the Mini-Pill if you are breast-feeding <input type="checkbox"/></p>	<p><input type="checkbox"/>8</p>
<p>9 What to do if you miss a period? <input type="checkbox"/></p>	<p><input type="checkbox"/>9</p>
<p>10 Other (please explain) <input type="checkbox"/></p>	<p><input type="checkbox"/>10</p>
<p>8 That it is okay to use the Mini-Pill if you are breast-feeding <input type="checkbox"/></p>	<p><input type="checkbox"/> No data</p>
<p>9 What to do if you miss a period? <input type="checkbox"/></p>	
<p>10 Other (please explain) <input type="checkbox"/></p>	
<p>If you were given INJECTABLES (Depo-Provera, Net-pellets), were you told (Choose all that apply)</p>	<p>✓ all that apply</p>
<p>1 That you have the right to choose whether or not to use an injectable? <input type="checkbox"/></p>	<p><input type="checkbox"/>1</p>
<p>2 How long the injection protects you from pregnancy <input type="checkbox"/></p>	<p><input type="checkbox"/>2</p>
<p>3 How to get another injection when it is time? <input type="checkbox"/></p>	<p><input type="checkbox"/>3</p>
<p>4 That injectables do not help protect you from sexually transmitted infections such as HIV <input type="checkbox"/></p>	<p><input type="checkbox"/>4</p>
<p>5 What sort of side-effects you might have while using injectables (changes in your menstrual patterns, weight gain, etc)? <input type="checkbox"/></p>	<p><input type="checkbox"/>5</p>
<p>6 What to do if you miss a period? <input type="checkbox"/></p>	<p><input type="checkbox"/>6</p>
<p>7 Other (please explain) <input type="checkbox"/></p>	<p><input type="checkbox"/>7</p>
<p>6 What to do if you miss a period? <input type="checkbox"/></p>	<p><input type="checkbox"/> No data</p>
<p>7 Other (please explain) <input type="checkbox"/></p>	

POSTABORTION CARE PATIENT EXIT INTERVIEW	
If you were given an IMPLANT (Norplant), were you told (Choose all that apply)	
1 That you have the right to choose whether or not to use an implant?	<input checked="" type="checkbox"/> all that apply
2 How long the implant protects you from pregnancy (up to 5 years)	<input type="checkbox"/> 1
3 How to get another implant when it is time?	<input type="checkbox"/> 2
4 How to get the implant removed if you decide you want to try to become pregnant?	<input type="checkbox"/> 3
5 That implants do not help protect you from sexually transmitted infections such as HIV	<input type="checkbox"/> 4
6 What sort of side-effects you might have while using implants (changes in your menstrual patterns, weight gain, etc)?	<input type="checkbox"/> 5
7 What to do if you miss a period?	<input type="checkbox"/> 6
8 Other (please explain) _____	<input type="checkbox"/> 7
	<input type="checkbox"/> 8
	<input type="checkbox"/> No data
If you were given an IUD, were you told (Choose all that apply)	
1 That you have the right to choose whether or not to use an IUD?	<input checked="" type="checkbox"/> all that apply
2 How long the implant protects you from pregnancy	<input type="checkbox"/> 1
3 How to get another IUD when it is time?	<input type="checkbox"/> 2
4 How to get the IUD removed if you decide you want to try to become pregnant?	<input type="checkbox"/> 3
5 How to check for the IUD "string" to make sure it is still properly in place?	<input type="checkbox"/> 4
6 That IUDs do not help protect you from sexually transmitted infections such as HIV	<input type="checkbox"/> 5
7 What sort of side-effects you might have while using IUDs (changes in your menstrual patterns, discomfort, etc)?	<input type="checkbox"/> 6
8 What to do if you miss a period?	<input type="checkbox"/> 7
9 Other (please explain) _____	<input type="checkbox"/> 8
	<input type="checkbox"/> 9
	<input type="checkbox"/> No data
If you were given a FEMALE STERILIZATION procedure, were you told (Choose all that apply)	
1 That you have the right to choose whether or not to be sterilized?	<input checked="" type="checkbox"/> all that apply
2 That sterilization is permanent?	<input type="checkbox"/> 1
3 If you had a tubal ligation (or your tubes "tied"), that you should use another contraceptive method for the first 3 months after the surgery	<input type="checkbox"/> 2
4 That sterilization does not help protect you from sexually transmitted infections such as HIV	<input type="checkbox"/> 3
5 What sort of side-effects you might have after being sterilized (discomfort, etc)?	<input type="checkbox"/> 4
6 What to do if you miss a period?	<input type="checkbox"/> 5
7 Other (please explain) _____	<input type="checkbox"/> 6
	<input type="checkbox"/> 7
	<input type="checkbox"/> No data
Were you given an appointment to talk to someone else about contraceptives?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> No data
POST-TREATMENT COUNSELING	
I would now like to ask you a few questions about any information you were given	
Were you told	
Normal bleeding varies from none to the equivalent of a heavy menses?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> No data
Bleeding may last from three days to light bleeding for up to three weeks?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> No data
Where to go for medical care and information?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> No data

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POSTABORTION CARE PATIENT EXIT INTERVIEW	
	<p>To take paracetamol for cramping?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>To rest for at least 24 hours?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Usual activities may be resumed when comfortable after 24 hours?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Sexual intercourse may be resumed 1 week after bleeding stops?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Condoms should be used for sex for the first week after abortion, regardless of whether or not you want to get pregnant again soon?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>To avoid douching?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Fertility can return in as soon as 10 days?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Risk factors for Sexually Transmitted Infections?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>How to prevent Sexually Transmitted Infections?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Where to obtain other reproductive health services?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
Were you told to come back to get treated if you	
	<p>Have severe or increased pain?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Develop a fever?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Develop chills or extreme tiredness?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Continue to bleed for more than 3 weeks?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Bleed more heavily than your normal period?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>
	<p>Pass a clot that is more than >8 cm in size?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data</p>

POSTABORTION CARE PATIENT EXIT INTERVIEW	
No bleeding coupled with abdominal pain?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Have concerns about the treatment or health?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Were you given a follow-up appointment? (If <i>NO</i> , then skip to Question ##)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
MISCELLANEOUS QUESTIONS	
I just have a few more questions for you	
If a friend or relative needed help, would you recommend this facility to them?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
If <i>NO</i> , then why would you not recommend this facility to a friend or relative? (Please explain)	
Did you feel like you had enough privacy while being treated at this facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No data
Do you now have any concerns about your health following the treatment you received?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to <input type="checkbox"/> No data
If <i>YES</i> , what are your concerns?	
Please tell me any other comments that you would like to make?	
Thank you very much for letting me talk with you today!	

