

MIDTERM EVALUATION
OF THE
LATIN AMERICAN AND THE CARIBBEAN
MATERNAL MORTALITY INITIATIVE

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ACRONYMS AND FOREIGN TERMS

BEOC	Basic emergency obstetric care
CA	Cooperating agency
CDC	Centers for Disease Control and Prevention
CHS	Center for Human Services (URC)
EOC	Essential obstetric care
FUMEF	Foundation for Women of Fertile Age
FY	Fiscal year
G/PHN	Bureau for Global Programs, Field Support and Research, Center for Population, Health and Nutrition
IDB	Inter-American Development Bank
IEC	Information, education and communication
IMCI	Integrated management of childhood illnesses
IR	Intermediate Result
JICA	Japanese International Cooperation Agency
JSI	John Snow, International
LAC	Bureau for Latin America and the Caribbean
LAMM	Latin American and the Caribbean Maternal Mortality initiative
Lps.	Lempiras; Honduran currency (present value: Lps. 100 = +/- \$ 14.00)
MCH	Maternal and child health
MOH	Ministry of Health
MotherCare	John Snow's maternal health project
NGO	Nongovernmental organization
PAHO	Pan American Health Organization
Parteras	Village midwife
PRODIM	Programas para el Desarrollo de la Infancia y la Mujer (Honduran NGO)
PTS	Plan de Trabajo Semestral (Six-Month Work Plan)
PVO	Private voluntary organization
QAP	Quality Assurance Project (URC)
Sacoa	Bolivian NGO
SO	Strategic Objective
UNICEF	United Nations Children's Fund
URC	University Research Corporation
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

Antecedents to the Latin American and the Caribbean Maternal Mortality (LAMM) initiative go back more than a decade. In December 1996, the Bureau for Latin America and the Caribbean of the United States Agency for International Development (USAID) launched the five-year, \$4.5 million activity. The Strategic Objective (SO) addresses more effective delivery of essential obstetric care. LAMM has three Intermediate Results. IR 1 addresses increased capacity of communities to recognize and respond to pregnancy-related complications by accessing health services. IR 2 addresses the development, testing, evaluation, and dissemination of approaches to enhance use of protocols, standards, and guidelines at the first level of obstetric referral. IR 3 addresses intensive implementation of the essential obstetric care (EOC) aspects of the Regional Plan for the Reduction of Maternal Mortality.

PAHO was awarded a grant to work on IR 3, policy development and consciousness raising in 11 target countries. Field support funds were added to the Bureau for Global Programs, Field Support and Research, Center for Population, Health and Nutrition (G/PHN) contract with University Research Corporation's Center for Human Services' Quality Assurance Project (QAP) to implement activities in improved obstetric care, IR 2, in three pilot countries. A delivery order to John Snow, International (JSI)/MotherCare was issued to promote community activities, IR 1, as well as the development of information, education and communication (IEC) materials, also in three pilot countries.

A midterm process evaluation was conducted to study whether the amended Results Framework was valid and to examine initiative accomplishments. Field work was conducted over a 6-week period beginning in August 1999, involving travel to four LAMM countries: Ecuador, Peru, El Salvador, and Honduras.

Regarding **design findings**, the LAMM initiative had a somewhat unusual beginning because it did not have a Project Paper, had a staggered startup, and had three implementing agencies and various contracting mechanisms. In spite of considerable efforts to overcome these obstacles, conceptual clarity is still lacking in key elements of the initiative. This has left LAMM implementers without the guidance needed in weighing technically complex alternatives as to which of many desirable programming strategies and activities should be pursued. Also, each partner had exclusive responsibility for one IR that produced clear lines of responsibility but has contributed to an undue separation among the three components.

Findings at the Strategic Objective level indicate that four issues of essential obstetric care are not yet included in the LAMM results package. Initiative implementers could become more familiar with outside-of-project-area, holistically oriented service models. They could be addressing unmet need in some aspect of current programming. Improved data collection could take place. The initiative could begin to look more at personnel who are actually providing most obstetric care in health facilities.

IR 1 findings show that in one pilot country, LAMM is making substantial progress in increasing the percentage of adults who can name danger signs during pregnancy and who specify an intent to use services in the event of an obstetric emergency. Also, progress is being made in preparing community emergency evacuation plans and improving linkages between community groups and health workers. In other pilot countries, the quality of IEC materials is high; however, implementation delays have meant that community mobilization is not far advanced.

IR 2 findings show that in one pilot country, learning is taking place in development, testing and dissemination to enhance use of protocols, standards and guidelines, and significant, replicable gains are occurring in improved essential obstetric care. In another country, fewer gains are being achieved, although activities are underway to improve patient reception and flow. Energetic Ministry of Health (MOH) commitment to the improvement process is essential; where it exists, gains will likely take place. Also, some projects seem to be addressing peripheral rather than substantive obstetric issues. Additional focus on the four essential obstetric emergencies—hemorrhage, sepsis, hypertension/eclampsia and obstructed delivery—would help address this.

IR 3 findings show that substantial gains have been achieved in high-level political support to reduced maternal mortality at the country level. Adequate progress is being achieved regarding the review of existing strategies and legislative/regulatory policy changes; however, country coordinating committees need to be strengthened. Enhanced communication between PAHO country program managers and better informed regional program staff are areas where improvement should be expected. Also, except in isolated cases, PAHO staff appears to be concerned with pure policy formulation and disconnected from what is taking place in the field. Success stories should be given wide exposure throughout LAMM. In addition, the thematic issues at the SO level should receive additional policy attention: holistic vision, unmet need, improved obstetric data, and improved obstetric training for nurses and auxiliary nurses.

Managerial findings discuss the staggered startup and implications for achievements after one and one-half years of field operations. Also analyzed are expenditures, steering committee functioning, regional fora, communication and coordination, reporting, monitoring and evaluation, dissemination, staffing, and geographic dispersion. In general terms, the initiative has been well supervised. Communication, coordination and reporting are areas where improvement is suggested.

Nine recommendations are presented for the current initiative. The Results Framework should be maintained in spite of weaknesses. However, essential obstetric care needs to be more clearly articulated. Additional policy/field interaction should be promoted. Communication between initiative partners should improve and national maternal mortality steering committees should be reactivated. The role of the community in essential obstetric care needs refocusing. PAHO reporting should improve, and country-earmarked funds could be distributed for greater impact. Several operational recommendations are provided for each country visited, also.

Three recommendations are put forth regarding possible future directions: each LAMM implementer could begin to develop some response to unmet needs, to local revenue generation, and to underreporting of maternal mortality.

In spite of start-up difficulties and a complex design, LAMM has achieved significant gains in the first half of its life. Carrying out these recommendations will help it reach its goals during the remainder of the initiative.

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

I. INTRODUCTION

A. BACKGROUND OF THE INITIATIVE

Recent data suggest that the problem of maternal mortality is widespread. A 1993 World Bank Development Report cited maternal causes as the leading contributor to disability-adjusted life lost among women of fertile age. Current statistics indicate that more than 23,000 women die from pregnancy-related causes each year in Latin America and the Caribbean. About 80 percent of these deaths are probably preventable with current medicine and knowledge.

Maternal mortality is somewhat of a silent killer, however. National and international attention over the last several decades has focused on infant and child mortality, and has succeeded in reducing rates from 100–200 per 1,000 live births to the mid–50's range in many countries. Meanwhile, indices of maternal mortality in the 100–200 per 100,000 live births range have received less attention and have not improved, with the average at 190 in countries where there is a United States Agency for International Development (USAID) presence. These figures significantly distort the real situation for many women because urban mortality figures (where the quality of care and low maternal mortality can approximate U.S. levels) are aggregated with rural figures, where the rates of maternal death are far higher. In the Bolivian Altiplano and Haiti, maternal mortality is estimated to be as high as 950–1,000/100,000, respectively—15 times the regional average and approximating conditions in many of the least developed countries of Africa.

Maternal mortality is widely recognized as both a structural and medical issue. It is a structural issue in that existing medical care could significantly reduce maternal mortality, but nonmedical factors are impeding significant improvements. These factors include an underdeveloped political consciousness on how to reduce maternal mortality as well as more practical limitations: rural inaccessibility to services, women's ignorance of the risk factors in pregnancy, societal prejudice against indigenous populations, low service utilization, economic factors, and others. At the same time, maternal mortality is a medical issue because low-quality obstetric care is characteristic of a number of nonurban hospitals in Latin America (and some urban hospitals, too) and drugs are in short supply, as is an adequate supply of blood for transfusions in the case of hemorrhage. There are estimates that a significant percentage of maternal deaths are preventable by addressing these medical issues at the first level of referral.

Antecedents to the Latin American and Caribbean Maternal Mortality (LAMM) initiative go back more than a decade. In 1987, in Nairobi, the World Health Organization declared the Safe Motherhood Initiative, and proclaimed the Decade of the Mother. In 1990, the Pan American Health Organization (PAHO) prepared a plan of action for the reduction of maternal mortality, which was then approved by the 22nd session of the Pan American Sanitary Conference. Maternal mortality was an important topic in the 1994

Conference on women and on population and development in Beijing and Cairo, respectively. Maternal mortality was chosen as a topic for discussion in a meeting convened by Hillary Rodham Clinton for the First Ladies at the time of the Hemispheric Summit in Miami in December 1994. At the summit per se, the heads of state reconfirmed their support for achieving the World Summit for Children goal of reducing maternal mortality.

The regional program of the Bureau for Latin America and the Caribbean (LAC) addressed the subject by developing a Results Package directed to maternal mortality as part of its regional Population, Health and Nutrition (PHN) Strategic Objectives (SOs), under the Health Priorities Project (598–0825). The LAC Strategic Objective, within which the LAMM initiative falls, is “more effective delivery of selected health services and policy interventions.” The LAMM initiative is one of five Results Packages in the SO; the other four activities are vaccinations, integrated management of childhood illness, health reform, and infectious diseases. The Strategic Objective-level statement for LAMM is “more effective delivery of essential obstetric care.”

The initiative was authorized in November 1996 via an action memorandum approved by the assistant administrator for Latin America (see annex A). In December 1996, the First Ladies of Latin America met in La Paz and USAID launched the LAMM initiative by witnessing USAID’s signing of the grant to PAHO. Funds were transferred later in fiscal year (FY) 1997 to the Bureau for Global Programs, Field Support and Research (G)/PHN for the Quality Assurance Project (QAP) and MotherCare.

The LAMM initiative has three Intermediate Results (IRs) and results indicators:

- IR 1: Increased capacity of communities to recognize and respond to pregnancy-related complications by accessing health services in pilot districts, indicated by pilot countries; where adults can name one or more of the danger signs during pregnancy, labor and delivery increased by 5 percent over prior years; and, who specify their intent to use services in the event of obstetric complications;
- IR 2: Development, testing, evaluation, and dissemination of approaches to enhance use of protocols, standards and guidelines at the first level of referral, indicated by pilot countries where the percentage of targeted facilities in pilot districts that have the capacity to provide essential obstetric care (EOC) increase by 15 percentage points over the prior year; and,
- IR 3: Intensive implementation of the EOC aspects of the Regional Plan for the Reduction of Maternal Mortality, indicated by target countries with policies and plans for community mobilization to increase the utilization of EOC; with funded programs for community mobilization; with policies and plans for delivery of EOC at the first level of referral; and, with funded programs for delivery of EOC at the first level of referral.

PAHO was awarded a grant to work on policy development and consciousness raising in the 11 target countries of this initiative.¹ Field support funds were added to the G/PHN contract with University Research Corporation's (URC) QAP to implement pilot activities in health in three pilot countries: Ecuador, Bolivia and Honduras. At the same time, a delivery order to MotherCare was issued to cover community promotion activities, as well as the development of information, education and communication (IEC) materials, also in the three pilot countries. MotherCare, in turn, hired a local nongovernmental organization (NGO) in each of the three pilot countries to implement community-level activities and foster the sustainability of the learning when the initiative ended. Two local NGOs were hired—Sacoa, in Bolivia, and Programas para el Desarrollo de la Infancia y la Mujer (PRODIM), in Honduras—and one international one—PLAN International, in Ecuador.

Although the grant was signed with PAHO in December 1996, PAHO deferred program initiation until April 1997, until a concern over advances of program funds was resolved. Funds were obligated to QAP and MotherCare in October 1997. The initiative is a complicated one, with a staggered start for the three different partners, multicountry interventions, and a number of technical issues that have required clarification as the initiative progressed.

Key programmatic milestones of the five-year initiative to date are as follows:

- Establishment of the three pilot country offices,
- Carrying out the first QAP design workshops in three pilot countries,
- Baseline studies carried out in three pilot countries,
- Rapid assessment surveys carried out in three pilot countries,
- Formation of the first quality design teams in three pilot countries,
- Development of an IEC strategy in three pilot countries,
- Carrying out the first legislative summary,
- Teleconference of the First Ladies of the United States, Bolivia and Peru in May 1998,
- Meeting of the PAHO Scientific and Technical Group (April 1998),
- First meeting of the Subcommittee for Maternal Mortality Task Force started in April 1999,

¹ Bolivia, Brazil, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Paraguay, and Peru.

- First regional meeting of LAMM (Roatán, Honduras) (July 1998),
- Brazilian workshop in Fortaleza for building advocacy among First Ladies (December 1998), and
- Presentation of progress of this initiative at the conferences of the First Ladies of the Americans in 1997, 1998 and 1999.

The initiative is halfway through its expected five-year life as this process evaluation is being conducted.

B. PURPOSES OF THE EVALUATION

As detailed in the scope of work (annex B), the purposes of the evaluation are:

1. To determine if the Results Framework, as amended, is still valid and feasible and to recommend adjustments to the Results Framework and activities, as appropriate (see annex C).
2. To examine progress towards achieving the SO and IRs, as planned, evaluating whether the results/indicators will be met in a timely and effective manner. To identify specific internal/external constraints that may limit their accomplishment or success and to recommend adjustments based on findings and conclusions.
3. To assess how the initiative structure as configured is working, including both the delegation of specific technical areas and activities to the three partners as well as their coordination, working relationships and collaboration in the implementation of initiative activities.
4. To assess the administration of the initiative by USAID and the three implementing partners, including the status of coordination and communication within their organizations, specifically between headquarters and field operations and host country governments. The focus should be on initiative management, meeting deadlines, monitoring, and technical assistance. The team should recommend adjustments in implementation, based on findings and conclusions.
5. To review the resources management of the initiative, including use of human, material and financial resources to achieve IRs.
6. To examine the feasibility of scale-up or sustainability and mechanisms for ensuring sustainability after external funding ceases.

This process evaluation is intended to provide suggestions on how to improve the initiative. Recommendations are formulated accordingly.

C. FIELD PROCEDURES

During the first week of the evaluation, a 2–day team planning meeting was held and interviews were conducted in Washington, D.C., with USAID, URC, MotherCare, and PAHO representatives. Three weeks were spent in the field: one week in Ecuador in meetings and field travel, one week split between Peru and El Salvador in meetings, and one week in Honduras in meetings and field travel (see annex D). Follow-up interviews were conducted in Washington after the field work. Briefing sessions were held with each of the key players and the steering committee.

The methodology used during the evaluation was the application of semi-structured or structured individual interviews. A questionnaire developed prior to the Washington interviews is attached in annex E, as are several instruments developed during the course of the field work. Questions addressed the following items:

- Key achievements to date,
- What could have functioned better,
- Key managerial strengths,
- Key weaknesses,
- Relationship between USAID and PAHO,
- How the steering committee functions and its principal accomplishments,
- Relationship between USAID and the cooperating agencies in this initiative, and
- Technical questions.

The following individuals were interviewed in the field: PAHO’s country representative or acting representative and the maternal and child health representative, Ministry of Health (MOH) central-level staff, USAID Mission staff, the QAP representative, a number of MOH district-level staff, and members of field committees. Where applicable, interviews were also held with staff from the NGO involved in the initiative. Additionally, a concerted effort was made to interview numerous members of the quality design teams in the pilot areas to determine how well the process is viewed by those applying the methodology. (Annex F lists the persons interviewed.)

D. COMPOSITION OF THE EVALUATION TEAM

The evaluation team was composed of three consultants: one specializing in organizational development and project management, one specializing in obstetric care and midwifery, and the third, specializing in IEC and community development.

The team leader is a specialist in management and organizational development with over 20 years of overseas experience in health and development programming. The health expert is a midwife with a Master's in Public Health and nearly 15 years of experience in hands-on obstetrical care, as well as half a dozen years as the head of one of the divisions of the MOH in Santiago, Chile. The community and IEC specialist was a consultant for nearly 20 years in community development in many countries of Latin America. (Curricula of the team members are included as annex G.)

II. DESIGN FINDINGS

A. RESULTS FRAMEWORK

While ideas behind the LAMM initiative had been under consideration for some time, the actual grant documentation to the Pan American Health Organization (PAHO) was written rather quickly. Based on a Results and Indicators Framework that had evolved over time, the action memorandum of November 27, 1996, and a PAHO project proposal, the first obligation was the grant to PAHO, signed at the Annual Conference of the First Ladies in La Paz on December 4, 1996. Funds were made available to PAHO as of January 1997.²

From mid-1996, parallel conversations and program work had been taking place with John Snow, International (JSI)/MotherCare and the Quality Assurance Project (QAP), with the idea that these entities would assume a role in LAMM. The former would work in community promotion aspects of the initiative; the latter would work at the first-level of obstetric referral facilities. Funds were obligated to QAP and MotherCare in October 1997. In part because of the evolution described above and in part because USAID reengineering was taking place during this time, no Project Paper was prepared.

Without a USAID master document, the most comprehensive description of the initiative to that point was the PAHO proposal, “Intensive Implementation of the Basic Emergency Obstetric Care (BEOC)—Aspects of the Regional Plan for Reduction of Maternal Mortality,” which focuses on PAHO activities. As will be described below, including in the title the acronym BEOC brought with it terminology of the PAHO Regional Plan that does not necessarily represent the perspective of USAID or the other two implementing partners who use other terminology and sometimes other concepts.

The Strategic Objective-level statement for the LAMM initiative is “more effective delivery of essential obstetric care.” After much work among the LAMM partners in mid-1997, it was decided to simplify two Strategic Objective indicators. The current formulation is that progress towards the objective will be indicated by target countries with percentage of births attended by trained personnel increased by at least 1 percentage point over the previous year and target countries with a 5 percentage point increase over the prior year in percentage of reporting units with maternal mortality committees which produce annual reports.

The formulation of IR 2 and IR 3 did not change. IR 1 had been “increased capability of selected private voluntary organization (PVO) networks and Ministries of Health to identify and respond to community needs.” It was changed to “improved capacity of

² Actual grant disbursement to PAHO involved negotiations of Standard Provisions and the effective start-up date.

communities to recognize and respond to pregnancy-related complications...” Having reviewed these differences, the evaluation team supports these reformulations. The operative IR formulation is as follows:

- **IR 1:** Increased capacity of communities to recognize and respond to pregnancy-related complications by accessing health services in pilot districts.
- **IR 2:** Development, testing, evaluation, and dissemination of approaches to enhance use of protocols, standards and guidelines at the first level of referral.
- **IR 3:** Intensive implementation of the EOC aspects of the [PAHO] Regional Plan for the Reduction of Maternal Mortality.

The first two IRs were to be accomplished in three pilot countries (Ecuador, Bolivia and Honduras), while IR 3, policy, was to take place in all 11 target countries. In the pilot countries, it was intended that there be interface with the three field pilots. The conceptualization in this form was meant to achieve a two-tiered impact: experimentation with and development of innovative approaches to improved obstetric care and promotion of national and regional initiatives on the policy front.

B. CONCEPTUAL DESIGN ISSUES

The absence of a formal summary document such as a Project Paper in LAMM’s evolution has resulted in a conceptual lack of clarity on key issues. First, there is substantial confusion in the Results Framework, as seen in the table on the following page. While IR 1’s formulation changed from “increased capability of PVO networks...” to “increased capacity of communities...” (noted above), sub-IRs did not change when this reformulation took place. Detailed and measurable sub-IRs were only developed for IR 3 and do not exist in the SO schematic for IR 1 or IR 2. What at first glance appear to be sub-IRs for IR 1 and IR 2 are instead suggested activities rather than, for instance, contractual obligations. Activity 3 under IR 1, “prototype guidelines for management/referral of obstetric complications for nurses, nurse auxiliaries available at health post” is clearly mislocated under IR 1; it is obviously related to IR 2. For those not very familiar with the evolution of the initiative or adept at USAID terminology, the SO/IR formulation is somewhat confusing and difficult to understand.

Another confusing element is the presentation in the Results Framework of country-level results. All “Level 2 Country Intermediate Results” are not an official part of the initiative nor are responsibilities of any implementer, but rather “thought pieces” of potential outcomes of a successful project.