Interview completed	
<input type="checkbox"/> Yes	
<input type="checkbox"/> No	
Date _____/_____/_____	Time _____
(dd/mm/yyyy)	(24 hour time)
Reviewed by Site Coordinator _____	
Print name	Signature

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*INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE*



**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
OBSERVATION OF POSTABORTION CARE
SERVICES QUESTIONNAIRE**

DATAPAC Module 5

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The DATAPAC *Guide to Using the Observation of Postabortion Care Services Questionnaire* is part of the DATAPAC Core Questionnaire Series, a set of questionnaires and instruction guides that provide an overview on how to design and conduct quantitative postabortion care (PAC) operation research (OR) studies. The DATAPAC Core Questionnaire Series is in modular form and currently includes

- Overview** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 1** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 2** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 3** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 4** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 5** **GUIDE TO USING THE OBSERVATION OF POSTABORTION CARE SERVICES QUESTIONNAIRE** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

The DATAPAC Core Questionnaire Series is designed to be a guide for rapidly assessing the quality and cost-effectiveness of PAC services. These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the DataPAC Core Questionnaire Series For Postabortion Care Operations Research (Module 1)*

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

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Overview

The DATAPAC *Guide to Using the Observation of Clinical Services Questionnaire* (Module 5) requires observations of postabortion care patients from the time they first present at the facility until they leave. This questionnaire is part of the DATAPAC *Core Questionnaire Series*, a set of questionnaires and instruction guides intended to provide an overview on how to design and conduct quantitative operations research (OR) studies on postabortion care (PAC). For more information on DATAPAC, please see the *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (King *et al*, 1998).

General Instructions for Observing PAC Services

There are various steps that a Data Collector can take to ensure that observing PAC services is as unobtrusive as possible ^a

- ! **Informed Consent Form** You should have a signed Informed Consent Form on file for every participant in your study. The forms should be locked and accessible only to research staff. It is essential to get the consent of both the patient and the provider before observing their interaction. Those patients unable to give informed written consent, such as when they are too medicated, in too much pain or discomfort, or otherwise incapacitated, should not be included in the study. You should also offer to give a copy of the form to each participant. The *Guide to Using the DataPAC Core Questionnaire Series for Postabortion Care Operations Research* (King *et al*, 1998) provides an example of an informed consent form, and copies of these forms can be obtained from Ipas.
- ! As patient observation could cause providers to perform differently, observers must develop good rapport with clinic staff and strive to minimize disruptions during the treatment of the patient. It is also important to note that both providers and patients may behave differently when they know they are being observed. Conducting a number of observations of service provision can help overcome this problem as far as the provider is concerned. Providers who are repeatedly observed may tend to ignore the observer and act as they would during a routine provider-patient encounter.
- ! The Data Collector should also explain to providers that the purpose of the observation is not to assess their personal performance, nor will information gathered through the observation be provided to their superiors to be used in a performance appraisal. The purpose of the study is for the observer to get a sense of how PAC services are provided *overall* at the health care facility. The observation is only one part of a larger process, with the overall goal of improving PAC services at the health care facility.
- ! Even if trained in the provision of PAC services, the Data Collector should let the provider know that she or he is not an “expert” who can be consulted during the session. The role of a Data Collector is solely that of observer.

^a Otsea K, Benson J, Measham D, Thorley M, Lidh R. Program monitoring manual for postabortion care. Ipas, Carrboro, North Carolina. 1998.

- ! The Data Collector may want to dress in neutral colored clothing to minimize drawing attention to her or himself
- ! Before the session begins, the Data Collector should find a place to sit or stand so that the patient-provider interaction can be seen clearly. However, it is important that the Data Collector not be in the way of either the provider or patient. Hovering too close to the patient or provider can cause them to be uncomfortable.
- ! During the session, the Data Collector should remain quiet and still so as not to distract the patient and provider. Writing on the forms should be done as discreetly as possible.
- ! Allow the patients and providers to refuse to be observed at any time, or to discontinue the observation completely.
- ! Do not discuss your observations with anyone other than the study staff.
- ! All observers need accurate watches so that they can record the actual time (hours and minutes) events occur.
- ! No more than one person should observe services at any one time.

How to Complete this Form

- ! **Participant Selection Checklist:** Be sure to complete the checklist and informed consent form *before* beginning data collection
- ! Only place *Patient's Study ID Code* on the form if you will need to link data from this questionnaire to data from other data collection instruments. This can best be accomplished, for example, by using the *DATAPAC General Information Questionnaire Module 1 (GIQ)*, and then using the *Patient Study ID Code* from the GIQ to link to other questionnaires such as the *DATAPAC Postabortion Care Patient Exit Interview Module 4*, or the *DATAPAC Clinical Case Report Form for Postabortion Care Patients Module 2*. The *Patient Study ID Code* is a unique number for each participating patient and is assigned by the study staff
- ! Use a ballpoint pen when making corrections. Strike through incorrect answer, make the correction and initial (see example below)

Example: How to correct or make changes to answers

Original response		Original response with correction	
Marital status		Marital status	
1 Married	<input checked="" type="checkbox"/>	1 Married	<input checked="" type="checkbox"/> TK
2 Cohabiting, "In union"	<input type="checkbox"/>	2 Cohabiting, "In union"	<input type="checkbox"/>
3 Single	<input type="checkbox"/>	3 Single	<input checked="" type="checkbox"/>
4 Divorced	<input type="checkbox"/>	4 Divorced	<input type="checkbox"/>
5 Widowed	<input type="checkbox"/>	5 Widowed	<input type="checkbox"/>

OBSERVATION OF POSTABORTION CARE SERVICES QUESTIONNAIRE

DATAPAC Module 5

Patient Selection Checklist	
The patient .	✓ if the answer is <u>YES</u>
Requires emergency treatment for complications arising from spontaneous abortion or induced abortion performed outside of the study site. Complications may include incomplete abortion, sepsis, lacerations, uterine perforations, and other related injuries	<input type="checkbox"/>
Has read, or been read, and has <u>signed</u> the <i>Informed Consent Form for Patients</i>	<input type="checkbox"/>

Only if both boxes have been checked, then you may proceed with data collection!

Instructions

- 1 Observe the postabortion care services provided to each study patient from the time she arrives at the facility until she leaves
- 2 Attempt to answer each question, except those questions indicated by the "skip" patterns
- 3 Allow the participants, both patients and staff, to refuse to be observed at any time
- 4 Make all marks with a "ball point" pen, and strike through and initial all corrections or changes

Remember to complete the Informed Consent Form!

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
14	Was the patient accompanied to the facility?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
15	Was the patient or person accompanying patient required to obtain medications or supplied before treatment could begin?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
16	Was the patient or person accompanying patient required to pay for services before treatment could begin?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
17	Were the following items available for the patient to use while waiting to be examined? (please check all that apply)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
18	Was the waiting area protected from the weather (i.e. sun, rain, cold temperatures, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
OBSERVATION OF PRE-TREATMENT EXAM		
22	Date when provider or other medical staff first evaluated the patient's status	<u> </u> / <u> </u> / <u> </u> <dd/mm/yyyy>
23	Time when provider or other medical staff first evaluated the patient's status	<u> </u> <u> </u> hours minutes (24 hour time)
24	What type of provider first examined the patient?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> Not observed
25	Did the person examining the patient communicate in a language she appeared to understand?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
26	If a staff member could not directly communicate with the patient, was someone available to translate?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
27	Did the staff member who examined the patient introduce him or herself to the patient by name?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
28	Did the staff member who greeted the patient call the patient by her name?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
29	Was the patient allowed to undress in privacy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not available
30	Was the patient given something (drape, gown, etc) to cover her body during examination? <i>If NO, skip to Question</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No (<i>skip to #</i>) <input type="checkbox"/> Not available
31	<i>If YES, did the covering appear to be clean?</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
32	Was the examination performed in an area with auditory privacy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not available
33	Was the examination performed in an area with visual privacy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not available
34	Was a pelvic exam performed? <i>If NO, then please skip to question #</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No (<i>skip to #</i>)
35	Was the pelvic exam explained to patient prior to the procedure (including a description of the procedure, risks and benefits, etc)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
36	If pelvic examination was done, did the provider	
	Wash hands with soap and water before the exam?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Wear gloves? (if NO, skip to Question ##)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Gloves appeared to be clean or sterile?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Perform a speculum exam? <i>If NO, skip to Question ##</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Speculum appeared to be disinfected or sterilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Perform bimanual examination?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Use adequate light?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5	
37	<p>What equipment or instruments were used to evaluate the uterus? <i>(Please check all that apply)</i></p> <p>1 Ultrasound <input type="checkbox"/> 1</p> <p>2 Other (Please specify _____) <input type="checkbox"/> 2</p> <p>3 None <input type="checkbox"/> 3</p> <p><input type="checkbox"/> Not observed</p>
38	<p>Did the provider place contaminated waste in a disposal container?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
39	<p>Did the provider place instruments into decontamination solution?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
40	<p>During the pelvic examination, how did the provider speak to the patient?</p> <p>1 Supportively <input type="checkbox"/> 1</p> <p>2 Neutrally <input type="checkbox"/> 2</p> <p>3 Negatively <input type="checkbox"/> 3</p> <p>4 Did not speak to patient at all <input type="checkbox"/> 4</p> <p><input type="checkbox"/> Not observed</p>
41	<p>Was pregnancy status assessed? <i>If NO, skip to Question #</i></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
42	<p>How was pregnancy status assessed? <A> <i>(please check all that apply)</i></p> <p>1 History of last menstrual period (LMP) <input type="checkbox"/> 1</p> <p>2 History of symptoms <input type="checkbox"/> 2</p> <p>3 Pelvic examination <input type="checkbox"/> 3</p> <p>4 Urinary HCG <input type="checkbox"/> 4</p> <p>5 Serum HCG <input type="checkbox"/> 5</p> <p>6 Ultrasound <input type="checkbox"/> 6</p> <p>7 Other (please specify) <input type="checkbox"/> 7</p> <p><input type="checkbox"/> Not observed</p>
43	<p>How was patient assessed for uterine perforation? <A> <i>(please check all that apply)</i></p> <p>1 By history <input type="checkbox"/> 1</p> <p>2 By clinical examination <input type="checkbox"/> 2</p> <p>3 By radiological examination <input type="checkbox"/> 3</p> <p>4 Laparoscopy <input type="checkbox"/> 4</p> <p>5 During laparotomy <input type="checkbox"/> 5</p> <p>6 Ultrasound <input type="checkbox"/> 6</p> <p>7 Not assessed <input type="checkbox"/> 7</p> <p><input type="checkbox"/> Not observed</p>
44	<p>Was the patient asked if she was in pain during the exam(s)?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
45	<p>Was there evidence of patient pain (visual or audible cues) during the exam(s)? <i>If NO skip to Question ##</i></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
46	<p>Was the patient given any pain medications?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
47	<p>Did patient's pain during the exam(s) seem adequately controlled?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
48	Was patient told the results of her diagnostic examinations and procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
49	Did the patient have the opportunity to ask questions after diagnostic examinations and procedures were completed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
50	If patient asked questions, were they answered accurately and appropriately?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No questions asked <input type="checkbox"/> Not observed
51	Whom, other than the staff, was informed of the patient's diagnosis? (please check all that apply) 1 Patient 2 Husband or Male Partner 3 Parent(s) 4 Police 5 Person or people accompanying patient to facility (if different than 2, 3, or 4) 6 Other (please specify) _____ 7 No one	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> Not observed
52	Where did patient wait for further evaluation and treatment? 1 Was treated immediately (skip to question) 2 Emergency Room Waiting Area 3 Examination/Treatment Room 4 Other (please specify)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
53	Was patient told that her access to treatment depended upon certain preconditions (e.g. payment, permission of husband, etc.)? If NO skip to Question	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #)
54	What pre-conditions were required in order for patient to receive treatment? 1 Husband or partner consent 2 Parental consent 3 Judicial or police approval 4 Consent of one or more medical specialists or a medical committee 5 Acceptance of a contraceptive method 6 Age 7 Marital status 8 Parity 9 Number of sons 10 Ethnicity or religion 11 Ability to pay or purchase services or supplies 12 Availability of medical personnel or supplies 13 Other (please specify) _____	✓ all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> Not observed
55	Were the following items available to the patient while she waited for treatment? (please check all that apply) 1 Standing area only 2 Chairs or benches 3 Couches 4 Beds	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5	
64	Did the staff member who treated the patient introduce him or herself to the patient by name? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
65	Did the staff member who greeted the patient call the patient by her name? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
66	Were treatment procedures explained to patient prior to implementation? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
67	Were the risks and benefits of the treatment procedure explained? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
68	Were possible alternative treatments or procedures explained? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
69	Did the patient have the opportunity to ask questions prior to the uterine evacuation? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
70	If patient asked questions, were they answered accurately and appropriately? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No questions asked <input type="checkbox"/> Not observed
71	Was the patient asked to give her permission for the uterine evacuation procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
72	Was treatment procedure performed in an area with auditory privacy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
73	Was treatment procedure performed in an area with visual privacy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
74	Before the treatment procedure began, did it appear that
	All necessary supplies, medications, and instruments were available in the treatment area? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Instruments were sterilized or high-level disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	Treatment procedure tray was prepared? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
	All necessary staff members were present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
75	Did the treatment area appear clean (free from visible dirt and pests)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
76	Was a trained anesthetist or anesthesiologist present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
77	Was the patient asked if she was in pain?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
78	Was there evidence of patient pain (visual or audible cues) during the procedure? <Y> <i>If NO, then skip to Question ##</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
79	Did patient's pain seem adequately controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
80	If patient was conscious during procedure, how did staff speak to her? <A> 1 Supportively 2 Neutrally 3 Negatively 4 Did not speak to patient at all	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
81	Was cervical dilation required? <i>If NO, skip to Question</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
82	If yes, how was cervix dilated? <A> 1 With rigid dilators? 2 With laminaria? 3 With progressively larger vacuum cannulae 4 Misoprostol 5 Other (please specify) _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not observed
83	Date when cervical dilation began	____/____/____ <dd/mm/yyyy>
84	Time when cervical dilation began	____:____ <i>hours minutes</i> (24 hour time)
85	Date when cervical dilation was completed?	____/____/____ <dd/mm/yyyy>
86	Time when cervical dilation was completed?	____:____ <i>hours minutes</i> (24 hour time)