Table 1: Comparison of Various LAMM Intermediate Results

	IR 1	IR 2	IR 3
Level 1 Regional Intermediate Results	Increased capacity of communities to recognize and respond to pregnancy related complications by accessing health services in pilot districts	Development, testing, evaluation and dissemination approaches to enhance use of protocols, standards and guidelines at first level of referral	Intensive implementation of the BEOC aspects of the Regional Plan for Reduction of Maternal Mortality
Comment	Revised IR formulation	Unchanged IR formulation	Unchanged IR formulation
Level 2 Regional Intermediate Results	<ol style="list-style-type: none"> 1) Increased community mobilization to recognize obstetric complications and seek BEOC 2) Increased understanding by PVOs and MOH of the importance of inter-personal communication and perceptions of quality of care 3) Prototype guidelines for management/referral of obstetric complications for nurses, nurse auxiliaries available at health posts 4) Information network for PVO, NGOs and health facilities at the community level established 	<ol style="list-style-type: none"> 1) Conduct and disseminate results of pilot studies in 3 subregions, designed to test approaches to helping health workers comply with standards; developing worker-level monitoring and evaluation skills to enhance compliance; improving facility/community communication to enhance referrals 2) Assess and revise and disseminate prototypes, protocols and standards to include patient/client focus and better techniques to improve adherence to standards by health workers 	<ol style="list-style-type: none"> 1) Regional strategy reaffirmed or revised 2) Functioning regional and country ICCs 3) Enhanced communication between program managers and regional program staff 4) Country program managers have better information 5) Increased high level political support for implementation of regional plan at country level 6) Recommend legislative/policy adopted
Comment	Activities, not results; 2 and 3 do not relate to revised IR; no responsible party; 3 is part of IR 2	Agrees with SO/IR formulation; QAP responsible, but not at regional level	Agrees with SO/IR formulation; PAHO responsible
Level 1 Country Intermediate Results	Improved Community Response to Obstetrical Emergencies	Improved Quality of Care at First Level of Referral	Improved Policy Environment
Level 2 Country Intermediate Results	<ol style="list-style-type: none"> 1) Percentage of adults in target districts who can name one or more danger signs during pregnancy 2) Percentage of adults in target districts who can specify intent to use services 3) Increased use of emergency transport plans 4) Improved linkages between consumers, community groups 5) Increased follow-up by health system at the community level 	<ol style="list-style-type: none"> 1) Improved records of obstetrical complications and outcomes 2) Increased use of mortality audits (facility and community) 3) Increased availability of appropriate drugs and supplies 4) Management and supervision 	<ol style="list-style-type: none"> 1) Protocols routinely reviewed and updated by appropriate authorities 2) Increased resource allocations for community and EOC services 3) Identification and removal of restrictive and unsupportive policies
Comment	1 and 2 belong to SO/IR; MotherCare responsible only for these two	QAP not responsible; "management and supervision" not operationalized	None belong to SO/IR; PAHO not responsible

Other confusions exist. All PAHO documentation speaks of BEOC, *basic emergency* obstetric care; USAID documentation generally speaks of EOC, *essential* obstetric care. There are multiple confusion points in these seemingly small semantic differences. A first confusion is over the word *basic*, and whether it is part of the initiative or not. The PAHO definition of *basic* includes blood supply and support for cesarianarian section; however, since USAID did not want to involve LAMM in these two elements, a footnote in the Results Framework specifically excludes these two program elements, and, evidently, this exclusion was accepted by PAHO. Nevertheless, PAHO continues to promote these activities in the field as part of its concept of *basic* within its regional plan.

Another confusion is whether the initiative is promoting *essential* or *emergency* care. USAID uses a World Health Organization (WHO)–derived definition of *essential* obstetric care (well clarified by a MotherCare policy brief). The clarity of the MotherCare formulation is not followed in many parts of the initiative. LAMM implementers frequently use the term EOC without defining whether they are discussing *essential* or *emergency* and there are even times in one document when the descriptions drift from one usage to the other.

This lack of clarity at the conceptual level causes enormous problems in choosing program activities: no one has quite recognized how the choice of program interventions is influenced whether one is addressing emergency or essential care. The LAMM view of the role and importance of *prehospital* activities is unclear, not so much regarding community promotion (where IR 1 is adequately specific) but in defining a role for the community midwife, in promoting prenatal checkups, and in addressing issues of deliveries in the home. Designing activities directed to these issues will depend on whether one is addressing *basic essential* or *basic emergency* and how one views a role for the community (IR 1) in improved quality of care (IR 2). Next, the role of intermediate hospital facilities in providing obstetric care is poorly defined. Noted above, working with blood banks and cesarianarian sections are other difficult decisions: it is hard to exclude categorically some involvement with blood supply or cesarianarians at the first level of referral since the reason a woman is referred is frequently related to hemorrhage or obstructed labor.

More subtle problems with the strategic objective formulation also have become apparent. Assigning each partner exclusive responsibility for one IR produced clear lines of responsibility for output achievement (JSI: x communities organized; QAP: y protocols; PAHO: z policy reformulations, etc.). It also has contributed to a clear separation among the three components. Little effective sharing exists between the three partners; each implementer concerns itself with its own tasks, and does not look at the overall issue of maternal mortality.

Other confusing areas also exist. In USAID initiative descriptions and the QAP work plan, “increase in the *number* of facilities where essential obstetric care (EOC) is provided” is posited as an indicator of improved quality, IR 2, where it could easily fit under IR 3, improved national environment. “Increase in *utilization* of EOC services” is

posited as an indicator of improved community demand, IR 1, where it may logically better fit under IR 2, increased access.

Each party reports a clear sense of its responsibilities. When the evaluators asked more penetrating questions, however, ambiguities arose for which there was no general consensus. For example, the following are questions on which there is little clarity among the implementers, either in the field or head office personnel:

- In one pilot country, there was friction between implementers regarding who the initiative coordinator was. Which entity, PAHO or QAP, should take the lead? In pilot countries, who should lead in promoting the national steering committee?
- What is the responsibility of PAHO for providing technical assistance to the pilot activities in pilot countries?
- Who is responsible for clarifying the differences in EOC detected in this document—PAHO, QAP, JSI or another party, or perhaps the LAMM steering committee?
- Should QAP responsibilities be directed primarily in reducing maternal deaths in the delivery room (obstetric skills) or, as is now the case, in designing processes around patient access and flow?
- Should the initiative’s focus be primarily “emergency care” or “essential care”? What are the trade-offs?
- Are there any responsibilities within LAMM for QAP or PAHO to improve registers of maternal mortality? Is there any interrelationship between the two in this area?
- What are QAP’s obligations regarding involvement in community promotion with PLAN International?
- Who in the initiative is responsible for promoting improved obstetric skills, especially hands-on skills—PAHO, QAP or both?
- Have JSI responsibilities for community promotion been assumed by QAP? Who has the responsibility for providing technical assistance in IEC to the Honduras activities—QAP or JSI?
- Is PLAN International (a JSI contractor) responsible to JSI or QAP? Who will sign the PLAN contract?

- Is PLAN primarily responsible for the preparation of IEC materials or for community promotion? Now that the IEC materials in Ecuador have largely been produced, is it time for PLAN to step back from project activities?

C. TECHNICAL DESIGN ISSUES

An issue in technical design is the distinction between first level of referral versus second level. The PAHO and USAID documents define first-level referral as “facilities with 24-hour obstetrical care.” While conceptually this reads unambiguously, in practice, a large number of hospitals only provide obstetric/gynecologic specialists during daylight hours. During the night shift (when, it should be noted, the majority of births take place), even in rather large, decentralized hospitals, obstetric attention is provided either by a general physician (usually on her/his year of social service—and frequently without training and legal authority to perform cesarianarean deliveries) or by an auxiliary nurse. Is this 24-hour obstetric coverage as envisaged by the initiative? If so, is it at this level that the initiative should be directing the majority of its attention?

Conversely, is the initiative working with second level of referral when—as is presently taking place in at least one pilot country—staff invests considerable time and energy at a provincial hospital in complex organizational development issues, and little time addressed to obstetric complications that have been referred by a lower-level hospital facility?

Initiative documentation is not clear on these technically complex issues, and field staff is left to determine at what level of service and in which activities to work, without much clarity from the program design.

D. IEC DESIGN ISSUES

The NGOs that were selected in Ecuador and Honduras to design and implement an IEC strategy had surprisingly little previous experience in IEC, and the approach taken in each country was different. In Ecuador, PLAN International participated in a training workshop on IEC and decided to apply the Ten-step methodology of the quality design methodology, combined with the WARMI³ methodology, to design their IEC strategy. This proved to be a lengthy and elaborate process. In Honduras, PRODIM decided that the Ten-step methodology could not be applied to design an IEC strategy and subcontracted an IEC specialist to design it for them; however, the person who designed the strategy did not participate in its implementation. The well-done plan might have proceeded more effectively if this expert had been contracted to oversee the plan from time to time.

E. IMPLEMENTATION ISSUES

³ A community-centered methodology originally developed by Save the Children and MotherCare in Bolivia.

Whatever the lack of conceptual clarity in the original design, implementing the design suffered an additional setback when the grant between JSI/MotherCare and USAID, under which this initiative's MotherCare activities fit, expired on September 30, 1998. Administratively, this problem was resolved with the subcontracting of MotherCare staff under QAP, but a weakness remains. Although responsibilities for achievement of the community promotion part are now a subgrant contract under the QAP portfolio, QAP staff maintains that JSI, not QAP, is responsible for that component.

F. SUMMARY

The LAMM initiative had a somewhat unusual beginning, without a comprehensive written document, with a staggered startup, and with three different implementing agencies and various contracting mechanisms. In spite of considerable staff work to try to address these issues over the years, conceptual clarity is still lacking in many key elements of the initiative. As will be seen, this lack of conceptual clarity has left LAMM implementers without much guidance in weighing technically complex alternatives as to which activities should go forward among several desirable programming directions. This legacy of uncertainty has led to certain misdirected initiatives that will be noted in the next chapter. Recommendations are provided in chapter V.

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

III. PROGRAM FINDINGS

A. STRATEGIC OBJECTIVE ACCOMPLISHMENT

The Strategic Objective of LAMM is “more effective delivery of essential obstetrical care.” This will be measured by target countries with percentage of births attended by trained personnel increased by at least 1 percentage point over the previous year, and target countries with a 5 percentage point increase over the prior year in the percentage of reporting units with maternal mortality committees that produce annual reports.

Before entering into a detailed description of each Intermediate Result, there are several issues at the Strategic Objective level that merit discussion. Though not necessarily issues that have been adequately addressed by the LAMM formulation of SO and IRs, they are issues that have been observed as areas that need further thought. Four topics will be discussed: holistic vision, unmet need, unreliable EOC data, and those who actually provide the majority of obstetric care.

Holistic Vision

Based on the field data collection, it seems likely that most people associated with LAMM—in PAHO, QAP, JSI/MotherCare, the Ministries of Health, and communities—do not possess an adequately holistic vision that would foster increased use of decentralized health centers and improved identification of appropriate roles for the community. In project areas, the vast majority of institutional deliveries take place in overcrowded hospitals. Although there are a few decentralized health centers that provide services for normal deliveries, they are few in number. Also, there is not yet any effective relationship between the medical service providers and the community (e.g., civic leaders on the hospital board, hospital/community discussion meetings, and field days for obstetric service providers). For its part, community references to the hospital have deficiencies, too; women generally elect to go where treatment is perceived to be better even though they could be treated just as well at a simpler facility.

The LAMM initiative is not yet promoting the idea of care being provided at a level depending on obstetric complexity. An obstetric system is envisaged that starts in the community and works up, as follows:

- The first level in the system is one that reinforces the idea that the community is an active partner in identifying signs of risk, taking the medical evacuation decision, and getting the patient to a medical center quickly. In fact, this is the vision of IR 1 in LAMM. However, community midwives are an underused resource in this area. Next, health posts near the community, that is, the lowest level of MOH service delivery, should be reinforcing the concept of attention depending on the grade of obstetric complication.

- Health centers close to the community could facilitate ease of access, give good prenatal treatment and sufficient information (control prenatal), establish constant coordination with midwives and community health agents, and promote attracting women in need of special care with emphasis placed on prevention and the detection of maternal health complications. In order to do so, it would be necessary to assure that staff members at this level improve their basic obstetric observation skills.
- Having strengthened staff members' basic obstetric skills at these health centers, they might also be able to provide emergency attention to deliveries. One possibility would be to change the EOC system to permit well-trained auxiliary nurses to use oxytocics in the case of postpartum hemorrhage. In an emergency, staff at this level should also have the skills to attend to the newborn (including skills in newborn resuscitation). The development of a system of expedited referral for complications also requires skills in early identification of obstetric emergencies and preparation for referral.
- More births attended to in maternal birthing centers could foster a more personalized and friendly environment, without the stigma of sickness frequently associated with large hospitals, as well as foster use of procedures more culturally sensitive to women of various populations. In such centers, labor and delivery need not take place in different rooms, nor should the rooms be filled with bright lighting and gleaming steel equipment (much of it nonfunctional). A more natural, homelike environment (low lighting, warm environment, vertical-position birthing, etc.) could accommodate a woman who can stay in one place during delivery and not have to move from one place to another during labor. This kind of environment is conducive to a pleasant post-delivery process in which the healthy baby does not need to be separated from the mother, and postpartum attention to the newborn can wait several hours and take place in front of the mother. As will be seen, additional service delivery at this level would reduce serious hospital overcrowding.
- Hospitals of referral could concentrate on attention to high-risk pregnancies and births, and maternal and neonatal complications, and reinforce knowledge and skill preparedness in obstetric emergencies.

The experiences of two maternal and infant care centers outside the LAMM project (but still in the LAMM area of influence), Siguatepeque, Honduras, and Saquisilí, Ecuador, will be discussed. These facilities are good examples of how the offer of a maternal birthing center can provide closer, friendlier and quality service. The demand for obstetric care at these service centers has increased considerably. Women who were interviewed during this evaluation, many of them indigenous, reported being quite satisfied with the care and complications have been minimal.

Another good model will be discussed, one under experimentation in the José María Ochoa Health Center (not hospital) in Honduras. This initiative came about, in part, at

the request of community women who expressed the desire to have their births attended to by the same people who were attending to them during the pregnancy.

LAMM partners—PAHO, QAP and JSI—could become more familiar with these experiences and take the knowledge gained to other parts of the project.

Unmet Needs

The implication of a large underserved population of pregnant women who are not coming to the MOH service facilities in many countries has not yet reached the national agenda. For example, in four countries visited, the underserved population reaches or exceeds 50 percent, and the evaluation team was not made aware of any concerted effort to design strategies to attract these women. Although LAMM personnel will argue, convincingly, that this subject is too vast to be included within the scope of LAMM's small financing, the fact is that until *some* activities begin to address this subject, the initiative is focusing exclusively on the “already-served” population rather than taking into account the “unserved.” A few examples follow.

In Ecuador, Latacunga regional hospital statistics demonstrate that institutional prenatal and delivery care coverage is shrinking by 20 percent annually.⁴ Regional data suggest a maternal mortality incidence rate of 170/100,000; however, according to hospital statistics, the incidence of maternal mortality in 1994 was no deaths occurring 48 hours or more after hospital admittance. There is no consolidated information available at this hospital classified under obstetric complications. External consultations also show a downward trend of 44 percent between 1997 and 1998. According to the resident obstetrician/gynecologist, the hospital provides services for 70 percent of all possible deliveries (an opinion not supported by these data).

In Honduras, Santa Teresa Hospital in Comayagua provided services to 4,500 annual deliveries last year, coverage of 19 percent of their assigned population. The La Paz Hospital in Honduras has an annual rate of 1,800 deliveries, perhaps 34 percent underutilization.

In the countries visited, it is widely acknowledged that the great majority of maternal deaths occur in the woman's own home or at the hospital, due to late arrival and postdelivery hemorrhaging or eclampsia. Personnel recognize that until programs are directed at this target group, a significant part of the problem will remain undetected. In many countries, there are no hospital activities addressing this problem.

Health care service providers attribute the low percentage of women choosing not to give birth at hospitals to the treatment received, general hospital conditions, current medical procedures (such as episiotomy and genital shaving), the perception of complications associated with the hospital, the difficulty in transportation and access, and the cost of care. One aspect or another of improved attention is being addressed in many QAP design/redesign projects, but procedural changes or adaptations aimed at eliminating

⁴ Sixteen hundred deliveries in 1998, compared with 2,200 deliveries in 1996.

routine episiotomies and giving women the opportunity to deliver in the most comfortable (and more socially acceptable) position have not been addressed. For PAHO, while norms and standards of several countries are open to patient-centered recommendations,⁵ little has been done in the way of implementing these norms. It is difficult to see how a greater percentage of institutional births will take place until these issues are addressed more vigorously.

Initiative partners could be addressing the issue of unmet emergency obstetric need in *some* aspect of their programming. Even without a major reshaping of program focus or a significant diversion of funds to address this issue, project implementers should begin to experiment with some activities and efforts to begin to put this issue on national and regional agendas. (See Recommendations.)

Nonavailability of Reliable EOC Data

A third systemic issue, one related to unmet need, is that in most LAMM countries, there is inadequate information regarding incidents of maternal deaths, both at the hospital and nonhospital levels.

At the hospital level, information on causes and frequency of obstetric complications is frequently dispersed through a number of different hospital registers and therefore not analyzed by staff for issues, trends or problem identification. The discharge of gynecological patients is combined with general hospital patient information. Little hospital review of more complicated cases seems to take place. Partograms (birth tracking time sheets) were rarely used, and many hospital personnel do not place much value on the form, thus its application is not proceeding with much success. Common medical deficiencies and corresponding solutions cannot be identified because of the lack of realization that a problem exists.

The overall magnitude of maternal mortality is not known, not only in Latin America but also in most of the world. In the four countries visited, only those cases involving deaths that take place on the hospital premises are acknowledged. Even this is not always true: in Ecuador, only those deaths which take place 48 hours *after* admittance to the hospital are classified as maternal mortalities.

Data regarding nonhospital deaths hardly exist. In the four countries visited, the MOH is focused on hospital care and not overly concerned or informed about the larger maternal mortality issues of those who do not reach the hospital. In the Latacunga hospital (Ecuador), for example, no maternal deaths have been registered in the past five years; however, from January to June of 1999, project data collection in (only) 20 IEC communities found the occurrence of five maternal deaths. Hints of an attitude in some hospital staff of blaming the mother for her death because she did not come to the hospital until it was too late were perceived. Such attitudes, however subtle, cause service providers to be less concerned with nonhospital deaths. Without a proper search for causes related to maternal deaths and a wider understanding of deaths that occur outside the hospitals, hospital staff accepts no responsibility for those deaths.

⁵ In Ecuador, norms still call for routine episiotomies.

While some movement is taking place in strengthening national efforts to improve maternal mortality surveillance, more can be accomplished. New energy and strategies are being applied in Peru and Honduras in terms of weekly reporting by facsimile of maternal deaths that could be looked at for wide replication.

EOC Providers

It seems clear from field travel that the majority of essential obstetric care is not being provided by physicians trained in obstetrics. This is a strategic issue, a country issue and a policy issue. The evaluation team saw in most places that auxiliary nurses provide the majority of 24-hour services. It should be noted, also, that neither the licensed nurses nor the auxiliary nurses are assigned specific hospital areas of care (reception, hospitalization, delivery, postdelivery, and newborn care). Also, there are multiple responsibilities placed upon staff, especially during the evening and night hours. Timely identification of obstetric complications is problematic under these situations.

In El Salvador, 30 hospitals provide the vast majority of obstetric care. However, the figure disguises an important shortfall. In most of these hospitals, obstetricians/gynecologists are only on duty for 12 hours, that is, daylight hours, when the fewest births take place. Physician generalists, frequently those who have recently completed medical school, cover the larger number of births that take place in the dusk-to-dawn shift during their year of service. These newly trained physicians only attend emergency births. Thus, even in a relatively reduced number of hospitals, the attention being provided by physicians trained in obstetrics and gynecology is substantially less than the real need.

In Honduras, even in those hospitals that offer 24-hour service, the quality of prenatal obstetric care is debatable. In some regional hospitals, there is only one obstetrician/gynecologist on 24-hour call, and residents or nurses often attend to deliveries as they occur. (None of these professionals had specific training in maternal and neonatal care.) In the hospital of Comayagua, Honduras, an obstetrician/gynecologist is not available at certain times (midday, all day Saturday, and Sunday evenings.) Auxiliary nurses who have only a basic education (up to sixth grade) attend to the majority of deliveries after only a year of nursing training, none of which includes specialization in maternal or neonatal health. The number of professional licensed nurses is quite limited. Physicians in their year of residence do not perform cesarianareans because of a lack of training, and are ill equipped for obstetric and neonatal complications. If complicated cases arise during the absence of an obstetrician/gynecologist, emergencies are automatically referred to the hospital in Tegucigalpa, in this case several hours away.

Lessons Learned

There are at least four issues of EOC with large potential impact at the Strategic Objective level that are not yet included in the LAMM Results Package. Some of them can be addressed without a major reorientation of program focus. Initiative implementers

could become more familiar with outside-of-project-area, holistically oriented service providers and take the knowledge gained to other parts of LAMM. Initiative partners could be addressing unmet need in *some* aspect of their programming. Crossfertilization of LAMM–area experiences in collection of comprehensive EOC data could be shared from one country to another, enriched by QAP data and experience. Through PAHO at the policy level and QAP at the pilot level, the LAMM initiative could begin looking at the issue of who actually is providing most obstetric care in health facilities and direct special training to this cadre.

B. INTERMEDIATE RESULTS ANALYSIS

LAMM is divided into three Intermediate Results: **IR 1: improved community recognition and response** to obstetrical emergencies, **IR 2: improved quality of care** at first level of referral, and **IR 3: improved policy environment**. Each will be discussed separately, although the interrelationship between the three cannot be forgotten.

Intermediate Result 1: Improved Community Recognition and Response to Obstetrical Emergencies

There are two indicators for this IR: “pilot countries where adults interviewed in pilot districts who can name unprompted one or more of the danger signs during pregnancy, labor and delivery, and immediate postpartum increase by 5 percent over the prior year;” and “pilot countries where the percentage of adults interviewed in pilot districts who can specify their intent to use services in the event of obstetric complications increased by 3 percentage points over the prior year.”

JSI/MotherCare implemented activities related to this IR until September 30, 1998; activities continue under a subgrant mechanism between JSI and QAP. In general terms, there are two programmatic elements: the development of information education and communication (IEC) materials and disseminating those materials in pilot communities (20 each in Honduras and Bolivia, and 20 [reduced from 50] in Ecuador). Characteristics of IEC and the community component were very different in the two countries visited.

IEC Findings

Ecuador

The Ecuador quality design team on IEC was initially formed by representatives from QAP/Ecuador, the MOH at the provincial level, staff from the local Social Security Agency, PLAN International, and three female community members. The team began activities in May 1998 by attending the quality design workshop in Latacunga, after which it started meeting weekly to define the 10 steps of quality design for IEC. The three women from the community attended the first meetings but were too shy to intervene and decided later not to participate. Due to frequent strikes of MOH personnel, IEC materials were not produced during 1998; during this time, the quality-design meetings focused on the Ten-step process.

In the first half of 1998, PLAN carried out several community surveys. During the second half, PLAN carried out focus group discussions among health center staff to determine knowledge, attitude and practices on pregnancy, delivery, postpartum, and newborn care. IEC team members attended a training workshop in February 1999 to learn the results of this study and design their strategy.