DATAPAC OBSERVATION OF PAC SERVICES, MODULE 5	
87	<p>If invasive procedure (not including pelvic exam) performed, did staff appear to <input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p>1 Give patient antibiotic prior to procedure? <input type="checkbox"/> 2</p> <p>2 Scrub hands with antiseptic soap & dry hands before procedure? <input type="checkbox"/> 3</p> <p>3 Use sterile gloves? <input type="checkbox"/> 4</p> <p>4 Use sterile drapes? <input type="checkbox"/> 5</p> <p>5 Clean vaginal and pubic area or any area of incision? <input type="checkbox"/> 6</p> <p>6 Use sterile or high-level disinfected instruments? <input type="checkbox"/> 7</p> <p>7 Maintain sterile technique? <input type="checkbox"/> 8</p> <p>8 Follow universal precautions? <input type="checkbox"/> 9</p> <p>9 Perform procedure in room protected from pests? <input type="checkbox"/> Not observed</p>
88	<p>If manual vacuum aspiration (MVA) was used, did provider appear to check vacuum seal? <i>If NO, skip to Question</i></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
89	<p>If vacuum aspiration (VA) performed, either electrovacuum aspiration (EVA) or MVA, did a clinic staff person appear to <i>(check all that apply)</i> <input checked="" type="checkbox"/> all that apply</p> <p><input type="checkbox"/> 1</p> <p>1 Prepare syringe? <input type="checkbox"/> 2</p> <p>2 Cleanse vaginal area and cervix? <input type="checkbox"/> 3</p> <p>3 Use sterile or high-level disinfected instruments? <input type="checkbox"/> 4</p> <p>4 Insert cannula and attach syringe without trauma? <input type="checkbox"/> 5</p> <p>5 Use no-touch technique? <input type="checkbox"/> 6</p> <p>6 Move cannula effectively to empty cervix? <input type="checkbox"/> 7</p> <p>7 Stop when signs of completion seen? <input type="checkbox"/> 8</p> <p>8 Examine the aspirate? <input type="checkbox"/> 9</p> <p>9 Repeat procedure if products of conception not seen? <input type="checkbox"/> 10</p> <p>10 Monitor the patient for immediate complications prior to leaving the patient? <input type="checkbox"/> 11</p> <p>11 Immediately place all used instruments directly in a decontamination solution following the procedure? <input type="checkbox"/> 12</p> <p>12 Immediately place all waste in a covered container? <input type="checkbox"/> Not observed</p>
90	<p>How did completeness of uterine evacuation using VA appear to be confirmed? <input checked="" type="checkbox"/> all that apply</p> <p><i>(check all that apply)</i> <input type="checkbox"/> 1</p> <p>1 By time elapsed <input type="checkbox"/> 2</p> <p>2 Gritty noise or sensation <input type="checkbox"/> 3</p> <p>3 Break of suction <input type="checkbox"/> 4</p> <p>4 Clearing of aspirate <input type="checkbox"/> 5</p> <p>5 Examination of aspirated tissue <input type="checkbox"/> 6</p> <p>6 Follow-up D&C <input type="checkbox"/> 7</p> <p>7 Ultrasound <input type="checkbox"/> 8</p> <p>8 Other (please specify) _____ <input type="checkbox"/> Not observed</p>

DATAPAC OBSERVATION OF PAC SERVICES. MODULE 5		
91	If D&C performed, did a staff person appear to <i>If NO skip to Question</i>	✓ all that apply
	1 Cleanse vaginal area and cervix?	<input type="checkbox"/> 1
	2 Use sterile or high-level disinfected instruments?	<input type="checkbox"/> 2
	3 Properly dilate cervix?	<input type="checkbox"/> 3
	4 Insert curette without cervical trauma?	<input type="checkbox"/> 4
	5 Use no-touch technique?	<input type="checkbox"/> 5
	6 Move curette effectively to empty uterus?	<input type="checkbox"/> 6
	7 Stop when signs of completion seen?	<input type="checkbox"/> 7
	8 Examine the uterine contents?	<input type="checkbox"/> 8
	9 Repeat procedure if products of conception not seen?	<input type="checkbox"/> 9
	10 Monitor the patient for immediate complications prior to leaving the patient?	<input type="checkbox"/> 10
	11 Immediately place all used instruments directly in a disinfecting solution following the procedure?	<input type="checkbox"/> 11
	12 Immediately place all waste in a covered container?	<input type="checkbox"/> 11
		<input type="checkbox"/> Not observed
92	Did completeness of uterine evacuation using D&C appear to be determined? <i>If NO, skip to Question</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
93	If <i>YES</i> , how did completion of uterine evacuation using D&C appear to be confirmed?	✓ all that apply
	1 Patient was not pregnant at presentation to this service site	<input type="checkbox"/> 1
	2 Concurrent hysterectomy performed	<input type="checkbox"/> 2
	3 Uterus contracted	<input type="checkbox"/> 3
	4 Products of conception/tissue seen	<input type="checkbox"/> 4
	5 Ultrasound	<input type="checkbox"/> 5
	6 Other (please specify) _____	<input type="checkbox"/> 6
	7 Not confirmed	<input type="checkbox"/> 7
		<input type="checkbox"/> Not observed
94	Was patient told what to expect during the time immediately after the treatment (before discharge)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
95	Was patient told the results of her therapeutic procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
96	Did the patient have the opportunity to ask questions after therapeutic procedures were completed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
97	If patient asked questions, were they answered accurately and appropriately?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
98	After treatment procedure was completed (<i>check all that apply</i>)	✓ all that apply
	1 Was the treatment table disinfected?	<input type="checkbox"/> 1
	2 Did staff members wear cleaning gloves?	<input type="checkbox"/> 2
	3 Was the floor cleaned?	<input type="checkbox"/> 3
		<input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
99	How did patient leave procedure area?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <i>Observation complete</i> <input type="checkbox"/> Not observed
	1 Walked unassisted	
	2 Walked assisted	
	3 Wheelchair	
	4 Gurney or stretcher	
	5 Patient died & was taken to morgue (<i>If ✓, observation is completed</i>)	
100	Were the following items available for the patient to use while she waited to be taken to the recovery area?	<input checked="" type="checkbox"/> all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
	1 Standing area only	
	2 Chairs or benches	
	3 Couches	
	4 Beds	
101	Was the waiting area protected from the weather (i.e. sun, rain, cold temperatures, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
102	Date when treatment procedure was completed	_____ / _____ / _____ <dd/mm/yyyy>
103	Time when treatment procedure was completed	_____ hours _____ minutes (24 hour time)
OBSERVATION OF RECOVERY		
104	Was patient taken immediately (within 5 minutes) to the recovery area? <i>If YES, skip to Question</i>	<input type="checkbox"/> Yes (<i>skip to #</i>) <input type="checkbox"/> No <input type="checkbox"/> Not observed
105	Date when patient entered recovery area?	_____ / _____ / _____ <dd/mm/yyyy>
106	Time when patient entered recovery area?	_____ hours _____ minutes (24 hour time)
107	Where did patient go to recover?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> Not observed
	1 Immediately sent home/discharged	
	2 Remained in treatment area	
	3 Returned to waiting area or emergency department	
	4 Obstetrics/Gynecology ward	
	5 Surgical recovery room	
	6 Intensive care unit	
	7 Other (please specify) _____	
108	Did medical personnel observe the patient in the recovery area? <i>If NO, skip to Question</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
109	Who observed the patient in the recovery area?	<input type="checkbox"/> 1
	1 Obstetrician/Gynecologist (OB/GYN)	<input type="checkbox"/> 2
	2 General Physician	<input type="checkbox"/> 3
	3 Resident Physician or Resident OB/GYN	<input type="checkbox"/> 4
	4 Medical Intern	<input type="checkbox"/> 5
	5 Nurse or Nurse Midwife	<input type="checkbox"/> 6
	6 Nursing assistant	<input type="checkbox"/> 7
	7 Midwife (trained or untrained)	<input type="checkbox"/> 8
	8 Other (please specify) _____	<input type="checkbox"/> Not observed
110	Did any post-procedure complications develop before discharge? In NO, skip to Question	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not observed
111	What post-procedure complications developed? (check all that apply)	<input checked="" type="checkbox"/> all that apply
	1 Dehydration/insufficient fluid replacement	<input type="checkbox"/> 1
	2 Fluid overload	<input type="checkbox"/> 2
	3 Intoxication	<input type="checkbox"/> 3
	4 Anemia/insufficient blood replacement	<input type="checkbox"/> 4
	5 Complications of anesthesia (please specify) _____	<input type="checkbox"/> 5
	6 Adverse drug reaction (please specify) _____	<input type="checkbox"/> 6
	7 Fever	<input type="checkbox"/> 7
	8 Septicemia	<input type="checkbox"/> 8
	9 Pneumonia	<input type="checkbox"/> 9
	10 Urinary tract infection	<input type="checkbox"/> 10
	11 Endometritis	<input type="checkbox"/> 11
	12 Vaginal or perineal laceration	<input type="checkbox"/> 12
	13 Cervical laceration	<input type="checkbox"/> 13
	14 Bladder perforation/urinary incontinence	<input type="checkbox"/> 14
	15 Uterine perforation	<input type="checkbox"/> 15
	16 Bowel perforation	<input type="checkbox"/> 16
	17 Peritonitis	<input type="checkbox"/> 17
	18 Retained products of conception (POC)	<input type="checkbox"/> 18
	19 Ongoing or ruptured ectopic pregnancy	<input type="checkbox"/> 19
	20 Hemorrhage	<input type="checkbox"/> 20
	21 Sepsis/septic shock	<input type="checkbox"/> 21
	22 Postabortal Syndrome, excessive anxiety, etc	<input type="checkbox"/> 22
	23 Death (If YES, then observation is completed)	<input type="checkbox"/> 23
	24 Other (please specify) _____	<input type="checkbox"/> 24
		<input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
112	When conscious, was the patient told	✓ all that apply
	1 Normal bleeding varies from none to the equivalent of a heavy menses?	<input type="checkbox"/> 1
	2 Bleeding may last from three days to light bleeding for up to three weeks?	<input type="checkbox"/> 2
	3 Where to go for medical care and information	<input type="checkbox"/> 3
	4 Take paracetamol for cramping	<input type="checkbox"/> 4
	5 Rest for at least 24 hours?	<input type="checkbox"/> 5
	6 Usual activities may be resumed when comfortable after 24 hours?	<input type="checkbox"/> 6
	7 Sexual intercourse may be resumed 1 week after bleeding stops?	<input type="checkbox"/> 7
	8 Condoms should be used for sex for the first week after abortion, regardless of fertility intentions?	<input type="checkbox"/> 8
	9 Avoid douching?	<input type="checkbox"/> 9
	10 Fertility will return in as soon as 10 days?	<input type="checkbox"/> 10
	11 Risk factors for Sexually Transmitted Infections?	<input type="checkbox"/> 11
	12 How to prevent Sexually Transmitted Infections?	<input type="checkbox"/> 12
	13 Other reproductive health services available?	<input type="checkbox"/> 13
	14 Where to obtain other reproductive health services?	<input type="checkbox"/> 14
		<input type="checkbox"/> Not observed
113	Was the patient told to visit a provider if she has	✓ all that apply
	1 Severe or increased pain?	<input type="checkbox"/> 1
	2 Fever?	<input type="checkbox"/> 2
	3 Chills or extreme tiredness?	<input type="checkbox"/> 3
	4 More than 3 weeks of bleeding?	<input type="checkbox"/> 4
	5 Bleeding more than menstrual bleeding?	<input type="checkbox"/> 5
	6 Passage of clots >8 cm in size?	<input type="checkbox"/> 6
	7 No bleeding coupled with abdominal pain?	<input type="checkbox"/> 7
	8 Has concerns about the treatment or her health?	<input type="checkbox"/> 8
		<input type="checkbox"/> Not observed
114	Was patient given written instructions?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
115	Where did the patient go following discharge from the recovery area?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> Not observed
116	Were the following items available for the patient to use while waiting to receive postabortion counseling or to be discharged? (check all that apply)	✓ all that apply <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
	1 Standing area only	
	2 Chairs or benches	
	3 Couches	
	4 Beds	
117	Was the waiting area protected from the weather (i.e. sun, rain, cold temperatures, etc)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5	
118	Date patient left recovery area <div style="text-align: right;">____/____/____ <dd/mm/yyyy></div>
119	Time patient left recovery area? <div style="text-align: right;">____ hours ____ minutes (24 hour time)</div>
OBSERVATION OF POSTABORTION CONTRACEPTIVE COUNSELING	
120	Were contraceptive and/or information offered to the patient? <i>If NO, then skip to DISCHARGE Section (Question ##)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No (skip to #) <input type="checkbox"/> Not observed
121	Where did contraceptive counseling take place 1 In the recovery area? <input type="checkbox"/> 1 2 On the obstetrics & gynecology ward? <input type="checkbox"/> 2 3 At the family planning clinic? <input type="checkbox"/> 3 4 Other (please specify) _____ <input type="checkbox"/> 4 <input type="checkbox"/> Not observed
122	Who primarily provided the contraceptive counseling? 1 Counselor from Family Planning Clinic <input type="checkbox"/> 1 2 Obstetrician/Gynecologist (OB/GYN) <input type="checkbox"/> 2 3 General Physician <input type="checkbox"/> 3 4 Resident Physician or Resident OB/GYN <input type="checkbox"/> 4 5 Medical Intern <input type="checkbox"/> 5 6 Nurse or Nurse Midwife <input type="checkbox"/> 6 7 Nursing assistant <input type="checkbox"/> 7 8 Midwife (trained or untrained) <input type="checkbox"/> 8 9 Other (please specify) _____ <input type="checkbox"/> 9 <input type="checkbox"/> Not observed
123	Did the postabortion contraceptive counseling take place in an area with visual privacy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
124	Did the postabortion contraceptive counseling take place in an area with auditory privacy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
125	Was the patient told about the immediate risk of pregnancy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
126	Was the patient asked about her future plans or desires for pregnancy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
127	Was the patient told about all available contraceptives (available at that facility)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
128	Was the patient told about the potential side effects associated with each available method? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed
129	Did the patient express a desire for contraception? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5		
130	If the patient desired a contraceptive, what method was she given?	<input type="checkbox"/> 1
	1 Male Condom	<input type="checkbox"/> 2
	2 Female Condom	<input type="checkbox"/> 3
	3 Spermicide	<input type="checkbox"/> 4
	4 Diaphragm	<input type="checkbox"/> 5
	5 Combined oral contraceptive	<input type="checkbox"/> 6
	6 Progestin-only pill	<input type="checkbox"/> 7
	7 Injectable	<input type="checkbox"/> 8
	8 Implant	<input type="checkbox"/> 9
	9 IUD	<input type="checkbox"/> 10
	10 Female sterilization	<input type="checkbox"/> 11
	11 Information on male sterilization	<input type="checkbox"/> 12
	12 Other method (please specify) _____	<input type="checkbox"/> Not observed
131	If the desired contraceptive was not given to the patient, was this because the method was	<input checked="" type="checkbox"/> all that apply
	1 Medically contraindicated?	<input type="checkbox"/> 1
	2 Not available at the facility?	<input type="checkbox"/> 2
	3 Temporarily out of stock?	<input type="checkbox"/> 3
	4 Provider's opinion of method?	<input type="checkbox"/> 4
	5 No reason provided to patient?	<input type="checkbox"/> Not observed
132	If the patient was not given her desired contraceptive method, was she	<input checked="" type="checkbox"/> all that apply
	1 Sent home with no further information or services?	<input type="checkbox"/> 1
	2 Given a referral slip to go elsewhere?	<input type="checkbox"/> 2
	3 Given an appointment for another time at this clinic?	<input type="checkbox"/> 3
	4 Given an appointment at another clinic?	<input type="checkbox"/> 4
	5 Given appointment for follow up visit in home?	<input type="checkbox"/> 5
	6 Brought to another site within or near clinic for method provision on same day?	<input type="checkbox"/> 6
		<input type="checkbox"/> Not observed
133	If desired method unavailable or contraindicated, was the patient offered an alternative method?	<input type="checkbox"/> Yes
		<input type="checkbox"/> No
		<input type="checkbox"/> Not observed
134	If patient was offered and accepted an alternative method, what was the method?	<input type="checkbox"/> 1
	1 Male Condom	<input type="checkbox"/> 2
	2 Female Condom	<input type="checkbox"/> 3
	3 Spermicide	<input type="checkbox"/> 4
	4 Diaphragm	<input type="checkbox"/> 5
	5 Combined oral contraceptive	<input type="checkbox"/> 6
	6 Progestin-only pill	<input type="checkbox"/> 7
	7 Injectable	<input type="checkbox"/> 8
	8 Implant	<input type="checkbox"/> 9
	9 IUD	<input type="checkbox"/> 10
	10 Female sterilization	<input type="checkbox"/> 11
	11 Information on male sterilization	<input type="checkbox"/> 12
	12 Other method (please specify) _____	<input type="checkbox"/> Not observed