From MotherCare, PLAN received illustrations developed in Bolivia on risks and danger signs during pregnancy, delivery and postpartum. PLAN and the MOH IEC team then adapted them to Ecuadorian physical and dress characteristics and produced two preliminary versions of the materials, one for the indigenous population in rural areas and a second one for urban and suburban audiences.

These materials were being validated among the target populations at the time of the field visit for this evaluation. The validation process was to be completed by the end of August 1999. The final versions were to be produced and printed during September and distribution of material was scheduled for October 1999. The print material will include four flip charts (on danger signs during pregnancy, delivery and postpartum and dangers with the newborn) in two versions and two sizes: a large one for group sessions and a smaller one for interpersonal education. Three fliers will also be prepared and addressed to different audiences.

It is obvious that enormous effort has gone into the development of these materials. They are attractive and colorful and the quality of the drawings is excellent as they clearly portray characteristics of both the rural and suburban Ecuadorian population.

In addition to print materials, PLAN has produced 11 radio spots, an educational puppet show on how to be prepared for an obstetric emergency, and a motivational videotape addressed to government and community leaders. During the third week of August, PLAN was to subcontract to a specialized company to research and determine the best schedules in which to air the radio material on the two most popular stations at the community level. The spots were expected to go on the air by mid-September.

The IEC team developed the script for the puppet show and a professional puppeteer was hired to design and produce the puppets and the stage. The puppet shows would be presented in different communities and marketplaces.

PLAN's leadership of the IEC team was energetic and kept the team motivated in spite of many work stoppages. Team members who were transferred to LAMM responsibilities worked hard learning concepts of IEC and then applying the Ten-step methodology to develop a wide variety of materials.

The evaluation team attended a meeting in the community of Chanchaló in Cotopaxi, organized and conducted by two PLAN facilitators, with the participation of 28 community members: 25 women, including the local midwife, and 3 men. The objectives of the meeting were to present the results of the community diagnosis, to discuss the main

causes of maternal deaths in the community and to motivate the community to offer solutions.

The meeting lasted more than two hours and the most active participant was the community midwife who answered most of the questions. No time plan was evident for the meeting; therefore, PLAN facilitators became distracted from the central topic into answering and asking questions on other subjects, such as family planning and other health matters, losing track of the main objective of the session—medical evacuation in case of obstetric emergency.

Honduras

MotherCare hired the Honduran NGO, PRODIM, to handle the IEC and community promotion activities in March 1998. In July 1998, PRODIM completed a socioeconomic survey of 20 communities where the initiative would work in the Comayagua Valley. A training plan in essential obstetric care for community members was prepared in September 1998, and a proposal to train communities in social mobilization around EOC themes was prepared in November 1998. An IEC specialist was hired by PRODIM to design an IEC strategy and it was completed in January 1999.

The contract with PRODIM was terminated at the end of March 1999, reportedly due to poor management, after which QAP/Honduras hired a former PRODIM employee to continue the effort. The materials were designed, validated and produced under this individual's supervision during the first half of 1999 and the IEC campaign was launched in July 1999. The campaign included community-based training with support materials on danger signs before and during pregnancy, during delivery and postpartum period, as well as radio spots on the same subjects.

The support materials include one block-size flip chart for community and interpersonal communication; a small manual on danger signs; a cloth flip chart for community training; a puzzle and a bingo game on danger signs to train voluntary personnel; a three-leaf flier on danger signs for distribution among women of fertile age; two-leaf fliers on each of the danger signs for distribution among women who present risk factors; wall calendars for distribution among pregnant women; table calendars for MOH personnel, listing six rules on how to better treat patients; a form to identify all pregnant women in the community, to be used by voluntary health personnel; and, a flier on an emergency evacuation plan for obstetric emergencies.

The project also designed a referral card that will soon be used throughout the MOH–Comayagua. The card indicates the initial diagnosis, the health facility where the patient was first seen and the hospital to which he/she⁶ is being referred. The card will be given to the patient to keep for future reference.

⁶ The form is not restricted to maternal issues .

This wide variety of materials has been developed as a result of creativity and hard work; however, the quality is not as high as that produced in Ecuador. The MOH in Honduras has expressed interest in giving these maternal mortality materials wider distribution, but that would be premature until improvement takes place.⁷

The evaluators attended several community-training sessions conducted by QAP/Honduras personnel with community leaders and members who will become voluntary health personnel. The training was carried out using the flip chart and counseling manual. The groups participated actively in the training and the QAP facilitator showed skill and ability to keep participants interested and active throughout a full day of training.

Bolivia

Verbal and written reports from Bolivia indicate that the IEC component has been delayed because of slowness in other issues of program implementation in that pilot country.

Community Involvement and Ownership

Community involvement in rural areas of Ecuador is moving slowly, which is due to the long gestation process of the development of the IEC materials caused, in part, by months of work stoppage in the MOH itself. As noted previously, materials are only now being field-tested after nearly a year of development. It is also due to the sociocultural characteristics of the Ecuadorian population. Women especially are shy, reserved and seldom welcome outsiders' involvement in their communities. Many believe the death of a woman during delivery is a natural occurrence. Women attend the educational sessions but they are usually quiet and sometimes show little interest in what is being said. This was observed during the visit to Chanchaló.

PLAN has been organizing meetings with community leaders and other community members to inform and motivate them. Written invitations are delivered personally several days in advance in an attempt to encourage participation. In spite of this, attendance at the meetings can be low.

⁷ For example, all the women in the illustrations are wearing the same dress and the same color throughout the different materials, regardless of their age or situation. The pictures could be made more attractive and realistic if the women were depicted more in accordance with their ages. Flip charts could be more effective if the corresponding text were printed on the back of each illustration to remind the educator what should be said for each page. The calendar could be more effective if the messages were printed on both sides, so that the health personnel could be reminded of them throughout the year, not only for 6 months. The mini-poster on the emergency plan and the leaflet on danger signs before pregnancy use elaborate language that is not the everyday language used by the population. Finally, the logo used in all the materials does not focus enough on the campaign's main objective: saving women's lives through a community emergency evacuation plan.

Women's refusal to go to the health facilities to deliver is explained by the belief that a delivery should be an intimate event, which it is in their own homes. There were numerous reports of indigenous women being afraid of hospitals because of the procedures used and the disrespectful and demeaning way in which they feel they are treated by hospital staff.

Some Honduran conditions are different. The target population is of a higher educational level and much less indigenous. The women interviewed were more literate, outspoken, active, and open; some of them live in peri-urban areas, and they were already well organized. Each community had well-identified leaders who obtain the community's collaboration on a given activity.

The community extension aspects of activities in Honduras were impressive. With the cancellation of the PRODIM contract, QAP/Honduras took on the community promotion part of the initiative (IR 1) as well as its responsibilities for the hospital side of the initiative (IR 2). Through the creative hiring of an experienced community-development doctor, this side of the initiative did not suffer. Several peri-urban communities where the initiative was working were visited; the village women were well informed about obstetric complications and energized to seek community solutions. The quality of the community workshops in which the evaluation team participated was quite high. IEC activities were well received. The people welcomed the opportunity to become voluntary health personnel and were proud to be officially associated with the MOH.

Regarding community mobilization, the evaluation team visited several communities in Comayagua and was able to attend various project activities. In one community, a meeting was held with 18 women who were community leaders to discuss and analyze their experience in filling out the form to identify pregnant women in the community. Two QAP field staff conducted the meeting. Each woman had filled out her form successfully and was anxious to tell about her experience. Each woman was responsible for visiting every house on her block to ask if there were any pregnant women living there. If so, she had to interview the woman and obtain basic data that would allow her to monitor and advise the neighbor. All of the women could name the four danger signs during pregnancy (which had not been mentioned in this session, but in previous training). One of the QAP/Honduras staff was a skillful facilitator and the other was on his way to becoming one under her supervision. Both were well liked and respected by the community.

In one municipality, QAP/Honduras promoted the formation of a local foundation to collect funds for transportation of obstetric emergencies, Foundation for Women of Fertile Age (FUMEF). A meeting was held in the mayor's office to open 16 collection boxes that had been placed in public places throughout the town. The mayor opened the meeting and welcomed the participants: 11 women, 6 of whom were midwives, and 3 men. The funds were to be deposited in a bank and pay for transportation of poor women with obstetric emergencies to the hospital. Fundraising activities would be continuous and FUMEF was to develop activities to create awareness on maternal mortality and the

community's role in saving women's lives. Before the meeting started, participants were asked to name the four danger signs during pregnancy and they did so correctly.

There were reports of another community where a project-formed community group is composed of vehicle owners who are organizing themselves to transport women to the hospital in case of obstetric emergency. They had the full support of the mayor who offered to collaborate with approximately US \$3,500 from municipal funds for these emergency medical evacuations.

Lessons Learned

Key lessons learned in one country are that the initiative is making substantial progress in improving the percentage of adults who can name danger signs during pregnancy and who specify an intent to use services in the event of an obstetric emergency. Also, progress is being made in preparing community emergency evacuation plans and improving linkages between community groups and health workers. This is taking place by dint of effective project leadership and energetic buy-in from the regional Ministry of Health officials, coupled with high community demand for improved obstetric services. In other pilot countries, the quality of IEC materials is quite high. However, implementation delays have meant that community mobilization is not far advanced.

There is a larger issue worth thinking about for any potential follow-on project: how *appropriate* and *useful* is it to spend resources developing a role for the community in what might be thought of as predominantly a medical/hospital initiative? The concept of "holistic vision" discussed in the first section of this chapter should clearly answer the question in the affirmative.

Intermediate Result 2: Improved Quality of Care at First Level of Referral

QAP is responsible for the accomplishment of Intermediate Result 2: development, testing, evaluation, and dissemination of approaches to enhance use of protocols, standards and guidelines at the first level of referral. This was to be measured by pilot countries where the percentage of targeted facilities in the pilot districts that have the capacity to provide EOC increased by 15 percentage points over the prior year.

QAP has adapted its quality assurance methodology, developed over the last five years, to the theme of obstetric care. In two countries, this has involved design/ redesign projects, activities that are developed by local QAP and MOH staff based on problem identification, generating a list of potential solutions, choosing and implementing one or more solutions, and evaluating whether the problem has been resolved. A start-up workshop on the design/redesign of the Ten-step methodology was conducted in each pilot country. Six projects were originally developed in Ecuador and six in Honduras. In both countries, projects included reception and triage, referral and counter-referral, prenatal care, and community mobilization/IEC. At present, five projects are underway in Ecuador, and eight are ongoing in Honduras. A brief description follows.

Reception and triage projects involve working on making the arrival of the maternal care patient a priority, decreasing waiting periods, facilitating inpatient maternal care, lighting improvements, painting arrows on walls to improve patient flow, improving seating in waiting areas, and roofing waiting areas which are in the open. Training has also been given to hospital guards to encourage them to facilitate the admittance of pregnant women, especially those arriving with complications or in an advanced stage of labor. Most activities have so far focused on reception issues. Triage, per se, teaching the need to exclude some patients or treating emergencies before nonemergencies, has not yet formed a significant part of these projects.

Prenatal care projects (control prenatal) work to diminish waiting periods, provide effective and expedient care, improve women's treatment, and develop a better knowledge of patient satisfaction. One proposal is devoted entirely to improving the interpersonal skills of program health workers. Accomplishments in one health center (Latacunga, Ecuador) have included improvements in hygiene, privacy, sufficient bedding, and general equipment maintenance and upkeep.

A third design/redesign effort has attempted to address infrastructure limitations. Santa Teresa Hospital in Comayagua (Honduras) and Latacunga Hospital (Ecuador) both have critical space shortages that result in obstetric care being provided in a number of noncontiguous areas (admission, labor, delivery rooms, newborn care, and surgery). In Latacunga, there is no maternal emergency room; women in search of maternal care have to walk hundreds of feet up several stairs to the obstetrics area before being seen by a health professional. Emergency obstetric care is provided in the general emergency area of the hospital, a room equipped with only four beds with no privacy, also equally distant from the delivery room and maternity inpatient care areas. The postdelivery rooms are on a different floor, requiring that the new mother walk a long distance to the recovery room. Efforts to improve these conditions have met with resistance from various power centers—operating room physicians versus emergency room physicians versus obstetricians, for instance—and limitations of space and budget.

At Santa Teresa Hospital, postbirth recovery beds were shared between two women and their newborns; in addition, beds were crammed into the ward with a foot or less between them. There is only one wash room at some distance from the postdelivery inpatient area, and it lacks proper hygiene and at times has no running water. Predelivery and delivery areas have little circulating air and no bed linens, and there is limited space in which the women can walk. There is considerable outdated equipment taking up already limited space. The design/redesign projects have tried to address these difficult logistical/space barriers with limited success.

Another design/redesign effort has addressed the issue of emergency referral from a lower level service facility to the regional hospital. In Ecuador, there is no such system, and in Honduras, the current system is not working. The current Honduran system uses transfer forms that were not completed; moreover, counter-referral did not take place—the central hospital physician's diagnosis stayed behind in the larger hospital. In Honduras, the design project has developed a new referral form that is in the testing stage. However, the information on the new form is overly general regarding pregnancy

complications and not well indexed, and has no classification with respect to complication type, date or clinical findings—data that often are the reason for the referral. Moreover, the form is not exclusive to maternal emergencies, but includes a list of complications affecting both adults and children. Apparently, the QAP–designed referral instrument in Ecuador is being implemented without having been pretested.

In Honduras, three other projects have been developed. One is a plan to assure timely ambulance services from one distant maternal birthing center to the regional hospital; two others will be described more fully below.

Generalized Findings

Fifteen clinical histories were selected at random⁸ to capture an overall glimpse of the quality of obstetric documentation currently found in QAP–supported hospitals. The clinical histories reviewed contained a series of forms without any particular order, with repetitive information; also, they contained unstandardized and sometimes contradictory information. In addition, the majority were incomplete. Sometimes, files included information concerning all previous hospitalizations of the woman. The evolution of physicians’ treatment was separate from that of the nurses’ or auxiliary nurses’ treatment. Prebirth information was incomplete. In some cases, there were six hours between entries, and frequency of postdelivery exams was particularly low. Some histories did not have a diagnosis; others had incomplete clinical findings. Some did not indicate whether this was the mother’s first birth. Where a partogram existed, it had no accompanying graph. There was little sequencing with regard to diagnosis, identification, case evolution, and management. Health center case histories were more complete and demonstrated more concern with signs and symptoms; however, even then, there were few actions that seem to have been taken, based on the findings. Some of the histories did not include fetal condition. There was neither use of a scale nor monitoring of uterine height. Finally, little hospital review of more complicated cases seems to take place. Partograms were rarely used.

While these observations indicate that substantial work is needed on improving clinical histories at the service level (IR 2), it is highly likely the conditions described are characteristic throughout the LAMM initiative and thus have obvious implications at the policy level (IR 3), also.

Almost all those interviewed recognize that current levels of obstetric and neonatal care lack many key elements, and a need for improvement was generally expressed. QAP design/redesign projects have largely been oriented to the improvement of referral

⁸ Salcedo Hospital (Ecuador), the health center in Latacunga (Ecuador), and the La Paz Hospital (Honduras).

mechanisms, access, and more rapid reception at the hospital of the pregnant patient. Four clinical cases observed during the field travel are described in annex H. These cases indicate the need for more work on improved obstetric care at first- and second-level referral hospitals.

None of the QAP projects have addressed specific actions to improve detection and timely management of the four principal causes of maternal mortality—hemorrhage, sepsis, hypertension/eclampsia, and obstructed delivery—and neonatal hypoxia.

Ecuador Findings

At the provincial level, QAP/Ecuador has achieved the active participation of MOH authorities and staff in project activities. Adequate leadership was observed in some MOH personnel, a key element for project implementation. The provincial director of health is committed to project activities and has encouraged group effort and teamwork among his staff; he also made some personnel changes in order to achieve project goals. For instance, the previous director of obstetrics/gynecology at the Latacunga Hospital transferred to a less important position as a result of peer pressure generated by the QAP quality assurance process.

At the level of service delivery, hospital information on causes and frequency of obstetric complications are dispersed through a number of different hospital registers and therefore are not analyzed by staff for issues, trends or problem identification. The discharge of gynecological patients is combined with general hospital patient information. Recurring medical problems are therefore difficult to identify.

The majority of staff time in Ecuador has been spent in activities working at the provincial hospital, with substantially less time working at canton-level hospitals or maternal birthing centers. The definition of “first level of referral” has not served in Ecuador to clarify whether this is an appropriate decision, in part because both these levels provide first-level patient care.

In some service centers, improved quality of care and reduced waiting time for pregnant women is being reported. Patient reception and flow have improved in two of the three design/redesign projects, and a referral system is being worked on, the first in the country. However, many service facilities still treat pregnant women as they treat other sick patients; women have to wait for several hours among all other patients who come to the health centers with all sorts of different health problems. Indigenous communities, especially women, could be made aware of project activities and the new, fast-track approach to pregnancy and delivery services offered. The Saquisilí Health Center (currently outside the LAMM area) is a good example of this approach.

Quality design efforts at Salcedo Hospital have revitalized or replaced unused gynecological equipment and tables.

The team also visited the maternal waiting center in Latacunga, an alternative for high-risk women who live in distant areas and want to give birth at the hospital, since it offers food and lodging for any pregnant woman during the last stages of her pregnancy and during the postpartum period. The center is currently underused and is facing serious financial difficulties.

Regarding QAP methodology, the Ten-step process as developed by QAP/Ecuador is well systematized. However, experience has shown that it can be a lengthy and elaborate process, and QAP/Ecuador is now studying how it can be compressed so results can be obtained more quickly.

QAP/Ecuador has recently begun experimenting with a training methodology based on case study. Once national norms have been developed, as has occurred in Ecuador, the next step is to make them operational by defining standards and protocols to the norms. In Ecuador, the MOH is moving into that stage, and QAP is assisting. A format has been designed with questions that help service providers learn current standards through reviewing a real clinical file.⁹ Preliminary results show that the case study methodology can be used as a training/learning tool, but may be more effective if accompanied by adequate problem definition. This includes a four-stage sequence: identification of signs and symptoms, evaluation of procedures or examination necessary, diagnosis confirmation, and appropriate action to be taken. It would seem that the methodology would be useful in identifying needs for further training; however, these first results suggest that the case study methodology may be less useful in promoting the use of norms and standards. In addition, the methodology does not include review or application of any clinical *skills* in the management of the four basic obstetric emergencies.

The Ten-step methodology is having difficulty dealing with the multilayered bureaucracy and complexity of the Latacunga regional hospital. In the regional hospital, three projects (of a total of five in QAP/Ecuador) have been gestating for 15 months, which is a long time not to see many results. This has been due in part to MOH work stoppages, but also because many of the design projects exceed the team's decision-making and execution capacities. Some MOH team members commented that the methodology has resulted in tedious meetings, at times. There was also a perception that some of the design projects may exist mostly on paper. The QAP methodology appears to work better when applied in smaller facilities, such as the health centers or cantonal hospitals, where personnel from the director to the lowest level can fully commit to quality assurance efforts and power brokering is less.

⁹ The first test of this case study methodology took place at Salcedo Hospital with the clinical history of an obstructed delivery. In the preliminary tabulation of test results, all responses correctly classified the case as a pregnancy of 40–43 weeks with commenced labor. Under vital signs, no one commented regarding pelvic size, fetal presentation, uterine dynamics (though some mentioned that an obstetric examination could have included these vital signs) and there was no record of a maternal hydration or hypoglycemic evaluation. There were incongruent entries such as labor greater than 14 hours and notations with respect to initial methods and treatment. In the question “difficulties in treatment,” several respondents mentioned that lack of a Doppler, ecography or access to a 24-hour pharmacy. The majority responded that fenoterol (a uterine inhibitor) should be administered.

Also regarding methodology, community members no longer participate in hospital design/redesign committees, and the project has not yet explored a mechanism to replace this lost community voice.

Regarding outreach, some QAP/Ecuador staff members seem content to work in a quite small geographic area, in a small number of health facilities, with few design/redesign projects. One result is that QAP/LAMM is largely seen as a hospitalized activity. Additionally, since the national steering committee did not function for 8 months, QAP went ahead with project activities in Cotopaxi working with the local MOH authorities and not communicating with MOH at central level. One result is that the Ministry of Health, Quito, reports that it is largely uninformed of project status, while at the same time expressing keen interest in applying the quality assurance methodology in areas other than obstetrics elsewhere in the country.

Finally, coordination and collaboration between QAP and PAHO/Ecuador are weak. The facility and the policy components, QAP for IR 2 and PAHO for IR 3, respectively, seem to be working as two separate projects, and there is some feeling of competition and friction. USAID/Ecuador recently intervened to improve the relationship between QAP, PAHO and the MOH and to restart periodic meetings of the steering committee. Also, PLAN International is carrying out activities at the community level with little cooperation and technical assistance from QAP. In addition, PLAN reported that it does not yet have a written contract with the Center for Human Services (CHS) and JSI for the second half of the project. PLAN personnel are unsure of their role and their budget, and this situation is having negative repercussions on staff motivation and performance.

Honduras Findings

The QAP/Honduras initiative has generated eight active design/redesign projects. Most QAP design/redesign projects in Honduras are similar in scope to those in Ecuador, that is to say, of limited utility in enhancing the use of protocols, standards and guidelines and demonstrating effective new models of improved maternal care so far. Two activities, however, have the potential for quite high replicability and impact in the near future. Each merits some description.

The departmental hospital in Comayagua, Hospital Santa Teresa, was designed to serve a population of 50,000; it now serves 500,000. Overcrowded and short of drugs, sterilized equipment, staff and money, the hospital has been practicing triage medicine for at least a decade. Its maternal lethality has been the worst in the country.

Under the auspices of a LAMM design/redesign project, Santa Teresa is beginning to change. Hospital staff report lowered waiting time, especially for obstetric patients who have become a staff priority. Patient-centered remodeling is under discussion by the design/redesign team. The issue of how the patient is treated (*trato humano*) is now being discussed by hospital staff. An exit survey of patient satisfaction was conducted, which showed that women recognize that hospital personnel are trying to improve. A

community volunteer program to help relieve staff shortages is trying to begin. Hospital staff reports general improvement in hospital cleanliness and the timely repair of the hospital water and electric systems.