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5	
135	<p>If the patient did not accept the alternative method, why not? ✓ all that apply</p> <p>1 Patient did not like the alternative method <input type="checkbox"/> 1</p> <p>2 Alternative method not available at site <input type="checkbox"/> 2</p> <p>3 Alternative method out of stock <input type="checkbox"/> 3</p> <p>4 Medical contraindication to alternative method <input type="checkbox"/> 4</p> <p>5 Patient wanted alternative method at later date <input type="checkbox"/> 5</p> <p>6 Social barrier to alternative method (please specify) _____ <input type="checkbox"/> 6</p> <p>7 Other (please specify) _____ <input type="checkbox"/> 7</p> <p><input type="checkbox"/> Not observed</p>
136	<p>Was the patient given verbal or written instructions on how to use the method she was given? <input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
137	<p>Was the patient told how to get resupplies of the method (if applicable)? <input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p> <p><input type="checkbox"/> Not applicable</p>
138	<p>Were the following items available for the patient to use while waiting to be discharged? ✓ all that apply</p> <p>1 Standing area only <input type="checkbox"/> 1</p> <p>2 Chairs or benches <input type="checkbox"/> 2</p> <p>3 Couches <input type="checkbox"/> 3</p> <p>4 Beds <input type="checkbox"/> 4</p> <p><input type="checkbox"/> Not observed</p>
139	<p>Was the waiting area protected from the weather (i.e. sun, rain, cold temperatures, etc)? <input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>
140	<p>Date patient left contraceptive counseling area _____</p> <p style="text-align: right;"><dd/mm/yyyy></p>
141	<p>Time patient left contraceptive counseling area _____</p> <p style="text-align: right;">_____</p> <p style="text-align: right;"><i>hours minutes</i></p> <p style="text-align: right;"><i>(24 hour time)</i></p>
OBSERVATION OF DISCHARGE	
142	<p>Discharged to <input type="checkbox"/> 1</p> <p>1 Home? <input type="checkbox"/> 2</p> <p>2 Another health facility? <input type="checkbox"/> 3</p> <p>3 Jail or police custody? <input type="checkbox"/> 4</p> <p>4 Other (please specify) _____ <input type="checkbox"/> Not observed</p>
143	<p>Was patient given post discharge follow up appointment? <input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not observed</p>

DATAPAC OBSERVATION OF PAC SERVICES: MODULE 5	
144	Other clinic(s) to which patient was referred ✓ all that apply
	1 None <input type="checkbox"/> 1
	2 Family planning <input type="checkbox"/> 2
	3 Sexually Transmitted Infection (HIV/AIDS) <input type="checkbox"/> 3
	4 Antenatal <input type="checkbox"/> 4
	5 Primary health care/Maternal and Child Health <input type="checkbox"/> 5
	6 Mental health/Social Services <input type="checkbox"/> 6
	7 Other (please specify) _____ <input type="checkbox"/> 7
	<input type="checkbox"/> Not observed
145	Day of Discharge / / <dd/mm/yyyy>
146	Discharge Time hours minutes (24 hour time)
Be sure to thank the patient and providers for allowing you to observe the patient's care!	

Observation completed	Date _____	Time _____
<input type="checkbox"/> Yes	(dd/mm/yyyy)	(24 hour time)
<input type="checkbox"/> No		
Reviewed by Site Coordinator	_____	_____
	Print name	Signature

*INTERNATIONAL
DATABASE OF
OPERATIONS
RESEARCH ON
POSTABORTION CARE*



**DATAPAC Core
Questionnaire Series**

**GUIDE TO USING THE
SUPPLIES AND EQUIPMENT CHECKLIST FOR
POSTABORTION CARE SERVICES**

DATAPAC Module 6

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and

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Clinical Technical Working Group

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Version 1 2



The DATAPAC *Supplies and Equipment Checklist for Postabortion Care Services* is part of the DATAPAC Core Questionnaire Series, a set of questionnaires and instruction guides that provide an overview on how to design and conduct quantitative PAC OR studies. The DATAPAC Core Questionnaire Series is in modular form and currently includes

- Overview** **GUIDE TO USING THE DATAPAC CORE QUESTIONNAIRE SERIES FOR POSTABORTION CARE OPERATIONS RESEARCH** A general guide for designing and implementing PAC OR
- Module 1** **GUIDE TO USING THE GENERAL INFORMATION QUESTIONNAIRE FOR POSTABORTION CARE PATIENTS** A brief questionnaire designed to uniquely identify study participants and sites
- Module 2** **GUIDE TO USING THE CLINICAL CASE REPORT FORM FOR POSTABORTION CARE PATIENTS** A questionnaire for documenting the clinical presentation of PAC patients and their course of treatment as recorded in patient charts and other records
- Module 3** **GUIDE TO ASSESSING RESOURCE USE IN THE PROVISION OF POSTABORTION CARE** A series of questionnaires designed to document resource use and cost of providing PAC services
- Module 4** **GUIDE TO USING THE POSTABORTION CARE PATIENT EXIT INTERVIEW** A questionnaire for assessing the quality of PAC services from the patient's perspective, including measures of pain and understanding of PAC counseling messages
- Module 5** **GUIDE FOR OBSERVATION OF POSTABORTION CARE SERVICES** An observation checklist for assessing the quality of PAC clinical practice including issues such as infection control, pain management, and information given to patients
- Module 6** **GUIDE TO USING THE POSTABORTION CARE SUPPLIES & EQUIPMENT CHECKLIST** An inventory of supplies and equipment necessary for providing PAC services

The DATAPAC Core Questionnaire Series is designed to be a guide for rapidly assessing the quality and cost-effectiveness of PAC services. These instruments and guides are quantitative in design and do not address qualitative research methodologies such as open-ended interviews or focus groups. The *General Information Questionnaire (Module 1)* is the backbone of the series, collecting general information designed to uniquely identify study participants and sites. It is intended for use with all PAC OR studies that are designed based on this series. For example, we recommend that a researcher designing a PAC "Cost Study" consult both the *Guide to Assessing Resource Use in the Provision of Postabortion Care (Module 3)* as well as the *Guide to Using the DataPAC Core Questionnaire Series For Postabortion Care Operations Research (Module 1)*

The instruments included in the DATAPAC Core Questionnaire Series are meant to serve as templates and may need to be modified for each study to reflect differences in treatment practices and study sites. In addition to the DATAPAC Core Questionnaire Series, DATAPAC also includes an electronic database of data from PAC OR studies and a library of supporting documentation such as protocols and reports. These resources are free to anyone interested in PAC OR. Please contact Ipas for more information or to make contributions to DATAPAC.

Acknowledgments

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Overview

The DATAPAC *Supplies and Equipment Checklist for Postabortion Care Services* is actually a series of checklists. When used as a set, the checklists can be used to assess the availability and quality of supplies and equipment needed to provide adequate postabortion care (PAC) services. The checklists provided here include:

Checklist Name	Description
Facilities	Infrastructure, utilities, and “durable goods” (items that are intended to be used for one year or longer). Examples include running water, adequate ventilation, and a locked storage area for medical supplies equipment.
Reusable Supplies	Items that can be used, or cleaned and reused, several times. Examples include specula, stethoscopes, and linens.
Disposable Supplies	Items that should only be used once and then discarded. Examples include disposable gloves, gauze, and bleach.
Lab Supplies	Items that are needed in order to provide lab services generally required when treating PAC patients. Examples include pregnancy tests, microscope, and ultrasound equipment.
Medications	Medications commonly needed for PAC patients. Examples include local anesthesia, analgesia, and antibiotics.
Contraceptive Commodities	Contraceptive methods. Examples include condoms, IUDs, and oral contraceptive pills.

These checklists include items that are either required or useful when providing comprehensive PAC services. However, it is likely that your facility will have supplies and equipment that are not already present on these checklists. The checklists are therefore available from Ipas on diskette in Microsoft Word so that additional items can be added to the list. In order to improve the DATAPAC *Supplies and Equipment Checklist for Postabortion Care Services* for future users, please contact the DATAPAC Coordinator with any suggested additions to the checklists.

How to Complete the Checklists

Each question requires a “Yes” or “No” response. Generally, in order to answer “Yes” to the question, the Data Collector should be able to *observe* the item. If a staff member says that an item exists, but cannot show it to the Data Collector, then the correct response should be “No”. However, Data Collectors need to be flexible. For example, contraceptives may be in a locked cabinet with limited access. The item exists, the Data Collector can see it, but it is not necessarily “available”. In this case, we recommend that you mark the item as “No”, but note in the space provided for comments that although the item exists, more providers need access to the cabinet.

Also, many items on these checklists may be subject to “stock outs”, meaning that the facility runs out of the item occasionally or even frequently. This is particularly true for items on the Disposable Supplies, Laboratory Services and Tests, Medications, and Contraceptives checklists. Therefore, Appendix 1 contains copies of these forms where, in place of the Yes/No format, the

Data Collector may respond that an item is either “Usually”, “Sometimes”, or “Never” available Unless the Data Collector is a member of the facility staff, it is likely that she or he will need to interview staff involved in PAC service provision in order to ascertain whether item are frequently unavailable

Other important instructions include

- ! **Informed Consent:** If completing the checklist requires you to interview staff involved with PAC services (Appendix 1), then you should have a signed informed consent form on file for every participant in your study You should also offer to give a copy of the informed consent form to each participant The *Guide to Using the DataPAC Core Questionnaire Series For Postabortion Care Operations Research* (King et al, 1998) provides an example of an informed consent form, and copies of these forms can be obtained from Ipas
- ! Do not say or do anything (other than complete the checklist) during the provision of PAC services Be as discreet as possible while completing the checklist
- ! Do not discuss your observations with anyone other than the study staff
- ! Use ball point pen when making corrections Strike through incorrect answer, make the correction and initial (see example below)

Example: How to correct or make changes to answers

Original response		Original response with correction	
Marital status		Marital status	
1 Married	<input checked="" type="checkbox"/> 1	1 Married	^{TK} <input type="checkbox"/>1
2 Cohabiting, “In union”	<input type="checkbox"/> 2	2 Cohabiting, “In union”	<input type="checkbox"/> 2
3 Single	<input type="checkbox"/> 3	3 Single	<input checked="" type="checkbox"/> 3
4 Divorced	<input type="checkbox"/> 4	4 Divorced	<input type="checkbox"/> 4
5 Widowed	<input type="checkbox"/> 5	5 Widowed	<input type="checkbox"/> 5

When you have finished completing the checklist, be sure to **THANK** any staff or administrators who may have assisted in the data collection process Good luck!

SUPPLIES AND EQUIPMENT CHECKLIST FOR POSTABORTION CARE SERVICES DATA PAC Module 6		
Data collector name or ID# _____		Checklist # _____
Hospital Name _____		
Date of data collection (dd/mm/yyyy) ____/____/____		
Time observation began _____	Time observation ended _____	
(24 hour time)	(24 hour time)	
Was form completed? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was form reviewed by Site Coordinator? <input type="checkbox"/> Yes <input type="checkbox"/> No	
		____/____/____
Site Coordinator (Print Name)	Signature	Date Reviewed (dd/mm/yyyy)

FACILITIES CHECKLIST

Instructions ✓ **YES** if the item is Available, Functioning *and* Adequate
 ✓ **NO** if the item is Not Available, Not Functioning, and/or Not Adequate
 Note any comments about an individual item in the appropriate column

FACILITIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
Patient Changing Area	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Visual privacy (patient & provider cannot be seen by others)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Auditory privacy (patient & provider cannot be heard by others)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Exam table (with stirrups for holding knees)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Beds			<input type="checkbox"/> Yes <input type="checkbox"/> No	
Stretchers or gurneys	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Chairs or benches	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Toilet for patients	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Sink	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Running water	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Adequate room lighting	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Adequate ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Adequate heat	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Electricity	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Locked Storage Area (for medical supplies/equipment)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Television & VCR	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

FACILITIES CHECKLIST

FACILITIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>YES = Available, Functioning, and Adequate NO = Not Available, Not Functioning, and/or Inadequate</p>				