Even more important than these fledgling improvements, the *spirit* of the hospital seems to have improved. Staff attitudes of negativism and resentment are now being replaced by more investment of personal enthusiasm, and a sense that improvements are being made and that locally generated positive change is possible. It is important not to overstate this finding, because setbacks in the design/redesign process can still occur and the physical conditions of Hospital Santa Teresa still do not meet national or international standards. Nevertheless, a real attitude change appears to be taking place under LAMM auspices.

At the José María Ochoa Health Center, which is near Hospital Santa Teresa, a second dramatic change is taking place. Current data from Santa Teresa show that 85 percent of births are normal, requiring no specialized hospital interventions. However, until now, José María Ochoa has been classified as a health center with a physician but with no obstetrical function. The QAP design/redesign project is helping José María Ochoa to reclassify itself as a maternal birthing facility. With that change, the center proposes to handle as many uncomplicated pregnancies as it can. A similar facility created under local initiative 30 miles away handles 1,500 births a year. If José María Ochoa handles that amount of normal pregnancies, it would reduce Santa Teresa's patient load by one third. Beyond that, regional plans are to move from 5 such centers to 10 in the next year. For the first time in at least 10 years, there is the possibility that obstetric care will improve in the Comayagua Valley in a short time in a way that was inconceivable as little as 15 months ago.

Another potential learning is that it is important to standardize the fee that facilities charge so that there is no economic incentive to overuse one and underuse another. A cost structure should be developed which takes into account a different level of service at (overcrowded) hospitals. (In fact, the preferred goal would be to charge *more* in the hospital, the higher service level, and *less* in the lower service level, to provide an economic incentive that service facilities be used as the scarce resource they are.¹⁰) Second, local, decentralized management of funds seems a relatively easy way to improve the quality of obstetric care provided by a service center and, at the same time, provide essential operating funds at a time of acute budget scarcity from the central level.¹¹

¹⁰ Recommended in the *Midterm Evaluation of the Health Sector II Project (522-0216)*, prepared for the U.S. Agency for International Development and the Honduras Ministry of Health, POPTECH, September 1998.

¹¹ This observation comes about by looking at the maternal clinic in Siguatepeque, where for five or more years, a local civic committee and the maternal clinic have established a policy of charging 100 Lempiras (US \$14) for women to give birth in the clinic. While this sum is nearly 3 times what the Comayagua hospital charges, the quality of attention in Siguatepeque is such that many women prefer to give birth in the Siguatepeque clinic rather than the Comayagua hospital. Half of the fee goes to the MOH Department of Health; the other half stays at the clinic for improving care.

The project also appears to have generated a number of derivative effects. Hearing of project activities, several local authorities of nearby municipalities requested project assistance in conducting municipal strategic planning exercises in the spring of 1999, to which QAP responded. The director of the MOH Department of Quality Control is notably committed to LAMM activities and quite involved in ongoing supervision. A document entitled, *Strategy to Guarantee Quality*, was published in May 1999. On October 1 1999, QAP and PAHO were planning to cosponsor a “National Quality Care Day.” In the field, Honduran women report that they do not like to give birth in hospitals because of poor treatment by nurses. One of QAP/Honduras’s design/redesign projects is having a secondary effect that some health care providers are becoming concerned about improving their attitude and communication skills.

Similar gains are not likely to be achieved in the neighboring department of La Paz where the design/redesign team has encountered apathy from the hospital director and lack of involvement from the resident obstetrician/gynecologist. In this hospital, nursing staff was clearly seen to be disempowered. In contrast to the Siguatepeque clinic or the Santa Teresa Hospital, where auxiliary nurses proudly serve as the first providers of obstetric care, in the La Paz Hospital, nurses report categorically that they only do only what is authorized in writing. A generalized finding comes out of the two hospital comparisons in Honduras: without active commitment of hospital doctors, it is difficult to see how the LAMM initiative can measurably improve maternal mortality in the foreseeable future.

Regarding standards and protocols development, the QAP/Honduras team is completing the training of MOH auxiliary nurses and nurses in the manual of standards through the hiring of a licensed nurse to conduct the training. The methodology consists of lectures concerning the manual and a discussion afterward directed by the facilitator. Each participant receives clinical management observation with at least two supervised attended cases. The training/capacity building lasts two days for licensed nurses and auxiliary nurses, and there is a strong review of the themes of delivery and newborn care. Training takes place over 5 days in the health centers, and there is a special review concerning the themes of prenatal care, postpartum care and family planning. Although management of obstetric complications is not included, this seems to be an effective training regime.

It appears that advances taking place in standard and protocol preparation in Honduras should be given wide exposure throughout LAMM. QAP could be studying the Honduran manuals for replication in the other two pilot countries and PAHO could be studying them for wide replication throughout the region.

Lessons Learned

In one pilot country, substantial learning is taking place on development, testing, evaluation, and dissemination of approaches to enhance use of protocols, standards and guidelines at the first level of referral. Significant, replicable gains are taking place in improved essential obstetric care. In another country, fewer gains are being achieved, although some activities are underway to improve patient reception and flow. It may be

that the design/redesign methodology works better at smaller facilities and in less complex tasks where staff buy-in can be more easily achieved, where power politics and logistic/facility limitations make significant gains less likely. MOH commitment to the design/redesign process is essential: where it exists or can be fostered, projects will likely succeed; where it does not, or cannot be expected, projects will likely not prosper.

Some QAP design/redesign projects seem to be addressing peripheral rather than substantive obstetric issues. Concentration on the four essential obstetric problems, hemorrhage, sepsis, hypertension/eclampsia and obstructed delivery, would help address this issue. Finally, there is a substantial underused opportunity to learn from facilities outside LAMM areas where gains in reduced maternal mortality are also being achieved.

Intermediate Result 3: Improved Policy Environment

PAHO is responsible for the accomplishment of Intermediate Result 3: “intensive implementation of the EOC aspects of the [PAHO] Regional Plan for the Reduction of Maternal Mortality.”

Table 2 outlines the differences between USAID and PAHO indicators. There are some discrepancies.

Table 2: Differences in PAHO IR Indicator Formulation

	Results Package Indicators	SO Schematic Indicators PAHO Proposal Indicators Work Plan Indicators
Intermediate Result: Intensive implementation of the EOC aspects of the Regional Plan for the Reduction of Maternal Mortality	<ol style="list-style-type: none"> 1) Target countries with policies and plans for community mobilization to increase the utilization of Essential Obstetric Care (EOC) 2) Target countries with funded programs for community mobilization to increase the utilization of EOC 3) Target countries with policies and plans for delivery of EOC at the first level of referral 4) Target countries with funded programs for delivery of EOC at the first level of referral 	<ol style="list-style-type: none"> 1) Existing regional EOC strategies reaffirmed or revised 2) Functioning regional and country coordinating committees 3) Enhanced communication between country program managers and regional program staff 4) Program managers have better information for program decisions 5) Increased high-level political support for implementation of the regional plan at the country level 6) Recommended legislative/regulatory policy changes adopted

It is not clear which of these two formulations is the operative one. USAID is evidently required to report annually on accomplishments according to the formulation in the first column. The PAHO proposal and PAHO’s annual work plans carry the formulation in

column two. In terms of legal obligations, quantifiable outputs and annual reporting, it is important to determine which of the formulations takes precedence.

Generalized Findings

One of PAHO's strengths is its ability to maintain program momentum in spite of movement of key players. PAHO's LAMM initiative continues in spite of various changes of government (Honduras, Ecuador), changes of ministers of health in all countries visited, countless changes of MOH personnel, changes of PAHO representatives in all countries visited, changes in PAHO staff charged with LAMM responsibilities (El Salvador, Honduras), and changes of USAID Mission personnel (Peru, Honduras).

LAMM provides funding for a PAHO organizational priority, and counterpart funding agreed to within the LAMM initiative commits PAHO to using its resources for mutually agreed-upon priorities. Maternal mortality became one of the PAHO-declared objectives after the Twelfth Session of the Pan American Sanitary Conference in 1990. LAMM support to PAHO has contributed meaningfully to taking the PAHO declarations into the world of operational activities. As one respondent stated, "LAMM has helped accelerate a process that was already underway... and has allowed PAHO to separate out maternal mortality from the priorities of family planning and reproductive health." Another national consultant commented, "LAMM has shown Latin political leaders that working to reduce maternal mortality does not mean building new hospitals."

A number of national and international events have been promoted within the initiative. All 11 countries are now reported to have national health plans in which maternal mortality figures importantly. A number of high-level regional events have been achieved: the 1997 and 1998 First Ladies' Annual Meetings, where maternal mortality specialists presented their annual achievements, and the carrying out of a teleconference on maternal mortality in June 1998, involving the participation of the First Ladies of the United States, Bolivia, Ecuador, and Peru. In April 1998, World Health Day emphasized safe motherhood and needless maternal deaths in the 11 countries, and the resolution on reproductive health emphasizing emergency obstetric care and attention to indigenous populations was passed at the 25th Directing Council by various ministers of health. The First Ladies met in Ottawa in the fall of 1999 and maternal mortality was an item on that agenda. For some months, PAHO consultants have been assembling a legislative summary for each country showing the legal basis for maternal mortality issues.

PAHO staff tends to see their role as purely policy oriented. The evaluation team's perception is that in PAHO generally, the synergism between *policy* and *field* is underrecognized. Only in PAHO/El Salvador does there seem to be an adequate recognition that field experimentation can enrich policy dialogue. In other countries, more could be done so that LAMM staff would be better informed of field-based learning—and lobby for national recognition of those experiments. PAHO/Washington could assume a higher profile in promoting this policy-field interface in the 11 LAMM countries.

The absence of reliable data on maternal mortality has been noted elsewhere. In the countries visited, only those cases involving deaths on hospital premises are reported and data regarding nonhospital deaths hardly exist. Up to 50 percent of the population are not using MOH facilities when giving birth. Without a proper understanding of causes and frequency of death that occur outside the hospitals, recognition of the depth of the problem is handicapped. Some movement is taking place under PAHO auspices in improving surveillance and maternal mortality surveillance committees are reportedly being formed under LAMM auspices, although the number was not available to the evaluation team. New strategies are being applied in Peru and Honduras in weekly reporting by facsimile of maternal deaths that could be looked at for wide replication. PAHO's crossfertilization of experiences from one country to another can contribute to this issue.

A separation appears to exist between PAHO country activities in maternal mortality and USAID Missions. As will be seen, in several countries, local USAID Missions are largely uninformed of the PAHO LAMM responsibilities. USAID/Washington needs to strengthen its liaison with the Missions. Also, PAHO country staff needs to become more proactive in creating and maintaining USAID Missions' knowledge and interest in LAMM.

Throughout the LAMM area, there is generally recognized need to improve obstetric care in the hospital. Four clinical cases observed during the field travel (annex H) indicate the need for continued work on improved obstetric care even at first- and second-level referral hospitals. However, PAHO's involvement with the LAMM initiative has not yet adequately addressed specific actions to improve detection and timely management of the four principal causes of maternal mortality—hemorrhage, sepsis, hypertension/eclampsia, and obstructed delivery—and neonatal hypoxia.

Ecuador

Maternal mortality is becoming of increasing importance on the national health agenda of Ecuador. With PAHO/Ecuador support, two coordinating committees were formed in mid-1997, one at the technical level and another at the political level, including the First Lady and the Ministries of Health and Education. An early output of that effort was the declaration that maternal mortality was a public health priority, followed by the promulgation of a National Program of the Reduction of Maternal Mortality in June 1999.

Field activities in maternal mortality are underway in 10 provinces and the MOH expressed the desire to expand the effort to all 22 provinces. Phase One involved the formulation of national norms; PAHO/Ecuador participated in the formulation of these guidelines by hiring consultants who assisted in the document's preparation, as well as its diffusion in the national media. Phase Two currently underway, involves the transfer of knowledge via the development of self-instructional materials and a manual on the

management of emergency obstetrics that will complement current guidelines,¹² PAHO/Ecuador participated in this effort, also. Phase Three is supposed to include the transfer of obstetric skills in training centers proposed to be established in Cuenca, Riobamba and Quito to train MOH staff. In the 10 provinces, PAHO staff reports that 181 maternal mortality committees have been formed at provincial levels, increased from 30, two years ago, as a result of initiative activities.

In spite of the publication of these documents, it was widely reported that a lack of clarity exists over the term essential obstetric care in Ecuador. This fact slows the development of monitoring regimes and widespread application of norms. While maternal and neonatal standards and protocols have been recently revised with project participation, they are not being followed. Field-based obstetricians/gynecologists acknowledge a need for their correct application. Also, standards are focused on factors of high-risk obstetrics. Given that the predictive validity of identifying high-risk patients is rather limited, concentrating on improved care in the four principal causes of maternal mortality could be a better focus. PAHO technical assistance could be provided to clarify these concepts.

The Ecuadorian standards have been developed as part of a reproductive health effort that also include themes of family planning, infertility, menopause, and adolescence. The risk is that measures intended to diminish maternal mortality may not receive adequate emphasis in an integrated atmosphere, but this is the reality of the situation.

Regarding the development of standards and protocols, PAHO/Ecuador reported that its action plan includes dissemination of the new norms on a staged basis, and the transfer of knowledge, skills and abilities. Likewise, PAHO has prepared the document, *Essential Obstetric Functions at the Primary Level of Reference*. During the meeting of the National Commission, PAHO stressed the need to focus the project on EOC components, although it was not clear how this was being addressed.

Peru

Maternal mortality is high on the national health agenda in Peru. Reducing the rate of maternal mortality is 1 of the 10 priorities in the national plan of the MOH. In 1998, there was an 8-week national educational campaign promoting safe motherhood and the third week of May has been designed as National Safe Motherhood Week. The First Lady of Peru participated in an international teleconference with the First Ladies of the

¹² The manual's discussion of the control of postpartum hemorrhage and obstructed delivery could be strengthened. Also, the text's description of prescription and use of medication (sera, oxytocics, anti-convulsants, sedatives, and antibiotics) requires greater accuracy, especially if the manual is to be used by staff at a primary level of care. The document does not contain a description of procedures or skills needed in essential obstetric care (i.e., manual extraction of the placenta, manipulation of the uterus.) Also, an example of the partogram is included but there are no instructions on how to use or interpret it.

United States, Ecuador and Bolivia. Early in 1999, in a public ceremony announcing a new minister of health, President Fujimori specifically cited maternal mortality as one of the health priorities of his administration. The vice-minister of health chairs a national subcommittee on reduction of maternal mortality.

Major reform is underway, in which maternal mortality figures prominently, a proposed 10-year project involving the reorganization of the health sector with international financing of several hundred million dollars from the Inter-American Development Bank (IDB) and the World Bank. The Ministry of Health produced an operational plan to reduce maternal deaths in 1997, setting forth clear targets based on the national plan published in 1995. Also, quality data on maternal deaths are now available at the national level; each week, every health establishment in the country has to send a report by facsimile to the MOH on maternal deaths during the week, and PAHO reports that it provided technical supervision to these committees.

PAHO/Peru has contributed to these gains through the hiring of consultants in maternal and child health from Bolivia and Puerto Rico. The MOH reports that PAHO provided technical assistance in the areas of maternal epidemiology, techniques, management, norms, and procedures. It will also provide consultants in the new IDB/World Bank project. PAHO/Peru is a member of the national committee created with PAHO support in 1999. PAHO has produced flyers on an innovative agreement between the MOH and an influential Peruvian NGO, the Comedores Populares, promoting themes of reduced maternal mortality. Three regional workshops (Lima, Tacna and Trujillo) were held, including reduced maternal mortality in decentralized regional planning.

There is an unfortunate detachment or separation between PAHO at the national level and a USAID/Peru-financed maternal mortality field project, Project 2000. Although this project has a great deal to teach in terms of improved obstetric care in rural areas, PAHO staff has not visited the project in the four-plus years of its existence. Although Project 2000 has a number of weaknesses, as demonstrated by a recent midterm evaluation, it could be an important learning laboratory on improving obstetric care in rural Peru (and, possibly, in all of rural Central and South America).

USAID/Peru reports feeling no sense that PAHO is part of the team, and does not believe that PAHO has contributed much to maternal mortality. Both USAID/Peru and PAHO report work in nurturing 13 female congresswomen in themes of maternal mortality, but, evidently, neither side is informed about the other's activities.

El Salvador

Maternal mortality may be entering the national health agenda in El Salvador. A National Reproductive Health Plan was approved after a year's work and was published in April 1999 with PAHO/El Salvador support. Topics related to essential obstetric care figure in this plan. The new PAHO country representative, an obstetrician/ gynecologist, previously served as technical consultant to the MOH and contributed significantly to writing the national plan. The new minister of health is reportedly interested in maternal

mortality, and the new vice minister is an obstetrician/gynecologist. President Flores created a National Midwife Day several months ago and the first village midwife was given national recognition for her contribution.

Other positive developments are that each of the 30 hospitals providing obstetric care reportedly has formed a maternal audit committee to investigate cases of maternal mortality, although the new PAHO representative noted that maternal death surveillance is still relatively underdeveloped in most of the country. PAHO financed a multidisciplinary project in reproductive health and the establishment of a National Commission on Maternal Mortality. For several years, PAHO has provided technical assistance in the design of 5- and 10-day courses for community midwives: 5 days for those who were known to the MOH, 10 days for those who were not.

One innovation occurring under PAHO/El Salvador auspices is a policy-field interface. As part of its support to maternal mortality, PAHO has been providing long-term technical assistance (pilot feasibility projects) to four maternal hospitals. Recently, this support included workshops to develop quality circles. According to staff at one hospital, these workshops contributed to an enhanced sense of team, the establishment of a local quality committee, carrying out a client-satisfaction survey, inservice training for hospital-affiliated community midwives, and course work on improvements in reproductive health. PAHO/El Salvador also reports that it will soon cofinance an obstetric emergency course for hospital personnel.

LAMM in El Salvador has suffered from staff changes. The current LAMM consultant is the third in the position and is filling an interim assignment while maintaining multiple other responsibilities; moreover, this individual is not a health person. A copy of the PAHO/Washington program description from the USAID/PAHO grant was not available in El Salvador, detracting from the supervision of project responsibilities or accomplishment of project commitments. A recent international position had been created (child survival advisor); this individual should be joining the El Salvador team in November, in part, to assume LAMM responsibilities.

Less than 50 percent of births in El Salvador take place in hospitals (25 percent are unattended by anyone). The MOH/El Salvador suffers from heavy turnover of staff (particularly after recent elections, as in this case), and there is a need to continually train new MOH staff in the importance of maternal mortality.

There is concern about the PAHO/El Salvador quality circles effort, despite the favorable comments from San Bartolo hospital staff and the qualifications of the facilitator. A review of the workshop document found text hastily pulled together from other larger documents. The report on the workshop output is sketchy and describes several sessions where the workshops had to be compressed because people did not arrive on time. This initiative should be reconsidered.

The USAID Mission reports that it is largely uninformed of the goals and strategies of LAMM, although the initiative was discussed at the September 1998 state-of-the-art

course in Miami attended by El Salvador PHN personnel. The Mission expressed the opinion that PAHO's "presence in maternal mortality [has been] largely irrelevant." Recently, the Mission reports that several favorable, early contacts have taken place with the arrival of the new PAHO country representative.

Honduras

In Honduras, the initiative is strengthening national attention to reduced maternal mortality. A new MOH health agenda was published in April 1998, in which maternal mortality figures as 1 of 10 national priorities. Institutional births have risen from 43 percent to 53 percent in the last 10 years. A national plan for the reduction of maternal mortality has been produced recently. The MOH requires that maternal deaths be reported each week, including those attended by traditional midwives. Some maternal waiting homes (hogares maternas) have been established.

With support from three international donors, including PAHO, last year the MOH carried out an innovative maternal mortality study. Using four part-time researchers, a verbal autopsy was conducted on all maternal deaths reported in the previous year. Those data were compared with national figures, with results that are largely corroborative. The MOH director of primary health care gave an excellent presentation on these findings to the Centers for Disease Control and Prevention (CDC) in Atlanta. A National Committee for the Reduction of Maternal Mortality has been created to supervise LAMM, chaired by one of the authors of that study. Also, the MOH has granted administrative flexibility to several of the USAID-supported departments in which LAMM is working to experiment with different service delivery mechanisms.

LAMM has enjoyed high involvement from the MOH in Honduras. The national committee took an active role in project startup. One innovation is that the Comayagua regional director of health where QAP/Honduras works was a participating member in this committee from the start of the initiative. Among the many positive outputs reported by that committee are a feeling of shared responsibility, consensus decision-making, "quality" becoming a priority as an MOH goal, institutional births now becoming a national priority, and more maternal birthing centers being established nationally. Because national priorities became scrambled after Hurricane Mitch, this committee did not meet for nearly 8 months (which is understandable). It appears likely that the committee will soon reassume its high-profile leadership.

Regarding the development of standards and protocols, in Honduras, the MOH's publication of the *Manual of Standards and Procedures for Integral Women's Care* contains standards for prenatal care, delivery and newborn care, and post-delivery care, as well as criteria for identification and referral of complications. Specific case management is addressed in a companion document, *Management Standards of Emergency and Pathological Obstetrics at the Institutional Level*. In addition, a *Pocket Guide for the Care and Management of Emergency Obstetrics for Levels of Complication* is currently under review. These documents have a full description of obstetric complications, including the principal causes of maternal mortality. The pocket guide is

a synthesis of clinical management differentiated by levels of service based on the standards document. In general, these are good documents, well thought out and nicely interrelated. Included as annex I are some suggestions for improvements in the booklet.

A PAHO–hired consultant contributed to writing the norms and procedures manual that took over a year and a half to complete. PAHO/Honduras provided technical assistance in the design and workshops of the midwife’s manual. PAHO is cofinancing the publication of norms of integrated attention, and a PAHO–financed workshop on clean births will be held in September 1999 for community midwives. Perhaps as an indirect result of LAMM, USAID/Honduras has recently signed a contract with the Johns Hopkins University to conduct a special diagnosis of maternal deaths at the two largest facilities in the country: the Hospital Escuela Materna in Tegucigalpa and the Hospital Rivas in San Pedro Sula.

MOH staff in the Comayagua region voiced the opinion that PAHO/Tegucigalpa has been largely absent from involvement with LAMM in its department. At the national level, although PAHO is a member of the national steering committee, the MOH reports that not much coordination with PAHO takes place. An area requested of PAHO by the MOH is technical assistance in developing fundraising projects, where PAHO’s connections with the international donor community could be exploited.

As in some other countries, PAHO–supported LAMM activities have suffered from overly frequent staff changes. A significant lapse in staff follow through was noted with the departure of one PAHO consultant last year, leaving the initiative without supervision for months. Moreover, there is some confusion about who the PAHO LAMM representative is.

The MOH reports one significant weakness in the PAHO portfolio—it is only working on policy—that summed up a lack of policy-field interface noted in Honduras and other countries.

Lessons Learned

Country-specific comments have shown a wide diversity of activities and should be read to show how LAMM experiences in one country or another could lead to similar activities in the 11 target countries.

Substantial gains have been achieved by PAHO in the area of increased high-level political support to reduced maternal mortality at the country level (sub-IR 5): this is an area of PAHO strength. Adequate progress is being achieved regarding review and reaffirmation of existing regional EOC strategies (sub-IR 1) and recommended legislative/regulatory policy changes (sub-IR 6). However, functioning of regional and country coordinating committees need to be strengthened (sub-IR 2).

Enhanced communication between country program managers and regional program staff, and better informed program managers (sub-IRs 3 and 4) are areas where

improvement should be expected. There is a great deal of country insularity regarding what is taking place in LAMM and in maternal mortality that PAHO has not yet adequately addressed.

Also, except in isolated cases, PAHO staff is overly focused on pure policy formulation and disconnected from what is taking place in the field—maternal mortality and LAMM innovations with potential for significant impact and replication. Three such examples are standards and protocol preparation in Honduras, the possibly dramatically successful improvements in obstetric care taking place in Comayagua, of which PAHO staff is largely unaware; and weekly reporting by facsimile of maternal deaths and Project 2000 experiences in Peru. PAHO should be giving these—and other—potential success stories wider exposure throughout the LAMM initiative.

Finally, the broad thematic issues discussed at the beginning of this chapter need to receive more attention from PAHO at the policy level: a holistic vision of essential obstetric care, addressing some policy attention to unmet need, additional work on collecting reliable obstetric data, and special training for less well-trained service providers, nurses and auxiliary nurses.

C. POLICY/FIELD INTERACTION

In order to have maximum impact, policy should be enriched by field activities. As noted above, this is taking place somewhat in El Salvador. It appears to be taking place even more in Peru.

Project 2000 is a USAID/Peru project that has included a special focus on maternal mortality at the field level. A major activity at approximately \$30 million over five years, Project 2000 has been concentrating on establishing training hospitals in rural areas that will provide improved obstetric care to rural (and indigenous) women during childbirth. One innovation in Project 2000 is the establishment of a birthing center appealing to indigenous women—a delivery room created to approximate the characteristics of an Indian woman giving birth in her own home, with low-level lighting, a warm room, animal-skin rugs on the floor, vertical-position birthing, room for family members to be present, and hospital staff trained in indigenous norms and culture. This is a very important concept and a major way in which hospitals can begin to attract a larger number of indigenous women into medical facilities.

Other innovations in Project 2000 are a number of quality assurance ideas:¹³

- improving the care of obstetric emergencies in decentralized facilities,
- problem identification based on norms and institutional self-assessment,
- focusing on the importance of community participation,

¹³ Called the “continuous quality improvement” methodology in the Peru project.

- spending special effort on a team approach to obstetric management,
- enhanced training for traditional midwives,
- MOH staff attending some births in women's houses,
- creation of decentralized regional training centers focusing on hands-on training,
- starting to work with standard management of obstetric cases,
- focusing on satisfaction of users,
- focusing on improved obstetric data collection and data-based decision-making, and
- facility accreditation.

Project 2000 also provides an example of the holistic vision of the wider system of obstetric care: roles and functions at the community, health post, and first- and second-referral levels, that form a major recommendation of this report. The evaluation team was given a copy of the recently completed midterm evaluation of this project, a document that is not overly favorable to the administration of the project. However, in terms of its contribution to improved obstetric care and the learning curve of effective strategies to reduce maternal mortality, Project 2000's potential impact is high.

Each LAMM implementer could become better informed about this project and look for areas of crossfertilization.

D. SUMMARY

In general, the initiative is strengthening national and regional attention to maternal mortality. Field observations show that it is strengthening Ministry of Health efforts in Ecuador, Peru and Honduras, and to a lesser extent, in El Salvador. In other countries, the Dominican Republic perhaps, the initiative may be providing new impetus to addressing longstanding problems. Although the observation is subjective, if LAMM did not exist, the importance of working on maternal mortality would be significantly less recognized in Latin America than it is.

As in any new project, LAMM has encountered start-up difficulties. Some discussion of frequent changes of key players has been discussed; other personnel changes will be noted in the next chapter. On both the PAHO and the QAP side, a disparity between country personnel has been perceived.

In the three QAP pilot countries, the initiative has started unevenly. In one country, several pilot projects have the potential to improve obstetric care significantly over the short term, as well as developing models of intervention for impact over the long term.

In a second country, the pace has been less exemplary; in part, because of the initiative's inability to find and retain high-quality staff, in part because of complex activities the initiative has undertaken, and in part because of an overly circumscribed project area. In a third country, the project is reported as not yet operating effectively.

Nevertheless, LAMM as a whole is well placed to achieve its goals. Substantial groundwork has taken place on which activities can build. Improvements in obstetric care will be replicable even within the remaining two and one-half years of the initiative.

IV. MANAGEMENT FINDINGS

The following topics are addressed in this section: startup, financing, Washington Steering Committee functioning, initiative-supported regional fora, communication, coordination, work plan preparation and reporting, monitoring and evaluation, staffing, and geographic dispersion.

A. STARTUP

An action memorandum describing the LAMM initiative was approved by the assistant administrator for Latin America on November 27, 1996. Original grant documentation was signed with PAHO on December 4, 1996. There were issues regarding whether PAHO could begin charging expenses to the grant from that date that slowed PAHO's startup, although staff salaries began to be charged to the grant in January 1997. Full-scale PAHO startup took place from April 1997 with the signing of a grant amendment resolving the issue.

Throughout the spring and summer of 1996, technical assistance discussions were held among staff of USAID/Washington, QAP and MotherCare regarding potential collaboration in the initiative. On October 1, 1997, funding was allocated to these latter two institutions from the LAMM initiative, as a task order to MotherCare and as a transfer of field support funds to the Global Bureau in the case of QAP. MotherCare and QAP reported that actual fund transfer did not take place until early 1998, while USAID reports that salaries were charged retroactively by QAP from March 1997. Although outside the control of LAMM, MotherCare's institutional involvement in the initiative suffered a major blow when it was announced that the MotherCare project would close in September 1998. (MotherCare personnel continue to work on the initiative through a subcontract arrangement with QAP.)

It will be noted that for QAP and JSI, field activities have been underway for only about one and one-half years. This is little enough time to achieve all that has been documented in the previous chapter.

B. FINANCING

The total LAMM initiative is currently authorized at \$4.5 million: the \$2.25 million grant to PAHO, \$450,000 to MotherCare, and \$1.8 million to CHS. USAID estimates that total grant expenditures to the end of FY 1999 will be \$2.8 million of a \$2.85 million budget, as shown in table 3 on the following page.

Taking into account the staggered start of a new project and somewhat low expenditures in FY 1998, the expenditures versus the budget have become adjusted during FY 1999.

Table 3: Budget and Estimated Cumulative Expenditure

to September 30, 1999 (USAID Funds in \$000)

Grantee	Obligated	Expenses	Percent Executed
PAHO	1,035	1,002	97%
URC/QAP	1,067	918	86%
MotherCare	450	450	100%

C. WASHINGTON STEERING COMMITTEE

One feature of the initiative design is the formation of a Washington-based steering committee. Current membership of the steering committee includes representatives from each of the three implementers and the USAID project advisor. This group has met regularly since March 1997 to work with USAID on the initiative's design. In the committee, a memorandum of understanding was negotiated among PAHO, QAP and MotherCare regarding respective fields of action. Meeting agenda notes have been reviewed from these sessions that indicate substantial frequency of meetings and many early decisions. Among those taken in the early days of the initiative by this committee are selection of three pilot countries; the division of country leadership between MotherCare and QAP; updating annual work plans; defining criteria for, and eventual selection of, collaborating NGOs in three pilot countries; organization of country field coordination committees; much work on the reformulation of Strategic Objectives, Intermediate Results and results indicators; and, routine monitoring.

One key decision taken by the steering committee was creating the position of an initiative-funded field coordinator in each pilot country to oversee activities. Establishing this position was a vital early adjustment that contributed to the initiative's progress. In countries where the field coordinator is strong and energetic, the project has moved forward with appropriate rhythm and quality. In Bolivia and Ecuador, where the field coordinator has changed several times, activities are not as well advanced.

Monthly steering committee meetings were the norm in the early project, and were reduced to every two months about a year later. When the steering committee meetings changed to once every two months, the venue of the meetings moved from one organization's office to another. The USAID advisor since 1997 is credited with high energy, which kept the initiative moving that would not have been achieved with a less involved management style.

Over the months, it appears that the topics of steering committee discussion became more administrative than programmatic, although a recent change back to a programmatic focus has been reported. It will be seen from this evaluation that several of the concepts discussed in the early days of the steering committee may need to be reconsidered. The

definition of essential obstetric care based on the initiative authorization, the role of PAHO in the pilot countries and a more holistic vision of EOC, are such topics.

D. REGIONAL FORA

As part of the initiative, PAHO has hosted several events during this period, in Roatán in 1997, and Santo Domingo in 1998. The Roatán event was the PAHO annual regional managers meeting with PAHO advisors and MOH representatives; a similar event was held the year before in Washington, D.C. In Santo Domingo, the meeting was for the senior technical advisor group. A similar event is scheduled to take place in Honduras shortly. There were reports from several respondents that the Roatán and Santo Domingo meetings were not well handled.

Three regional interagency coordinating subcommittee meetings were held in April 1998, February 1999, and April 1999. A review of the maternal mortality surveillance system was held in Ecuador in May 1998. PAHO reports of several of these events have not been received to date by USAID.

E. COMMUNICATION

Communication refers to the flow of electronic and paper correspondence between Washington and the countries, and between one country and another. Most respondents report that this aspect is one of the initiative's strengths. The advent of electronic mail clearly has made a huge difference in this area, and all persons interviewed expressed satisfaction with the flow of communication between Washington and their respective countries.

The evaluators believe this is probably an overly optimistic assessment. In only one country was the PAHO LAMM representative fully aware of her responsibilities and up to date on the obligations of the PAHO grant. The flow of communication in QAP is clearly better, but even in QAP there is some feeling from one country to another of not being fully informed; the evaluators noted that the level of information between one QAP pilot and another was not all that could be expected. Good communication *between* LAMM implementers was not noticeable. One possibility is that electronic communication is good throughout the initiative, but that the sending and receiving of larger documents is an area for improvement.

For PAHO/Washington and USAID/Washington, a concerted effort at communication with newly arrived USAID PHN Mission personnel may be necessary. As seen elsewhere in this document, especially where PAHO is the only LAMM implementing agency, the local USAID Mission reported being largely uninformed of the goals and strategies of PAHO/LAMM, although Mission staff had participated in a Miami workshop where the initiative was presented. One Mission commented on not having received a copy of the PAHO proposal to USAID/Washington, but only a descriptive narrative. Technical personnel of another USAID Mission exhibited some dissatisfaction with the structure of the initiative. It is likely that similarly low levels of information exist in other target countries that the Washington offices of PAHO and USAID should work at improving.

F. COORDINATION

Efforts of the USAID advisor to maintain frequent contact with country-level personnel have been reported. This involved travel to 8 of the 11 countries, several more than once. Technical assistance has been provided to USAID/Nicaragua on maternal health surveillance, to USAID/Paraguay in adding maternal mortality to a Mission family planning project, to USAID/Peru to include maternal mortality in the newly starting CHANGE project, to the Japanese International Cooperation Agency (JICA) on areas of complementary programming, and to others. The LAMM initiative has been presented at various national and regional events on maternal health within LAMM areas and outside, once at the invitation of the United Nations Children's Fund (UNICEF) representative in Colombia, and once at the invitation of the MOH's Director of Women's Health of Brazil.

Coordination between colleague organizations refers to the sharing of experiences, and, in this area, all three initiative implementers demonstrate some need for improvement. In each of the three agencies, there does not seem to be any sustained effort to share project-generated documentation, or to engage in proactive learning sessions (beyond steering committee meetings and some shared travel now that the QAP/JSI subcontract exists). Each organization has reports that should be shared among the partners. Several examples are PAHO's recently translated WHO mother-baby manual, MotherCare Ecuador IEC materials, QAP baseline data studies, and the design projects. Sending a report is only the first part of effective communication; what happens after the recipient receives the report is an issue that has yet to be addressed adequately.

Each country visited has a coordination problem. In Ecuador, coordination was judged sufficiently problematic that the USAID Mission intervened to improve the situation. In Peru, there is a separation between PAHO/Lima and field activities. In Honduras, the interest and involvement of PAHO staff in coordinating with the MOH and with QAP needs improvement. Country steering committees that are supposed to oversee the functioning of the initiative have generally not functioned satisfactorily for many months. Coordination and communication between headquarters and field operations is an area requiring more work for all initiative actors, including USAID. (See Recommendations for some practical suggestions on how improvements can be achieved.) Communication to host country governments varies greatly from one target country to another and from one pilot country to another. (See also the related discussion on monitoring and evaluation, below.)

G. PLANNING AND REPORTING

USAID's monitoring of partner planning and reporting for this initiative, the availability of reports, and general paper flow were reviewed and demonstrate comprehensive, effective management. Documentation was voluminous and of high quality.

MotherCare's contract with USAID's Global Bureau, which included LAMM, required the submission of monthly reports that occurred until the end of the delivery order in September 1998. A review of these documents indicates that the paper flow was good.

QAP's reporting for this initiative was impressive: a number of high-quality documents have been produced. Among these are substantial trip reports for every visit, baseline studies and assessments, well-documented files of each design/redesign project, a comprehensive country briefing document in Ecuador, and other documents (see annex J). This is an area of considerable strength.

PAHO planning and reporting has been less satisfactory. The FY 1998 PAHO work plan¹⁴ established a number of indicators that are not especially substantive. While tracking some of these activities may be necessary in an objective related to policy development, they appear rather soft. Annual planning improved with the FY 1999 work plan; the USAID advisor reportedly spent a great deal of time assisting PAHO in the preparation of this document. Unfortunately, the submission was delayed by many months, with negotiations beginning 4 months after the start of the fiscal year and the final version not received for approval until 8 months after the start of the year. This slow production of one of the few requirements of the PAHO grant has been a source of considerable frustration to USAID/Washington during the first half of this grant. At one point, this issue led to a meeting between senior staff in USAID and PAHO where suspension of grant reimbursement until compliance was achieved was discussed. High-level management discussions reportedly continue every 3–6 months to track continued performance in this area.

The preparation of PAHO quarterly reports demonstrates weaknesses also. The third and fourth quarterly reports for (FY 1998) were reviewed by the evaluation team and had been prepared and submitted together at one time, with a sketchy narrative. The seventh and eighth quarterly reports (FY 1999) demonstrate varying levels of analysis and reporting. Although due by August 15, 1999, the ninth report had not been submitted by September 10, and could not be reviewed for this evaluation. With the arrival of two new full-time staff members, this situation should improve.

During the field work, the evaluation team became aware of a PAHO country supervisory system, known as the Six-Month Work Plan (Plan de Trabajo Semestral [PTS]). It is not known if this document is an exclusively internal one. One way for PAHO to overcome the reporting gap that currently exists between USAID and PAHO could involve sharing the country semester plans with USAID, both at the country and Washington levels.

In summary, the administration of the initiative by USAID has demonstrated effective management, as has MotherCare and QAP. PAHO has demonstrated areas requiring improvement.

H. MONITORING AND EVALUATION

Establishing clear monitoring and evaluation criteria has been difficult in LAMM from the beginning. First, because the initiative did not come about through the preparation of a Project Paper where conceptual linkages are usually carefully crafted, this process did

¹⁴ It is entitled, "Work Plan 1997," although it actually refers to FY 1998.

not take place in LAMM with USAID's customary thoroughness. Next, the USAID reengineering process took place after LAMM had started, requiring a certain retrofitting of Intermediate Results to Strategic Objectives. As noted elsewhere, some modification in the IR framework took place in mid-1997. Third, the project started in a staggered fashion: PAHO's grant coming online months before the other two implementing partners'. Also, the funding mechanism was significantly different for the three partners—PAHO funding via a grant mechanism that sometimes requires fewer tangible outcomes than other USAID mechanisms. In contrast, QAP received its LAMM funds as “additionalities” to its existing performance contract with the Global Bureau, while MotherCare's money came about through the preparation of a task order. Each of these mechanisms requires and allows different levels of programmatic accountability. Finally, PAHO's responsibilities under the LAMM initiative were regional and linked to national and regional policy formulation—a difficult enough responsibility to operationalize—while QAP and JSI/MotherCare responsibilities could be more clearly articulated, involving concrete performance targets in selected pilot communities or health districts.

For all of these reasons, the LAMM initiative does not have as conceptually tight a formulation of Strategic Objective, Intermediate Results, sub-Intermediate Results and indicators as some other projects. The way that initiative managers (within USAID and outside USAID) have handled this is to put great importance on the preparation of annual work plans, in some cases treating these plans as virtual “program contracts.” The strength of this strategy is that it fosters some annual accountability toward results outcomes. The weaknesses are that it tends to focus on annual performance rather than long-term results, tactical rather than strategic gains, perhaps. Also, if the choice of annual objectives is not carefully thought through, the short-term goals selected may not be the best ones to achieve project results. Both these errors seem to have taken place.

Strategic Objective Monitoring and Evaluation

Tracking of indicators of Strategic Objective accomplishment is well in hand. The two indicators are target [11] countries with percentage of births attended by trained personnel increase by at least 1 percentage point over the previous year and countries with a 5 percentage point increase over the prior year in percentage of reporting units with maternal mortality committees that produce annual reports. PAHO is responsible for reporting progress on these indicators through collection of Ministry of Health data from the 11 target countries. Baseline data were collected during calendar year 1997 and annual monitoring has taken place from the March 1998 quarterly report. The indicators are not overly ambitious and should be achievable by the end of the project; collecting valid data regarding these indicators is likely to prove a bigger obstacle than accomplishing the actual results.

IR 1 Monitoring and Evaluation

IR 1 does not have a sub-IR. However, the lack of sub-IRs did not hinder MotherCare in the clear formulation of annual activities because (by happenstance or intentionally) two of the level 2 country Intermediate Results were used as indicators of IR 1 achievement. The 1998 MotherCare work plan clearly relates to “measuring the increased capacity of

the community to recognize and respond to pregnancy-related complication” and the tracking of the “percentage of adults interviewed who can name one or more of the danger signs during pregnancy, labor and delivery and immediate postpartum.” Even including the word “interview” shows that early clarity existed about how MotherCare would measure growth in knowledge of maternal mortality, through before-and-after questionnaires. Before the end of the JSI/MotherCare delivery order, baseline studies of village response to a questionnaire on maternal mortality had been conducted in the three pilot countries—against which future gains can be measured. As attested to by the evaluation team in its Honduras field travel, monitoring and evaluating these indicators, as well as demonstrable gains, are taking place and should be accomplished to satisfaction by the end of the project.

IR 2 Monitoring and Evaluation

IR 2, similarly, does not have sub-IRs. In the absence of clearly enunciated sub-IRs, the QAP indicator and work plans are somewhat more difficult to evaluate. The indicator for IR 2 reads: “pilot countries [3] where the percentage of targeted facilities in the pilot districts that have the capacity to provide Essential Obstetric Care (EOC) increases by 15 percentage points over the prior year.” There are several problems with this formulation. In two of the three pilot countries, the number of targeted facilities that have *current or future* capacity to provide EOC averages only eight and QAP is already working in almost half of them. That is to say, within the existing MOH structure in Cotopaxi, Ecuador, there are only 10 MOH facilities in total and QAP is currently working in 3; in Comayagua, Honduras, there are only 7 MOH facilities in total and QAP is already working in 5. The formulation of the indicator implies that an *EOC capacity* does not exist until the initiative works in a given facility—clearly overstating the case.

Pragmatically, QAP has dealt with this by conducting a study that showed the percentage of facilities that complied with a strict definition of EOC criteria at the start of the project, which showed one each in Ecuador and in Honduras. While the quality of that definition is debatable, at least baseline data were collected. However, a 15 percent increase per year on a base of two (assuming pre-project *capacity* only in these two) would be four MOH centers with full capacity at the end of five years—less than the current number of QAP–assisted facilities. Thus, the indicator has little cognitive content; it gives no guidance on strategies to be pursued, nor does it provide any meaningful numbers of facilities to be targeted. The problem is more than simply an intellectual one; if project implementers have no meaningful indicator to guide them, their choice of activities can go astray, and that seems to have happened.

The 1998 work plan was an acceptable document for starting the work, more than for its programmatic insight. Several subresults are postulated: quality design, quality control and continuous quality improvement and project management, although how these particular subresults were chosen is not completely clear from the formulation of the level 2 regional Intermediate Results. In any case, against these concepts, adequate activities are reported, such as start-up meetings, regional planning workshops, data collection, establishment of design teams, and baseline studies.