Instructions ✓ **YES** if the item is Available, Functioning *and* Adequate
 ✓ **NO** if the item is Not Available, Not Functioning, and/or Not Adequate
 Note any comments about an individual item in the appropriate column

REUSABLE EQUIPMENT & SUPPLIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
Clean linens (gowns, sheets, towels, etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Exam gloves (note number of pairs)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		# of pairs _____
Cleaning gloves (note number of pairs)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		# of pairs _____
Reusable masks	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Eye protection (glasses, goggles)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Surgical gowns or aprons	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Adjustable lighting	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Stool	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Instrument table, tray, or shelf	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Sterilizer (Autoclave)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Container with lid (for storing sterilized or disinfected instruments)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Stethoscope	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Blood pressure gauge (Sphygmomanometer)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Thermometer	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Vaginal speculum	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Sponge or ovum forceps	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

REUSABLE EQUIPMENT & SUPPLIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
Tenaculum	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Cup(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Blood collection tubes	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10cc syringes with needles	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Needle extenders	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Sharps disposal container	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Container (for contaminated trash/ disposable items)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Decontamination bucket (for contaminated instruments)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Basins	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Oxygen tank, tubing, mask, flowmeter (full tank)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Ambu/Self-inflating bag	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Oral airways	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Suction apparatus	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
IV sets (needles?)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
IV stand	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Flashlight (torch or other emergency light source)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
MVA single-valve syringe (with 3cc silicone)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Valve set replacement (for single-valve syringe)		<input type="checkbox"/> Yes <input type="checkbox"/> No		

REUSABLE EQUIPMENT & SUPPLIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
MVA double-valve syringe (with adaptors & 3cc silicone)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Valve set replacement (for double-valve syringe)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Spare syringe seals (o-rings)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (4mm standard)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (5mm standard)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (6mm standard)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (7mm standard)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (8mm standard)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (9mm single-scoop aperture)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (10mm single-scoop aperture)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
MVA cannulae (12mm single-scoop aperture)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Curette (Uterine-7mm)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Curette (Uterine-12mm)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Dilator(s) (please specify type) _____		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Dilator(s) (please specify type) _____		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Dilator(s) (please specify type) _____		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Information, education, communication materials (charts, posters, etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

REUSABLE EQUIPMENT & SUPPLIES	EMERGENCY ROOM	TREATMENT AREA	RECOVERY AREA	COMMENTS
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other (please specify) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>YES = Available, Functioning, and Adequate NO = Not Available, Not Functioning, and/or Inadequate</p>				

Instructions • ✓ **USUALLY** if the item is always or nearly always Available, Functioning *and* Adequate
 ✓ **SOMETIMES** if the item is sometimes or occasionally Available, Functioning *and* Adequate
 ✓ **NEVER** if the item is Not Available, Not Functioning, and/or Not Adequate
 Note any comments about an individual item in the appropriate column

Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Disposable sterile gloves	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable masks	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable 10cc syringes with needles	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable blood collection tubes	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Cotton swabs	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Gauze	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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DISPOSABLE SUPPLIES

Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Cotton	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Alcohol	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disinfectant (bleach etc)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Gluteraldehyde (for cold sterilization)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never		
Antiseptic (for cleaning vagina & cervix) (specify type)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Soap	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Sanitary Pads	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Information, education & communication materials (for patients to keep)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never		<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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LABORATORY SERVICES & TESTS

Instructions:

- ✓ **USUALLY** if the item is always or nearly always Available, Functioning *and* Adequate
- ✓ **SOMETIMES** if the item is sometimes or occasionally Available, Functioning *and* Adequate
- ✓ **NEVER** if the item is Not Available, Not Functioning, and/or Not Adequate

Note any comments about an individual item in the appropriate column

LABORATORY SERVICES & TESTS	Location		COMMENTS
	Emergency Room	Treatment Area	
Hematocrit	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Hemoglobin	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Pregnancy test (please specify type) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Pregnancy test (please specify type) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Pregnancy test (please specify type) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Pregnancy test (please specify type) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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LABORATORY SERVICES & TESTS	Location		COMMENTS
	Emergency Room	Treatment Area	
Ultrasound	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Radiology (X-ray)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Blood cross-match	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Blood typing	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Transfusion	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Rh factor	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Blood bank	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Microscope	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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LABORATORY SERVICES & TESTS

LABORATORY SERVICES & TESTS	Location		COMMENTS
	Emergency Room	Treatment Area	
Gram-staining materials	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Culture media & supplies	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Other Laboratory Services (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Other Laboratory Services (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Other Laboratory Services (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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MEDICATIONS CHECKLIST

Instructions:

- ✓ **USUALLY** if the item is always or nearly always Available, Functioning *and* Adequate
- ✓ **SOMETIMES** if the item is sometimes or occasionally Available, Functioning *and* Adequate
- ✓ **NEVER** if the item is Not Available, Not Functioning, and/or Not Adequate

Note any comments about an individual item in the appropriate column

Medications	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
General Anesthesia (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Regional Anesthesia (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Local Anesthesia (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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MEDICATIONS CHECKLIST

Medications	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Analgesia (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Anxiolytics (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
_____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Antibiotics (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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Medications	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Oxytoxics (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
IV fluids (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Blood products (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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MEDICATIONS CHECKLIST

Medications	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Other medications (please specify)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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CONTRACEPTIVE CHECKLIST

Instructions ✓ **USUALLY** if the item is always or nearly always Available, Functioning *and* Adequate
 ✓ **SOMETIMES** if the item is sometimes or occasionally Available, Functioning *and* Adequate
 ✓ **NEVER** if the item is Not Available, Not Functioning, and/or Not Adequate
 Note any comments about an individual item in the appropriate column

Contraceptives	Usually	Sometime	Never	Comments
MODERN METHODS				
Male Condom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Female Condom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spermicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diaphragm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Combined oral contraceptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Progestin-only pill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Injectable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Implant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IUD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Female sterilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Male sterilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other method (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other method (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Appendix 1.

These forms are designed to be used when interview knowledgeable staff to determine whether supplies of certain items occasionally or frequently run out. Remember, if you interview staff in order to complete these forms, you should first obtain a written *Informed Consent Form* from each staff member involved.

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Instructions ✓ **USUALLY** if the item is always or nearly always Available, Functioning *and* Adequate
 ✓ **SOMETIMES** if the item is sometimes or occasionally Available, Functioning *and* Adequate
 ✓ **NEVER** if the item is Not Available, Not Functioning, and/or Not Adequate
 Note any comments about an individual item in the appropriate column

Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Disposable sterile gloves	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable masks	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable 10cc syringes with needles	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disposable blood collection tubes	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Cotton swabs	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Gauze	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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DISPOSABLE SUPPLIES

Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Cotton	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Alcohol	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Disinfectant (bleach, etc)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Gluteraldehyde (for cold sterilization)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never		
Antiseptic (for cleaning vagina & cervix) (specify type) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Soap	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Sanitary Pads	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Information, education & communication materials (for patients to keep)	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never		<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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Disposable Supplies	Location			Comments
	Emergency Room	Treatment Area	Recovery Area	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	
Others (please specify) _____	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	<input type="checkbox"/> Usually <input type="checkbox"/> Sometimes <input type="checkbox"/> Never	

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