The 1999 work plan did not deviate from the 1998 model and is a less useful document. A special weakness is that it does not indicate quantifiable outputs, but continues to discuss in generalities about “selecting EOC components,” “starting new redesign process(es),” completing design of current cycle of... components,” and “monitoring indicators on a quarterly basis.” It does not, for instance, provide any richness regarding the quality design projects discussed elsewhere in this document, nor establish any targets such as x projects on improved flow or y projects on improved delivery room skills. Moreover, it does not seem especially useful to combine the three pilot countries under the same format with the footnote, “this plan was developed for Ecuador and there will be a lapse of 1–3 months for Honduras and Bolivia,” when the advances of QAP achievements are so different from one country to the next.

Finally, as detailed in chapter III, it appears that some QAP countries are spending project time and energy on activities that miss key points of essential obstetric care (i.e., design/redesign projects that are “peripheral” to the four key obstetric problems).

IR 3 Monitoring and Evaluation

IR 3 is the only IR that has coherent, well-articulated sub-IRs.¹⁵ In most cases, this would make the job of monitoring and evaluating easier than it has been.

The Intermediate Result of “intensive implementation of the emergency obstetric care aspects of the regional plan for the reduction of maternal mortality” was to be measured through the achievement of the following six subresults:

1. existing regional strategy reaffirmed or revised,
2. functioning regional interagency coordination subcommittee and country interagency coordinating committee,
3. enhanced communication between country program managers and regional program staff regarding strategies and progress,
4. country managers have better information for program decision-making,
5. increased high-level political support for implementation of the plan at country levels, and
6. identification of legislative and policy issues for attention.

¹⁵ Except as noted in the chapter III discussion of this issue.

These are clear objectives and the FY 1998 and FY 1999 work plans are based on these expected Intermediate Results.

However, as seen elsewhere, until very recently, PAHO reporting was not all that it could have been. Also, tracking elusive gains in policy improvement is harder than quantifying tangible outputs. The FY 1998 PAHO work plan established a number of indicators that were not especially substantive: travel arrangements completed, meetings held, press releases given, minutes distributed, and attendance at meetings. Some flexibility was to be expected in establishing activities in the first year of a project's implementation; other items seem overly general considering that LAMM was supporting an already existing PAHO regional plan. Tangible outputs and responsible parties, for instance, did not figure in this work plan.

The FY 1999 work plan is a much more substantive document than the previous year's plan. Noted elsewhere, it was received extremely late in the fiscal year. Nevertheless, it articulates in far more cogent fashion target dates, responsible parties, quantifiable deliverables, means of verification, and other items appropriate in a detailed work plan. Activities related to the sub-IRs are coherent and, if achieved, should move the initiative along nicely. In spite of its being received quite late, the FY 1999 work plan was a significant advance in terms of PAHO's ability to achieve IR 3.

If FY 2000's work plan is prepared with the same thoroughness as the FY 1999 plan—and submitted on time—there is little doubt that it will assist PAHO and USAID in more effectively monitoring LAMM's contribution to the PAHO regional plan. One way to improve this plan further would be to include a few country-specific activities in the list of deliverables. "Assessment of the maternal deaths auditing system in Nicaragua" is a good example of this idea that was included in the FY 1999 work plan; other inclusions could be "conducting a programmatic review of the Honduras Santa Teresa experience to learn replicable experiences" or "conducting an external evaluation of the El Salvador quality circles experience." Adding such elements would relate some aspects of the work plan to concrete country outcomes more effectively.

Other Monitoring and Evaluation Issues

One overarching theme of this midterm evaluation is the interrelationship between one part of the project and the others, the overall LAMM initiative rather than discrete Intermediate Results. One weakness of each of the three work plans—as well as in each of the Intermediate Results—is that no one is looking out for the synergism that could exist between program components, nor the interrelationship between IRs. None of the work plans makes reference to any other component or interrelates accomplishment of one IR's activities with another IR's activities. Community promotion activities of IR 1 have been developed with little or no reference to what is being proposed in IR 2 at the facility level. Those who prepared IR 2 did so without any mention of a community interface—and without reference to policy issues at the national level. Those who prepared IR 3 make no reference in their planning or annual activities to what is taking place in IR 1 and IR 2. None of the three implementers make any reference to the

holistic vision of essential obstetric care that is being proposed in this document, emphasizing the systemic interrelationship between the community, traditional midwives and MOH service deliverers at the prehospital level. This is a significant lack in annual work plan preparation for all three implementers.

USAID reports that improved monitoring regimes are under development for each of the three implementers. This is an appropriate step. Recommendations to interrelate one annual plan with another will be put forward in the final chapter of this document. Comments and suggestions on QAP's proposed monitoring and evaluation system are included as annex K. Comments on the Ecuador baseline instrument are included in annex L.

Progress Toward Achieving the Strategic Objective

Progress toward achieving the Strategic Objective is adequately underway and the results and indicators will likely be met in a timely manner. The largest constraint at the SO level is verifying the quality of the data.

Full achievement of IR 1 will almost certainly take place in one of the three pilot countries. Progress in the other two countries is somewhat more problematic. In one, the NGO in charge of the community promotion has the systems in place to achieve results in spite of cultural/community obstacles. Satisfactory results accomplishment in the other pilot country, from all reports, is more doubtful because of general operational difficulties in the program.

Because the original formulation of the IR 2 indicator was weak, to all intents and purposes, IR 2 has already been achieved. This is in spite of the fact that project activities are only being maximally implemented in one of the three pilot countries. Central level monitoring and evaluation instruments should be adjusted so that the richness of project achievement in this one country can be adequately documented, and so that the weaknesses of project accomplishment in the other two countries can be identified and perhaps corrected midcourse.

Satisfactory achievement of IR 3 is far more likely in the latter half of the project than in the first half because of considerable improvement in the preparation of annual work plans. Timely submission of these plans will be essential. Although it is more difficult to track gains in policy than in other more tangible realms, adding some country-specific outputs to the annual work plan will help PAHO and USAID focus on the considerable LAMM learning that is taking place at some country levels.

I. DISSEMINATION AND DOCUMENTATION

Until now, it has been premature for the initiative to be concerned with the wide dissemination and documentation of results. For much of the first half of the initiative, (as is to be expected), partners have been concerned with making the project operational. Also, there is a question about who should assume primary responsibility for disseminating experiences: PAHO for national policies (only)? QAP for pilot project experiences? JSI/MotherCare for EOC community materials (or, as a follow-up to previous work, for help in the definition of essential obstetric care)? PLAN International for successful community materials?

Considerable initiative-influenced outputs have been published. In most countries, a number of documents related to norms, protocols and national policies have been produced. These are clearly important project-related accomplishments. What is unclear is what utility there would be in having such country-specific documents published beyond their individual country borders.

Mention has been made, also, of the legislative summary that PAHO is preparing that grows out of the LAMM initiative regarding the legal basis in each country for improved maternal care. When available, this summary could be a useful tool in lobbying noninvolved national leaders in joining the maternal mortality initiative.

One purpose of LAMM is to generate new ideas, to see what does and does not work. In this regard, important results will soon begin to be perceived in the Santa Teresa/José María Ochoa hospitals in Honduras that should receive wide publicity. These achievements should be carefully tracked and documented so that a monograph can be prepared or other wide dissemination mechanisms be considered. An opportunity for considerable institutional learning could soon take place that LAMM should exploit.

A similar observation is put forward more tentatively in the case of Peru since Project 2000 was not visited as part of this evaluation. Given the information provided by the MOH, it appears that the learning experiences of Project 2000 could receive wider dissemination. The recent midterm evaluation of Project 2000 does not lend itself to that, but there may be a number of lessons being learned in Peru that would benefit the maternal mortality initiative in many LAMM countries.

Of less regional applicability, but nonetheless of real importance, are the high-quality IEC materials being produced in Ecuador and the pocket guide seen in Honduras, and another reported (but not observed) in Ecuador. It appears that some entity should be assuming responsibility for giving these high-quality products wider exposure. While an initial reaction might be to think of assigning replication of such materials to PAHO within the initiative, it is not at this level of output that the competitive strength of PAHO lies.

This subject of who should assume responsibility for dissemination of such materials and mechanisms to do so could be addressed in meetings of the Washington steering committee over the next 6 or 9 months.

J. STAFFING

LAMM has had one USAID project manager and two project advisors in the two and one-half years under review. The PAHO project director and the project coordinator were assigned other responsibilities for 18 months. The PAHO long-term consultant for LAMM was relieved of responsibilities and the position left vacant for 6 months. Three individuals have filled the Ecuador field coordinator position while two people have served as the Bolivian field coordinator. The PAHO country representative has recently changed in each of the four countries visited. The PAHO LAMM person in charge has changed three times in Honduras, twice in Ecuador and El Salvador, and is currently vacant in El Salvador. This seems to be quite a number of personnel changes in a short period of time.

PAHO Washington programmatic supervision of LAMM was significantly less than full time for many months of the project. Because of staff vacancies elsewhere in the organization, the director of LAMM fulfilled interim functions at one level up in the organization for nearly one and one-half years, and the LAMM coordinator was asked to fill in, assuming several other functions for a similar period of time. Though PAHO maintains that the initiative received adequate attention during the period, reporting shortfalls discussed above suggest otherwise.

In one pilot country, staff seemed heavily burdened with administrative and programmatic responsibilities. In addition, that office is not informed about financial information from its superiors, including the most basic information regarding budget line items. Staff in this office reported feeling isolated and overlooked.

K. RESOURCES MANAGEMENT

Financial management within LAMM has improved during the last year and a half and is now satisfactory. Human resource availability has been an area requiring improvement, but recent changes suggest that the situation will improve in the latter half of the initiative.

L. GEOGRAPHIC DISPERSION

With budget adjustments, financing for the QAP pilot activities is approximately \$1.8 million for three countries for five years, approximately \$120,000 per country per year. (The MotherCare budget was \$450,000, now fully expended for three countries for one year.)

The PAHO budget that comes from USAID sources is \$2.25 million for 11 countries for five years. Since nearly 53 percent of the USAID grant supports salaries and Washington overhead, the effective money available to support country initiatives is less than \$20,000 per year. PAHO contributes counterpart funds to LAMM in the amount of \$2 million, but these funds are for cross-country activities. The basic point remains that this is a very small amount of country-specific money with which to achieve project objectives.

During FY 1999, there has been some convergence of thought between PAHO and USAID regarding the possibility of designating line item financing for project-specific activities in one country or another. Line item budget support could give maternal mortality more visibility in PAHO country operations. This is a way to foster ownership of LAMM by PAHO country staff.

A significant amount of initiative funds is being used to support the two recently hired Washington staff, an appropriate use of resources. Beyond that, if activity-specific resources were concentrated in fewer than 11 countries, it is possible that more demonstration impact could be achieved.

V. CONCLUSIONS

A. GENERAL CONCLUSIONS

The LAMM initiative is achieving important gains and is part of a process of regional momentum and learning taking place in themes of maternal mortality. All 11 countries are now reported to have national health plans that address maternal mortality. Norms and protocols of maternal and neonatal care were recently reviewed in several countries and are now available for wide distribution. A number of high-level political events may be partly attributable to LAMM in support and reaffirmation of obstetric strategies: an 8-week safe motherhood campaign in Peru, a National Midwife Day in El Salvador, and the Ottawa declarations in September 1999. A number of important national policy initiatives have taken place, partly as a result of the initiative. Also, there are reports of an increased number of maternal mortality surveillance committees. Were it not for LAMM, these events would probably not have happened to the extent they have.

PAHO's contribution to the initiative has been important in keeping maternal mortality on national agendas. Support for reduced maternal mortality continues in spite of considerable change of ministers, counterparts and functionaries. LAMM financing has allowed PAHO to separate maternal mortality from family planning and has shown that maternal mortality does not mean new hospitals. Recently hired, full-time Washington personnel bring new energy to the PAHO initiative.

QAP activities are recognized at several national, regional and local levels as contributing to improvement in the quality of care. In several countries, the Ministry of Health is interested in expanding the QAP methodology. Early results are being observed in design/redesign teams in improved problem identification and teamwork. There is a growing realization in QAP areas that dignified patient care is deficient and early improvement is taking place in improved client focus. The QAP effort has achieved consciousness raising in service providers that current obstetric care needs improvement and other quality assurance processes are available for study, also. Initial work is taking place in developing an improved system of referrals. Several innovative design/redesign projects are taking place that in a short time may be worthy of significant dissemination and replication.

For JSI, the quality of the IEC materials in one country and the process by which that material was created represent important learning.

B. ESSENTIAL OBSTETRIC CARE

Essential obstetric care remains an area of ambiguity.

1. The concept of essential obstetric care is frequently confused with emergency obstetric care; as a result, essential care is not emphasized adequately in field activities and national norms and plans.
2. It is important to promote policies of strengthening and efficiently using different levels of obstetric care (community, waiting hostels for high-risk patients, health posts, maternal birthing centers, first-referral hospitals, and second-referral hospitals) for the delivery of emergency obstetric care.
3. EOC needs to be conceived of as a system, rather than simply medical attention in a hospital operating room. As well documented in PAHO literature and organizational statements, it is counterproductive in most LAMM countries to direct policy attention only to one level of service delivery. However, this idea of EOC as a system seems to have become lost in day-to-day, hospital-oriented activities.
4. The initiative has not yet worked sufficiently with MOH staff at the political level as well as at the hospital level in providing technical assistance to define actions, skills (destrezas), drugs, equipment, and supplies required to provide EOC.
5. National-level training and training policies should include a strong component of skill building.
6. High-quality, 24-hour obstetric care in LAMM countries is overreported. Also, there is confusion about what constitutes first level of referral and second level of referral facilities.
7. It is not clear in field activities whether surgery, anesthesia, and blood transfusions are components to be included in the initiative, despite clarity at the Washington level and in the SO formulation.

C. FOUR OBSTETRIC PRIORITIES AND THE SYSTEM OF EOC

A concentration of initiative activities in specific, preventative and skill-based actions directed to the four principal causes of maternal death—hemorrhage, sepsis, hypertension/eclampsia, and obstructed delivery—and neonatal hypoxia, could produce significant impact.

A more effective plan will require a holistic vision: strengthening community preparedness, strengthening the capacity of basic health services to respond to obstetric emergencies, and improving quality obstetric care at the first level of referral. Also, more attention needs to be given to improving communication among all elements of this EOC system.

With initiative participation, standards and protocols on maternal and newborn care have recently been developed in several countries. The possibility to publish more pocket guides with special emphasis on the management of maternal and neonatal complications are good. Several ministries are open to the idea.

There is a growing realization among caregivers that patient care has been deficient, as well as the relationship between service providers. The initiative has been working to educate appropriate staff on the necessities of women's care, and the provisions of improved client-centered service. However, no design/redesign projects yet address minimizing or eliminating procedures that run counter to important cultural customs in different populations, especially indigenous ones.

One factor in obstetric care is poor quality information in hospital clinical histories and registries. Maternal mortality data are not reliable and subregisters could be developed, with particular attention to deaths occurring in the community.

D. POLICY/FIELD DIALOGUE

Across the initiative, there is a wide underappreciation of the synergism between policy support and field activities.

E. OPERATIONS

USAID/Washington has provided good supervision to the initiative. A review of the early ideas of quality improvement in maternal mortality two years ago, compared with ideas, instruments and current thinking, shows a solid growth in understanding of the interrelation of maternal mortality issues, sophistication of response and a capacity to innovate.

There has been a great slowness in reporting from PAHO, causing high frustration in USAID and making it easier for critics to believe that not a lot has been happening on the PAHO side of LAMM.

Overly frequent staff transfer at all levels of the initiative has had a slowing effect on initiative accomplishment.

Energetic, proactive communication and coordination among the three initiative partners have been low throughout the initiative. Where PAHO is the only LAMM representative, this observation applies to the USAID Mission's perception in like fashion. Effective sharing seems to be low. The press of activities means that few initiative implementers are informed about other parts of the initiative or other country experiences. Part of this is a design flaw in the formulation of Intermediate Results. Also, there is little sense of one, unified vision.

In the four countries visited, the national committees for the reduction of maternal mortality no longer have a prominent role. High-profile leadership that may have existed in the beginning has fallen victim to national emergencies, frequent MOH staff transfers,

staff reassignments, and other factors. These committees need to become directly involved again.

F. SELECTED COUNTRY OBSERVATIONS

In Ecuador, QAP is working in a small impact area with quite a narrow focus. A decision to concentrate primarily on the regional hospital taken consciously a year ago needs to be reconsidered; much time is being invested in producing few results in this complex environment. A low sense of holistic vision seemed characteristic in QAP/Ecuador; staff members report not being involved with community promotion. Other quality assurance activities outside the project area are largely ignored. There is a need for improved coordination, collaboration and communication between QAP and PAHO in this country.

In Peru, efforts to involve USAID with the PAHO initiative have not occurred to date. Also, PAHO familiarity with Project 2000's learning is low. Indeed, the entire initiative's familiarity with Project 2000 is low and thought could be given for LAMM staff from other countries to visit Project 2000 facilities to crossfertilize the two experiences.

In El Salvador, PAHO is embarking on a quality assurance initiative without reference to other LAMM activities, and there is an opportunity to improve through learning from the QAP activities in nearby Honduras. Also, additional work is needed to show the MOH the reasons for concern with the low level of obstetric hospital attention.

In Honduras, a number of exciting things are happening that need to be watched carefully. This may require additional staff, and will likely require additional staff support. In addition, PAHO needs to become better informed about initiative activities.

The experience with the Siguatepeque maternal birthing clinic makes it clear that the provision of quality essential obstetric care is linked to local revenue generation. The LAMM initiative is in a position to learn from this key finding.

G. IEC AND COMMUNITY PARTICIPATION

In Ecuador, the IEC team is producing a wide variety of high-quality materials. The effectiveness of the materials at the community level will depend on the capabilities of the trainers/facilitators. Distribution of the materials in October 1999 will increase the demand for obstetric services in health facilities and the MOH should incorporate improvements in service delivery and be prepared to satisfy new levels of demand.

One of the constraints of the initiative that has hindered progress in Ecuador has been frequent and prolonged strikes of MOH personnel. Beyond that, the rural Ecuadorian population is hard to reach effectively. The geographic location of rural and dispersed communities, roads in poor condition from communities to the nearest health facilities, and the reluctance of vehicle owners to transport women, especially at night, are important obstacles to improved obstetric care that need to be addressed.

In Honduras, effective QAP/Honduras leadership has played a key role in the success of the initiative. Facilitators' abilities have been determinant factors in obtaining people's collaboration.

H. UNMET NEEDS

In Latin American and the Caribbean and in LAMM countries in particular, there is inadequate attention being given to the problem of unmet needs. There are a number of LAMM countries where the percentage of women not yet being attended to in public or private facilities is 50 percent or more, while some policymakers direct most of their attention to the 50 percent currently being served in one way or another.

I. FEASIBILITY OF SCALE-UP OR SUSTAINABILITY

It is premature to address the issue of scale-up after only two years of program activities. Achieving substantial and sustainable reductions in maternal mortality will require, among other things, committed MOH practitioners dedicated to improving obstetric care at all levels, adjustments in programming criteria recommended by this evaluation, and national and regional expansion of the successful models of improved care being acquired within the LAMM initiative. Just as important, it will require continued financial commitment by national governments, PAHO and USAID over the medium term as well as energetic, high-level political commitment to energize and sustain these gains.

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

VI. RECOMMENDATIONS

The following recommendations have been formulated with the vision that LAMM is one initiative. Recommendations are meant to apply to each of the LAMM implementers, PAHO in its policy responsibilities, QAP and JSI in their community- and facility-level responsibilities, and all three interacting one with another. Even where a number of concrete suggestions are made, they should be thought of as responsibilities of all, not only the party to which the comment is addressed.

A. CURRENT DIRECTIONS

Recommendation 1: Maintain the current conceptual formulation in spite of weaknesses.

The conceptual formulation of the initiative has been pored over for months, and has reached its current form after a long, painstaking effort. It remains quite confusing and considerable ambiguity still exists—at both the Washington level and the field level. The Washington steering committee needs to tackle these issues again in light of the findings of this evaluation and distribute clarifying comments to all initiative partners. However, at this stage, the formulation does not need to be redone; there is simply not enough time left in the initiative to make the necessary adjustments. A more appropriate course of action is to expand each implementer’s *operational* (as opposed to conceptual) responsibilities to include some indicators of involvement with one another’s accomplishments.

Recommendation 2: Essential obstetric care needs to become more clearly articulated.

The Strategic Objective-level statement for the LAMM initiative is “more effective delivery of essential obstetrical care.” At present, IR 2 and IR 3 are not as clearly focused on the objective level as they could be. Many current activities, while laudable in themselves, miss the key point of essential obstetrical care. The guiding principle should be that each activity clearly relates to the four principal obstetric emergencies.

This recommendation involves a number of subelements. First, PAHO could lead a national policy dialogue wherever necessary (in the four countries visited, for instance) to define the difference between *essential* obstetric care and *emergency* obstetric care. The focus could be the four principal obstetric emergencies (hemorrhage, sepsis, hypertension/eclampsia, and obstructed delivery) and management of hypoxia in newborns. These definitions should involve not only general principles, but also operational definitions tied to the provision of specific services. A model of the schema is included in annex M. First and second levels of referral also need to be defined operationally on the basis of clear national decisions.

National norms for essential obstetric care should continue to be strengthened where they already exist or be developed where they do not. It seems important that this work be undertaken not simply as a general rubric under family planning, as is currently the case

in several countries, but that the final product have the clarity of a stand-alone document. National operational plans on implementing these norms then need to be developed. The issue of improving 24-hour obstetric attention should also be addressed and plans put in motion to train thoroughly the staff who provide nighttime obstetric care coverage, nurses and auxiliary nurses.

These efforts could involve several years of work at the national and policy levels. Ideally, MOH caregivers from all levels of obstetric service delivery, as well as QAP and JSI personnel in pilot countries, should participate. For QAP and JSI, each of these topics should be carefully thought out for implications in design/redesign activities.

PAHO and QAP can work with MOH staff at both the political and hospital levels in providing technical assistance to define actions, skills (*destrezas*), drugs, equipment, and supplies necessary to offer essential obstetric care.

Essential obstetric care can be thought of as a system, not only as improved medical attention in a hospital delivery room. Staff at both the national (PAHO) and pilot (QAP and JSI) levels can begin to think of EOC in a more holistic fashion as taking place at different levels of service:

- in the home and the community (in the case of normal, uncomplicated births to indigenous women);
- making better use of waiting hostels for high-risk patients from isolated rural areas;
- training auxiliary nurses (and community midwives) in improved risk identification and emergency medical evacuation planning;
- training auxiliary nurses (and perhaps especially capable community midwives) in the appropriate use of oxytocics for the treatment of postpartum hemorrhage;
- establishing more maternal birthing centers to attend to noncomplicated births;
- continuing work on developing a speedy referral system from maternal birthing centers to the hospital in the case of obstetric complications;
- strengthening the quality of emergency obstetric care at first-referral hospitals;
- creating policies and government-supported financial incentives that promote the use of hospitals with 24-hour obstetric care for emergencies that have been referred from lower levels of service, more than for normal births; and,
- continuing work on building a speedy referral system from first-referral to second-referral hospitals.

Skill building should be addressed more coherently than it is currently. Initiative effort should be directed to training health personnel to provide maternal care in knowledge and skills associated with the four principal causes of maternal mortality and newborn hypoxia. Routine episiotomies and enemas should not take place. Skills in the manual extraction of the placenta can be widely taught and practiced. Training at various levels of service delivery should be given in the appropriate use of oxytocics for the treatment of postpartum hemorrhage. Training modules should emphasize skills more than they do.

Design/redesign projects should concentrate on improving essential obstetric care at all levels of service provision. Such EOC should be norm-based, norm-driven and skills oriented.

- Design/redesign projects should be working on making explicit actions, skills, medicines, equipment, and examinations necessary to deliver low-level obstetric care in health facilities near the community.
- Initiative activities should train low-level personnel in knowledge and clinical skills required to manage the four principal obstetric emergencies and the management of hypoxia in the newborn. PAHO staff should be learning from these efforts.
- PAHO and QAP activities should direct attention to increasing the coverage of normal births at birthing centers and clinics that attend to normal births.
- The initiative should continue to promote the development and use of pocket guides and other job aides for the management of obstetric emergencies, using the Honduran experience.
- Initiative activities should now begin to work on improving problem-solving skills regarding obstetric complications and maternal and perinatal deaths for obstetricians/gynecologists, nurses and auxiliary nurses.
- PAHO and QAP should work together to develop a referral and counter-referral system that includes a referral document that states the reason for the referral, so that women and their newborns can be received and attended to quickly. Work needs to continue in motivating hospital staff to give special attention to such patients, especially when village midwives refer them.

QAP can continue its work around a learning methodology based on case study and problem resolution to increase the use of norms and protocols already developed. PAHO should participate in these efforts.

Recommendation 3: Improved policy/field dialogue should be promoted throughout the initiative.

The implications of this recommendation are many. PAHO staff could be traveling with some frequency to see what is taking place in field operations in EOC (in pilot and in nonpilot countries.) QAP staff could be actively discussing with PAHO its learning experiences and participating in dialogues and discussions with PAHO/MOH on EOC topics.

Central-level QAP staff could be visiting PAHO representatives on their field visits and PAHO country staff could be accompanying these staff on visits upcountry. QAP country staff could be preparing reports that are copied to local PAHO representatives and following up with verbal presentations to PAHO and the MOH on pilot project activities.

PAHO/Washington and QAP/Washington staffs could be inviting one another to attend key fora and meetings where maternal mortality subjects figure prominently. PAHO-produced materials could be shared with QAP staff before final printing and copies could be sent to QAP and followed up on for field-level applicability. PAHO in-country staff could be sharing policy papers with QAP field staff (or other field-oriented projects, such as Project 2000) and inviting their participation in policy dialogue. PAHO staff could also be lobbying for more attention from the minister and MOH staff to visit pilot activities and better understand the operational implications of policy discussion.

The USAID Missions should be important contacts for each entity; quarterly meetings could be scheduled with the Missions where LAMM partners make presentations (jointly, in pilot countries).

In order for this to occur, it is recommended that indicators be added to each Intermediate Result: for PAHO, adding some responsibility for IRs 1 and 2, in community activities and EOC; and, for QAP and JSI, adding some responsibility for IR 3, policy improvement. This could be a task of the Washington Steering Committee.

Recommendation 4: Energetic, proactive collaboration, communication and sharing need to be strengthened among initiative partners.

National events could be sponsored by PAHO on themes of maternal mortality as part of the frequent policy and technical subject fora that PAHO conducts in many countries. In such meetings, maternal mortality themes should be included as much as possible and QAP and other field staff could make presentations of their initiative experiences. When pilot project fora are held, PAHO and MOH staff should attend, participate (not only observe) and use access to the national media to give the effort wide exposure. Of course, workshop planners will need to make some adjustments to the content of such events in order to make them of interest to the national media.

International events could be handled similarly. PAHO workshops in which maternal mortality figures prominently should involve QAP and other field staff and USAID as both invited guests and presenters. When QAP hosts an international event (such as the upcoming Honduras annual planning session), PAHO staff from each country should be invited and make presentations.

On the issues of coordination and communication, staff in all organizations could be held accountable for improving the flow of ideas between and among initiative partners. Work plans should include the subjects of coordination and external communication and each staff member should be required to report on her/his output during the period. A number of other ideas of improved communication flow could quickly and easily be generated by discussing ideas spontaneously in one of these shared events.

Recommendation 5: In each country, the National Maternal Mortality Committee should be reactivated.

The initiative needs to recapture the involvement of high-level Ministry of Health officials. One of the first obligations of these committees could be to analyze this document's key essential obstetric care findings and holistic vision finding in the next 6 months or so, and develop a country-specific plan or action. PAHO, one or more field implementers (QAP in pilot countries), the MOH, and the local USAID Mission should participate in this committee. The MOH should chair the meeting; where there is not yet adequate MOH interest, PAHO should be the chair. The coordination and communication tasks described in these recommendations could also become responsibilities assumed by these national committees.

Recommendation 6: The role the community has to play in EOC needs refocusing.

IEC efforts should focus more explicitly on creating awareness of the dangers of childbirth and on the community's responsibility to save women's lives. The importance of the village midwife and strengthening her relationship with the nearby MOH service center are areas that needs reinforcing. Special efforts should be made to reach the male population in the communities and activities could be developed to address specifically the vehicle owners in each community.

If IEC materials are to be reproduced for national use, some improvements should be made. Illustrations could be made more attractive and realistic if women were depicted more in accordance with their ages. The flip chart could be more effective if the corresponding text were printed on the back of each illustration. The language of the mini-posters on the emergency plan and leaflets should be simplified. The logo and phrases used in these materials should be refocused to reflect the campaign's main objective—preparation and use of community evacuation plans.

Ecuador has the IEC component well established; Honduras has the community mobilization component similarly well developed. Pilot countries could benefit from cross-sharing visits, as well as from technical staff visits, one country to the other.

Recommendation 7: PAHO should improve its monitoring and reporting of the grant.

PAHO work plans should be prepared on time, and quarterly reports submitted on schedule. PAHO now has two full-time staff assigned to this initiative paid with USAID grant funds. These staff members should not be taken away from their LAMM

responsibilities by other organizational issues. More frequent meetings could take place between the PAHO–LAMM staff and the USAID initiative manager. Thought should also be given to providing to USAID the PTSs from the PAHO personnel responsible for LAMM in the various countries.

Recommendation 8: Country-earmarked funding should continue and be strengthened.

PAHO funding for specific initiative activities similar to the \$10,000 awarded to El Salvador should be strengthened further. One way to do so would be to promote seed capital for LAMM activities based on the order in which applications are received or on a matching basis. Funding larger than \$10,000 should be considered. One way to increase the funds would be for PAHO to give consideration to reducing the number of countries that receive LAMM initiative earmarks. Perhaps a more realistic number would be 6 or 7 such projects, not because activities in all 11 are not important, but because 6 or 7 is the number usually associated with effective span of control in modern management thinking. PAHO/Washington should become quite knowledgeable of such activities.

Recommendation 9: Staff transfers should be reduced.

While it is difficult in the international development field to eliminate staff transfers completely, each organization could make a concerted effort to keep current staff in position for the remainder of the initiative. Where this is not possible, everyone who relates to the individual who is leaving should be alerted that this is happening and a concerted effort should be undertaken to train the new person as soon as possible. This recommendation is meant to emphasize the importance of an accelerated campaign of knowledge acquisition in which everyone gives a little extra time and energy to accomplish the task, both within the individual's organization and in colleagues' organizations. Staff movement should be reported as an area of concern in each organization's quarterly report.

Recommendation 10: Country Specific Recommendations

In Ecuador, QAP/Ecuador needs to expand its activities beyond the three service centers (two hospitals and one clinic) where it has been working until now. Less energy should be spent on working at the Latacunga Hospital. Part of this recommendation involves expanding the holistic vision of QAP staff and working in areas other than the three easily accessible health delivery centers.

QAP/Ecuador and PAHO/Ecuador need to devote attention to improving their relationships with the MOH at the central level and with each other. The national committee was recently reactivated under a push from the USAID Mission, and should begin to meet again monthly, resolve conflicts, and continue with the task of defining essential obstetric care, and then implementing it.

QAP/Ecuador and PAHO/Ecuador should be more involved with other nonproject quality assurance activities taking place in the country. Also, the two entities should invest time

and energy in knowing what is going on at the community level and providing technical assistance there.

In Peru, PAHO staff needs to make USAID Mission staff aware of the activities of the initiative. USAID/Washington has a role to play in this effort. PAHO LAMM staff should travel to see what Project 2000 has been accomplishing in EOC and quality assurance activities. Peru staff could also travel to Honduras whenever appropriate, to see what QAP activities have produced there.

In El Salvador, PAHO staff should travel to Honduras to learn how to do quality assurance work more effectively. Also, a strategic plan should be developed to work on making new MOH staff sensitive to the issue of unmet needs. The new international staff in maternal and child health should be brought on as quickly as possible, and travel to Honduras and other events on maternal mortality to become knowledgeable of LAMM responsibilities. A detailed briefing packet should be prepared by PAHO/ Washington for this person's arrival with all key documents included. A visit from PAHO Washington LAMM staff should occur shortly after this individual takes office.

In Honduras, conversion of the health center, José María Ochoa, to a maternal birthing clinic so that it could relieve the Comayagua hospital of one third of its obstetric case load is one of the most positive developments in maternal care in central Honduras in the last decade. The project needs to be nurtured by the QAP/Honduras project, documented thoroughly and scaled up as soon as possible without doing damage to its sustainability. This will require more support to the QAP/Honduras staff from QAP Washington.

In addition, the entire LAMM initiative should be looking at the Comayagua experience for lessons learned and attempting similar design/redesign efforts in other countries.

PAHO/Honduras needs to assign a staff person with full-time responsibility for LAMM activities and that person needs to become better informed of what is happening in this project and with the MOH/Comayagua.

B. FUTURE DIRECTIONS

Recommendation 11: Each LAMM implementer could begin to develop some response to unmet needs.

Initiative partners could be addressing the issue of unmet need in some aspect of their programming. A major reshaping of program focus is not being suggested, nor a significant diversion of funds to address this problem, but rather that initiative implementers begin to experiment with some activities and efforts to put this issue on national and regional agendas. There was little evidence during data collection of the idea of increasing the attractiveness of hospitals and clinics so that more women *want* to deliver in a medical facility.

PAHO could promote making MOH leaders sensitive to the unserved population, perhaps by financing studies, carrying out a national campaign, or providing technical assistance

on successful Latin experiences that have made health centers more attractive to women in their area. For QAP and other field implementers, a design/redesign project could be created in each obstetric service center to study how to undertake an outreach campaign, with enhanced publicity for improved services, civic promotion, and other community mobilization activities, as currently being experimented with in Hospital Santa Teresa in Honduras. For both implementers, it is an appropriate strategy to begin thinking of the untapped 50 percent as potential clients for obstetric services and prepare a strategic plan on how to attract these clients.

For such a campaign to be effective, the early gains being achieved by QAP in provider-patient interactions need to be consolidated and then expanded. Women will resist coming to service facilities in larger numbers until they start receiving better treatment at the hands of MOH personnel.

Birthing facilities that appeal to indigenous women could be promoted throughout the initiative along the lines of the Peru Project 2000 model.

Recommendation 12: Each LAMM implementer could begin to consider the issue of revenue generation.

Cost recovery is a subject on which there is much debate. Some countries have passed recent legislation to mandate free delivery care (although what that means operationally is still unclear), while other countries are experimenting with a national health insurance scheme. Some interviewees strongly feel that providing subsidies for the birth event can be thought of as an important national strategy that LAMM could clearly support. Of course, where there is a national mandate for free maternity care, it clearly must be respected. Another USAID/Bureau for Latin America and the Caribbean (LAC) project directs specific attention to the subject and perhaps could share in the learning curve.

However, some effective revenue generation is already taking place in LAMM from which the initiative could learn and expand. The Siguatepeque experience demonstrates that where national resources assigned to EOC are limited, the provision of quality obstetric care can be fostered by linkage to local revenue generation. Where money is being collected and used to defray local operational expenses, better obstetric care is being provided than where money is not being collected. This knowledge could be more widely applied at both policy and pilot levels.

Recognizing that revenue generation is a new subject area—perhaps even one which could be added onto other existing USAID programming (or World Bank or IDB initiatives)—both PAHO and QAP should begin to devote some thought to how hospitals and maternal birthing clinics can generate locally managed funds to improve the delivery of essential obstetric services. For PAHO, the tasks could be to study the legal basis for cost recovery and conduct research on the tariff structure which would be appropriate, or host a national or an international forum on the subject of innovative cost-recovery experiences. For QAP, the task could be to learn quickly from the Siguatepeque experience, standardize the tariffs in the newly opening José María Ochoa clinic (and

ideally the Comayagua Hospital)¹⁶ and disseminate the results widely so that national planners in Honduras (and elsewhere) could learn from the experience. This activity is already taking place; it only needs to be reinforced. Women have demonstrated a willingness to pay for higher quality care. How to take advantage of that fact, while at the same time using the resources to further improve obstetric care, is, indeed, an important element that LAMM could begin to research.¹⁷

Another idea that is apparently already taking place is that QAP and PAHO documentation of the quality assurance process could be used by the MOH to prepare proposals to international donors for more EOC financing. With very little modification, the documentation of the QAP design/redesign projects could be put into a powerful request for funding to various European donors. PAHO could be assisting Ministries on this effort at least in the three pilot countries.

Recommendation 13: Each LAMM implementer could begin to devote attention to the serious underreporting of maternal mortality.

For PAHO and QAP, this could involve more support for studies, as in the Honduran CDC presentation (for PAHO, national studies; for QAP, regional or district studies.) For both entities, it should be relatively easy to develop simple, cost-effective studies similar to the one recently conducted by PLAN in Ecuador.¹⁸ For both, it could also involve more work with the MOH in vigorously addressing the formation of more maternal mortality committees at decentralized levels and promoting more verbal autopsy methodologies. For both, it should involve work to improve hospital information registers as well as strengthened maternal death investigation, both nationally and at the local level. In addition, there should be an interrelationship between activities being financed or supported by PAHO in this area, and those being undertaken by QAP.

Relatedly, more work needs to take place on improving current maternal mortality information systems. This is both a national effort as well as a regional, district and hospital one; PAHO and QAP, along with the MOH, could be working together in this area. This activity should also involve a study of what seems to be working correctly in the region in this regard—in Peru, for instance, and in Nicaragua, where other countries are dedicating attention to this subject.

¹⁶ In fact, a suggestion in this regard was made to the regional director of health in Comayagua during the field visit. (See annex G for the letter.)

¹⁷ The recommendation regarding revenue generation fits well within the project as currently conceived. It should be noted that some MOH staff specifically requested that LAMM undertake a design project in management training but the request was too far afield for this initiative. Management training for inexperienced physician-managers and hospital administrators could produce important gains, even while outside of LAMM, and it is recommended that the subject be evaluated by the authorities of the larger QAP project as an area of future programming. There was some talk of this subject in Honduras from QAP management staff in the past, but nothing ever came of the idea. It would be a worthwhile endeavor.

¹⁸ In Ecuador, a PLAN International study of 20 communities reports the same number of maternal deaths in 9 months as reported by MOH data in the entire region in 1998.

Conclusion

In spite of start-up difficulties and quite complex subject matter and design, the LAMM initiative has achieved significant gains in the first half of its life. Carrying out these recommendations will further help it reach its goals during the remainder of the initiative.

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ANNEX A

LAMM ACTION MEMORANDUM

ANNEX B
SCOPE OF WORK

ANNEX C

**STRATEGIC OBJECTIVE RESULTS FRAMEWORK
AND INDICATORS TABLES**

ANNEX D

TEAM TRAVEL SCHEDULE

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

ECUADOR SCHEDULE

MONDAY, Aug. 9

9:00 am	QAP/E	Meeting w/ Ecuador Project Committee
11:00 am	MOH/E	Meeting Dr. Walter Torres and MOH staff
2:00 pm	PLAN	Meeting with Dr. Mario Chávez and Narcisa Torres
4:00 pm	USAID/E	Meeting with Dr. Ken Farr and Aida LeFiebre

TUESDAY, Aug. 10

9:30 am	PAHO/E	Meeting with Dr. Elmer Escobar and PAHO/E team
11:00 am	QAP/E	Meeting with Dr. Jorge Hermida and team
2:00 pm		Travel to Latacunga

WEDNESDAY, Aug. 11: Field Visit

9:00 am	MOH/Cotpx.	Meeting with Dr. Franciso Rosero and Cotapaxi Regional Project Committee
11:00 am	MOH/Ltga.	Visit Latacunga Provincial hospital, Dr. Jorge Miño Pazmiño and hospital team
2:00 pm	MOH/Ltga.	Dr. Rodrigo Paredes and Latacunga Health Post #1 team
4:00 pm	Salcedo	Dr. José Izurieta and Salcedo cantonal hospital team
4:30 pm	PLAN	Dr. Mario Chavez and MOH IEC Committee

THURSDAY, Aug. 12: Field Visit

9:00 am	Latacunga Provincial hospital—	Dr. Carlos Donoso
11:00 am	Saquisilí	Dra. María del Carmen Grijalva and Saquisilí Hospital team.
4:00 pm	Chanchaló	Community visit with PLAN

FRIDAY, Aug. 13

11:00 am	MOH	Dr. Ramiro Echevarría, Dra. Diana Molina and MOH team
2:00 pm	QAP/E	Briefing to Ecuador Project Committee; briefing to MOH;
4:00 pm	USAID	Briefing, Dr. Ken Farr and team meeting

SATURDAY, Aug. 14

Document reading

PERU SCHEDULE

MONDAY, Aug 16

10:00 am	IDB	Ricardo Corcuera
2:30 pm	Project 2000	Dr. Bruno Benavides and team

TUESDAY, Aug. 17

10:00 am	MOH/P	Dr. Nazario Carrasco and team
2:30 pm	PAHO/P	Dra. Marie-Andrée Diouf, Dra. Miriam Cruz Olave

WEDNESDAY, Aug. 18

8:30 am	USAID	Dick Martin and team
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EL SALVADOR SCHEDULE*THURSDAY, Aug. 19*

8:30 am	PAHO/ES	Dr. Antonio Horacio Toro
9:00 am	MOH/ES	Dra. Rina de Ortiz, Dr. Ricardo Lara
2:00 pm	Hospital San Bartolo—Dr. Cecilio Parada and team	

FRIDAY, Aug. 20

8:30 am	USAID/ES	Dr. Terry Tiffany, Dra. María Carmen Estrada
10:30 am	PAHO/ES	Dr. Antonio Horacio Toro, and team
11:30 am	SALSA	Lucilda Aguirre
2:00 pm	UNFPA	Dr. Mario Morales

HONDURAS SCHEDULE*MONDAY, Aug. 23*

10:30 am	USAID/H	Meri Sinnit, Dr. Ernesto Pinto
2:00 pm	UNICEF	Dr. José Ochoa, (ex encargado de LAMM/OPS)
4:00 pm	QPA/H	Meeting with URC/QAP/H staff
6:00 pm	PAHO/H	Dr. Miguel Machuca, Dr. Ismael Soriano

TUESDAY, Aug. 24

3:30 pm	MOH	Dr. Mario Chiesa, Director, Programa Nacional de Garantía de Calidad
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WEDNESDAY, Aug. 25

8:30 am	MOH	National Coordinating Committee: Dr. Jorge Melendez, Dr. Alejandro Melara, Dr. Angel Coca (USAID), Dr. Ismael Soriano (PAHO), Dr. Mario Castro (QAP/H)
1:00 pm	UNFPA	Dra. Maritza Elvir, Dra. Cecilia, Dra. Patricia Rivera
3:00 pm	MOH	Field Trip to Maternal Birthing Center Siguatepeque

THURSDAY, Aug. 26: Field Travel

9:00 am	MOH/Comayagua—Dr. Alejandro Melara, Dr. Arturo Gutierrez & regional team	
11:00 am	CESAMO Jose Maria Ochoa—Dr. Oscar Ravén Gomez and team	
2:00 pm	Barrio La Independencia—Attendance at community workshop	

FRIDAY, Aug. 27: Field Travel

8:00 am	Hospital Santa. Teresa—Dr. Hector Chahin and hospital team Comayagua	
2:00 pm	Ajuterique	Visit Comité de Salud, also FUMEF
3:30 pm	La Paz	Taller de Planificación Estratégica Municipio de La Paz; also Hogar Materno de La Paz; also Equipo de diseño de Hospital de La Paz

SATURDAY, Aug. 28

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
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9:00 am	QAP	Meeting with QAP/URC staff
11:30 am		Return to U.S.

ANNEX E
EVALUATION QUESTIONNAIRES

FIELD QUESTIONNAIRE- MANAGEMENT

Interviewee name:

Title

Date:

From your point of view, what have been the key management issues to date? In terms of:

Start-up issues?

Flow of communication?

Inter-country coordination?

Extra-country coordination?

Preparation of work plans?

Follow up of work plans?

Human resources: timeliness, adequate, spread

Financial resources: timeliness, adequate, spread

Monitoring and evaluation

What could be better?

FIELD QUESTIONNAIRE: OVERVIEW

Interviewee name:

Title

Date:

From your point of view, what have been the key project achievements to date?

What could have functioned better?

What have been the project's key managerial strengths?

Any key weaknesses?

From your point of view, how would you characterize the relationship between USAID and the Cooperating Agencies in this project (different from other projects)?

Between USAID and PAHO?

Have there been tangible outputs from the relationship between PAHO and the Cooperating Agencies in this project? What?

What have been the National Steering Committee's principal accomplishments? How does it function? How often meet?

Specifically regarding PAHO's role: are you aware what has been accomplished regarding:

- 1) working with regional plans?
- 2) working with regional interagency coordinating committees?
- 3) enhanced communication between HQ and regional staff?
- 4) country managers with better EOC info.?
- 5) more high level (pol) support to EOC?
- 6) identifying legislative and policy issues?
- 7) improvements in maternal mortality surveillance?

CUESTIONARIO GUIA PARA PERU & EL SALVADOR

BID

Desde su punto de vista cual es la situacion actual de la Mortalidad Materna en el pais?

En su opinion como ha sido el funcionamiento del RICC

Cuales han sido los principales logros del Comite?

Cuales son las mayores dificultades ?

Cual ha sido el rol de la OPS en el funcionamiento del Comite

Existe un plan de trabajo y monitoreo del Comite?

Que haria para mejorar la funcion del Comite?

Proyecto 2000

Como se articulan los objetivos del proyecto con el Plan Nacional de Reduccion de la Mortalidad Materna?

Que poblacion cubre?

Cuando comienza y cuando termina el proyecto? Quien lo financia?

Requiere el proyecto de coordinacion con otras instituciones/organizaciones? Cual es el mecanismo de coordinacion?

Cuales han sido los principales logros?

Cuales las mayores dificultades?

Cual es la sostenibilidad del proyecto ?

Cual es su opinion respecto de la ampliacion de la metodologia del proyecto al pais?

Ministerio de Salud

Cuando fue la ultima revision del Plan nacional para la reduccion de la Mortalidad Materna?

Cual es la prioridad otorgada al Plan dentro de la politica de Salud vigente? Como esta expresada?

Que logros identifica en relacion al Plan?

Cuales han sido las principales dificultades para ejecutar el Plan?

De que manera esta integrada al Plan la estrategia de AOE?

Cuando se hizo la ultima revision de los protocolos de atencion materna y perinatal?

Cual ha sido el principal aporte de OPS al Ministerio de Salud?

Cuales son a su juicio los aportes principales de los comite RICC, CICC y STAG

En que grado de avance califica el funcionamiento los Comites de Vigilancia de la Mortalidad Materna?

Hay una mejor calidad de informacion respecto a complicaciones obstetricas y mortalidad materna y perinatal disponible para la toma de decisiones?

Cual es a su juicio el mayor aporte de los proyectos locales (ONG, donantes, etc) para la reduccion de la Mortalidad materna?

Que hace falta hacer?

OPS

Grado de avance del Plan Regional para la disminucion de la Mortalidad Materna

1. Revision del Plan Nacional para apoyar la estartegia de una mejor AOE
2. Funcionamiento de los comites (se ha generado apoyo al Plan?)
3. Plan de comunicacion para los gerentes de programas
4. Vigilancia de la mortalidad materna
5. Inclusion de la MM entre las prioridades de los programas publicos y la creacion de mecanismos para traducir la atencion obstetrica esencial en propuestas concretas de politicas y programas
6. Elaboracion de instrumenstos para el analisis de politicas y marcos normativos y referenciales vinculados con AOE y la salud materna
7. Provision de apoyo tecnico a MSP y ONG

Cuales han sido las principales dificultades para llevar a cabo el Plan en el pais?

Cuales identifica como los principales logros?

Cual es el punto menos desarrollado?

Como califica el funcionamiento de los comites RICC, CICC y STAG?

Tiene un plan de accion y monitoreo respecto de las diferentes actividades del Plan?

Con que frecuencia elabora los informes de avance? Cuando fue el ultimo?

Que tipo de apoyo ha recibido de OPS/Washington para el cumplimiento del Plan?

Cual es el mecanismo de coordinacion con OPS/Washington?

USAID

Cual es su opinion respecto al desarrollo del Plan para la reduccion de la MM en el pais?

Como es el aporte de OPS?

Que beneficos identifica de los comite RICC, CICC

Cual son a su juicio los logros del Plan?

Cuales han sido las principales dificultades para su ejecucion?

ANNEX F
INTERVIEW LIST

WASHINGTON, DC*USAID*

Annette Bongiovanni	LAMM Project Manager
Carol Dabbs	CTO, LAC Regional Health Priorities Project
Jim Heiby	CTO, Quality Assurance II Project
Ellen Ogden	CTO, Polio Eradication and Immunization Support
Mary Ellen Stanton	CTO, MotherCare III Project
Susan Bacheller	Technical Advisor to Rational Pharmaceutical Management Project

University Research Corporation/Washington

Dr. Stephene Legros	LAMM Project Manager, Quality Assurance Project
Diani Silimperi	Assistant Director, QAP Project
Dr. David Nicholas	Vice President
Dra. Barbara Kerstiens	(ex) Assistant Director, QAP Project

MotherCare/John Snow, Inc.

Coleen Conroy	Deputy Director, LAMM Project
Patricia Duanas	(participant in various committee meetings; not interviewed)

Pan American Health Organization

David Brandling-Bennet	Deputy Director
Irene Klinger	DEC Director
José Antonio Solís	HHP Director
Carol Collado	HPF/PC Coordinator
Victoria Camacho	LAMM Project Manager
Ivales Segovia	LAMM Technical Officer

ECUADOR*Ministry of Public Health/Quito*

Dr. Ramiro Echevería	Director General of Health
Dra. Diana Molina	Director of Promotion and Integrated Attention
Lic. Guadalupe Orozco	Statistician, National Directorate of Promotion and Protection
Dra. María Elena Acosta	Responsable de Implementación de Normas de Salud Reproductiva
Dr. Walter Torres	National Coordinator of Promotion and Protection
Dr. Patricio Jácome	Chief of the Department of Reproductive Health
Dr. Luis Escobar	National Coordinator of the Reduction in Maternal Mortality

Organización PanAmericana de Salud/Quito

Dr. Elmer Escobar	Representative in Ecuador
Dr. Alberto López	OPS/OMS, LAMM Project-in-Charge
Silvia Hartman	Consultant in Biostatistics/Epidemiology
Carlos Samayoa	Consultant
Ninja León	National Professional, OPS/OMS
Hugo Noboa	National Professional, OPS/OMS

Ministry of Health/Cotopaxi

Dr. Francisco Rosero	Provincial Director
Dr. Fernando Mejia	Provincial Subdirector
Dra. Susana Moscoso	Encargada de la Red de Servicios de Salud, Cotapaxi
Dra. Marianita Escutar	Chief of Health Services, Cotapaxi
Dr. Jorge Miño	Director, Provincial Hospital of Cotapaxi
Dr. José Izurieta	Director, Cantonal Hospital of Salcedo
Dra. María del Carmen Grijalva	Director, Cantonal Hospital of Saquisilí

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
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Dr. Carlos Donoso	Chief of Gynecological Services, Cotapaxi P. Hospital
Dr. Rodrigo Paredes	Director, Latunga Health Center # 1
Dr. Enrique Villarroel	Epidemiologist, Latunga Health Center # 1
Dra. Grace Herrera	Obstetric nurse, Latunga Health Center #1
Dr. Freddy Tinillo Ortiz	Social Security Physician
Mercedes Fabara	Orthodontist nurse auxiliary, Latunga Health Center # 1
Obst. Miriam Revelo	Obstetric nurse, Latunga Health Center # 1
Obst. Yolanda Santacruz	Obstetric nurse, Latunga Health Center # 1
Obst. Olga Ruíz	Obstetric nurse, Salcedo Hospital
Obst. Gladys Escobar	Obstetric nurse, Latacunga Health Center # 1
Lic. Carmita Pérez	Nutritionist, Latunga Health Center # 1
Lic. Mariana Mejía	Social Worker, Cotapaxi Provincial Hospital
Lic. Defilia Landeta	Nurse, Hospital of Salcedo
Lic. Margarita Sánchez	Nurse of the Salcedo Cantonal hospital
Ana Ortega	Regional Statistician, Latunga Health Center # 1
Teresa Brazales	Health Educator, Cotapaxi Province
Grace Mejía	Secretary, Latunga Health Center # 1
Grimaneza Villacís	In-Charge, Latacunga Maternal Waiting Center

PLAN International

Dr. Mario Chávez	LAMM Field Coordinator
Dra. Narcisa Calahorrano	Assistant Project Coordinator
Lic. Narcisa Torres	Educator
Lic. Ano Ordonez	Salcedo Nurse
Lic. Myriam Pillajo	Facilitator

University Research Corporation

Dr. Jorge Hermida	Director QAP Project in Latin America
Dr. Luis Vaca	LAMM Field Coordinator
Dr. Marco Antonio Pino	Consultant
Dr. Patricio Ayohoco	Consultant
María Sanchez	Consultant
Dr. Luis Fernando Viera	Consultant

USAID

Dr. Kenneth Farr	Chief, HPN
Aida LeFiebre	Assistant Chief, HPN
Pablo Palacios	USAID/MSP/JHPIEGO Consultant

PERU

InterAmerican Development Bank

Ricardo Corcuera	Project Officer
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Project 2000

Dr. Bruno Benavides	Chief of Technical Assistance, Project 2000 (Pathfinder)
Dr. Alfonso Villacorta	Specialist in Mother-Child Health (CARE)
Dr. Hugo Oblitas	Project Director, Project 2000 (MOH)

Ministry of Health

Dr. Nasario Carrasco	Director of Maternal-Child Health Program
Dr. Eduardo Maradiegue	Advisor of Maternal-Child Health Program
Rosa Villar	Advisor of Maternal-Child Health Program

Organización PanAmericana de Salud/Lima

Dra. Marie-Andree Diouf Representative
 Dra. Miryam Cruz Olave International consultant, LAMM In-Charge

USAID

Richard Brown Chief, HPN
 Dra. Lucy Lopez Program Manager, HPN Office
 Dr. Jaime Chan VIGIA Project Coordinator, HPN Office
 Barbara Feringa Manager, Reproductive Health Project

EL SALVADOR*Organización PanAmericana de Salud/San Salvador*

Dr. Horacio Toro Representative
 Ing. José Gerardo Merino Coordinator, technical cooperation; LAMM in-charge (a.i.)
 Dr. Mario Morales Official, Reproductive Health
 José Ruales Consultant in health systems
 Dr. Mario Valcarcel Epidemiologist

Ministry of Health

Dra. Rina de Ortiz In-Charge, Programa Salud Escolar
 Dr. Ricardo Lara In-Charge, Programa Materno-infantil
 Dr. Cecelio Parada Director, Hospital Periférica San Bartolo

UNFPA

Dr. Mario Morales Official of Reproductive Health

USAID

Dr. Terrance Tiffany Chief, HPN
 Dra. Maria Carmen Estrada Manager, HPN

Project SALSA

Lucelda Aguirre Assistant Administrator

HONDURAS*USAID*

Meri Sinnit Director, HPN
 Dr. Ernesto Pinto Foreign Service National
 Dr. Angel Coca Foreign Service National

UNICEF

Dr. José Ochoa Consultant

UNFPA

Dra. Maritza Elvir Program Officer
 Dra Cecilia Maurente Consultant in Reproductive Health
 Dra. Patricia Rivera Official in Reproductive Health

URC/QAP

Dr. Marco Antonio Casto Country Representative
 Dra. Norma Aly IEC and Community Specialist
 Lic. Ana Ruth Gutierrez Community Specialist
 Gerardo Torres Community Promoter
 Juan José Flores Community Promoter

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
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PAHO

Dr. Miguel Machuca Acting Representative
Dr. Ismael Soriano Consultant

MOH/Tegucigalpa

Dr. Mario Chiesa National Director, Office of Guarantee of Quality
Dr. José Melendez National Director, Maternal and Child Health

MOH/Comayagua

Dr. Alejandro Melara Regional Director, Comayagua
Dr. Hector Chahin Hospital Director, Santa Teresa Hospital
Dr. Arturo Gutierrez Departmental Director of Health
Lic. Norma Padilla Technical Assistant to the Family Health Unit
Dr. Emilio Maridiaga Obstetrician/Gynecologist, Santa Teresa Hospital
Lic Irma Montoya Nurse Supervisor, Santa Teresa Hospital
Rosaeverist Giron Statistician, Santa Teresa Hospital
Sonya Morales MIS, Santa Teresa Hospital
Juaquina Valle Nurse Supervisor, Santa Teresa Hospital
Lilian Padilla Neonatologist, Santa Teresa Hospital
Oscar Renán Gomes Director, CESAMO José María Ochoa
Mayte Santos Logistics, Santa Teresa Hospital

Hospital La Paz

Dr. Rigoberto Castro Hospital Director
Lic. Celeste Mendez Social Worker, La Paz Hospital
Ramon Roso Department In Charge, Statistics, La Paz Hospital

ANNEX G
CURRICULA OF EVALUATION TEAM MEMBERS

Frank Sullivan

HC 72 Box 204
Locust Grove, VA. 22508
Tel: (540) 972-1261
E-mail: frank.sullivan@gowebway.com

SUMMARY Substantial consulting experience in program design and evaluation. Twelve years in complex managerial assignments as Country Director and twenty-five years in program development on three continents. Multi-year living experience in the Dominican Republic, Bolivia, Ecuador, Honduras and Bangladesh and in-depth familiarity with these country. Successful experience with US Government both in fund-raising and in project evaluation. Broad experience in organizational leadership, project marketing, staff development and team building, and enhanced quality project management. Strong analytic abilities and written and presentation skills. Masters degree in international development from Cornell. Completely fluent Spanish.

EVALUATION Chief of Party of a **USAID/Washington** four-country Maternal Mortality midterm evaluation. Chief of Party of a **USAID/Bolivia** Title II midterm evaluation of Development Assistance Programs for three Cooperating Sponsors. Chief of Party of a **USAID/Dominican Republic** Title II Hurricane Georges Emergency response assessment. Chief of Party of a **USAID/Honduras** Health Sector midterm project evaluation. Chief of Party of a **USAID/Bolivia** Community and Child Health final project evaluation. Chief of Party of a Bolivia PROCOSI health network project documentation exercise. Chief consultant to **Save the Children/Angola** for an emergency Title II final project evaluation. Chief of Party to **Save the Children/Westport** of an Institutional Support Grant evaluation for **USAID/Food For Peace-Washington**.

PROPOSAL DESIGN Leader in the re-write of agricultural and institutional development components of a **CARE/Nicaragua** Development Activities Proposal. Chief of party for write-up of a **CARE/ Bolivia** proposal for a health, agricultural and food-for-work project, recently approved. Chief writer of a **Save the Children/ Nicaragua** Hurricane Mitch disaster response proposal. Team member of a **Save the Children/Bangladesh** proposal for a health and agricultural development project. Monitoring and evaluation manual writer to **Save the Children/Washington** on food programming, and author of a SC food evaluation manual.

STRATEGIC PLANNING & Provided leadership to strategic planning, portfolio review and evaluation of on-going projects. Skilled in multi-year visioning and

PROGRAM DESIGN	<p>SWOT analysis and facilitation to foster team consensus.</p> <p>Implemented new strategic directions building on the organization's competitive advantage and country challenges. Spearheaded the design and marketing of \$40 million of new projects requiring substantial personal involvement and supervision: In the Dominican Republic, \$4.5 million in Title-II food assisted primary health care programming and urban/rural water and sanitation; in Bolivia, \$27 million in natural resource and primary health care projects; in Ecuador, \$4.5 million in sprinkler-irrigation, potable water, primary health care and micro-enterprise projects.</p>
MANAGEMENT	<p>Exercised hands-on management of diverse portfolios. Supervised up to eight experts and 175 national staff, and annual budgets to \$6.5 million. Portfolios recognized widely for significant qualitative improvements that took place during each tenure. Doubled the portfolio in two assignments. Achieved improved financial oversight, administration of 100-or-more vehicle fleet operations, human resources management systems and office processes.</p> <p>Specialized in "turn around" situations and recognized for high administrative ability and broad strategic creativity. Energized staff to provide the best quality service to donors and Third World poor. Personally led processes of institutional rejuvenation, climate surveying and program innovation.</p> <p>Management consultant to the Department of Health of the District of Columbia as team leader of an environmental health consulting team.</p>
TRAINING & ORGANIZATIONAL DEVELOPMENT	<p>Fifteen years experience in personnel supervision, coaching and staff development. Known for high profile involvement and personal visioning. Widely read in themes of leadership and intimate knowledge of Situational Leadership, <i>and The 7 Habits of Highly Effective People</i>. Designed course work on these themes to stimulate, motivate and enhance staff job skills; personally conducted much of this training in Spanish. Skilled facilitator in all aspects of project development, leadership, project management. Participated in a self-financed "Training of Trainers" workshop at Training Resources Group. Certified instructor of the Myers-Briggs MBTI trait instrument. Agricultural project trainer to the U.S. Department of Agriculture and the Government of Thailand in project management.</p>
TECHNICAL EXPERTISE	<p>Extensive knowledge and experience of Third World and Bolivia development issues. <u>In primary health care</u>: growth card monitoring, nutritional counseling, diarrhea control, breast feeding promotion, immunizations, family planning, AIDS campaigns, adolescent sex</p>

education, water quantity and quality, hygiene education, community participation. Knowledgeable on issues of maternal mortality in Latin America.

In Food Security programming: commodity selection, proposal write-up, market analysis, Bellmon certification, disincentive analysis, Monetization, port management, commodity storage and logistics. Expert in the use of Title II as a development tool.

In agriculture and natural resources: sprinkler irrigation, soil conservation, agro-forestry, micro-watershed management, nursery management, small-scale vegetable production, community participation, agricultural credit.

RECENT
EMPLOYMENT

- 8/99 Chief of Party: USAID/Washington Latin American and the Caribbean Maternal Mortality Project midterm evaluation.
- 6/99 Chief of Party: USAID/Bolivia Midterm evaluation of three Title II agricultural./health/food-for-work Development Activity Proposals (DAP).
- 5/99 DAP proposal team member: CARE/Nicaragua.
- 4/99 Chief of Party: USAID/Dominican Republic Hurricane George Title II Midterm assessment.
- 2/99 DAP proposal team member: Save the Children/Bangladesh
- 1/99 Strategic planner: Hurricane Mitch Emergency Response plan, Save the Children/Nicaragua.
- 9/98 Chief of Party: documentation exercise, PVO Networks for Health, Bolivia.
- 8/98 Chief of Party: DAP proposal preparation, CARE/Bolivia.
- 7/98 Monitoring and evaluation consultant: Save the Children/ Washington DC.
- 5//98 Chief of Party: USAID/Honduras Health Sector II Project and Population-II Project midterm evaluations, POPTECH.
- 4/98 Chief evaluator: Angola AACP Emergency Food Project final evaluation, Save the Children.
- 3/98 Chief of Party: USAID/Bolivia Community and Child Health Project final evaluation, POPTECH.
- 2/98 Chief of Party: Title-II Institutional Support Grant evaluation, Save the Children.
- 9/97 Management consultant: DC Department of Health, University Research Corporation.
- 92-96 Country Director: CARE/Dominican Republic.
- 86-92 Country Director: CARE/Bolivia.
- 84-87 Country Director: CARE/Ecuador.
- 82-84 Assistant Country Director: CARE/Bangladesh.
- 81 Trainer consultant: USDA and the Government of Thailand.

GLORIA METCALFE

PERSONAL:

Titles: Professional Midwife; Masters in Public Health

Passport: (Chile)

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ACADEMICS:

1971- 76 School of Obstetrics, University of Chile, Santiago, Chile

1987- 88 Masters in Public Health, Medical Faculty, School of Public Health, U. of Chile

EXPERIENCE:

Hospital Paula Jaraquemada; Santiago, Chile. Clinical Midwife in Residence, also Quality Assurance officer in this 300-bed, level III referral hospital in Santiago. 1976 – 1984.

Ministry of Health of Chile; Santiago, Chile. Midwife responsible for the National Program for Maternal and Perinatal Health, involved with implementation of policy, standards and protocols in Maternal Infant Health programs, including monitoring, evaluation y assessment of activities for the Ministry of Health at the regional and national levels; planning, development and implementation of approved methodology within the environment of Reproductive Health Care and Family Planning, with a focus on the design and presentation of training programs for the implementation of the new policies in women's health care. 1982 – 1994

Consultancies -

May - June 1998 Review of the Program for Training of Empirical Midwives in Newborn Care for the Ministry of Health of Honduras and contracted by Mothercare, John Snow, Inc. Evaluation of programs included site visits, surveys and interviews with medical personnel and the midwives involved, as well as review and correction of manuals and training materials.

April – October 1997 Negotiations and initiations for the implementation of the first Professional Midwifery School for the NGO “Centro para los Adolescentes de San Miguel de Allende – CASA. Coordination with the Secretary of Education for the State of Guanajuato, Mexico, design and elaboration of a curriculum for 2 years (6 continuous

academic semesters) based on the criteria of the Secretary of Public Education in México, and on organizations related with women's health internationally recognized, such as the World Health Organization, International Confederation of Midwives, Midwives Alliance of North America, etc.

September 1994 – April 1997 Technical Long Term Advisor of the Mothercare II Project in Bolivia, contracted by The American College of Nurse Midwives (Washington DC). Responsibilities included the elaboration of protocols and norms in conjunction with the Ministry of Health of Bolivia in maternal/infant health care at the national level, planning and development of training programs to implement the protocols in Bolivia and assessment/evaluation of the IEC component in coordination with psychologists and technicians of the NGO Path, Inc.

May – June 1994 Short term advisory for the Mothercare I project (John Snow, Inc.) in Bolivia, in the evaluation and recommendations for their Bolivian projects, with propositions for their future projects in Bolivia in Mothercare II, in terms of health care services, the direction of training of professionals and programs for evaluation and monitoring.

PUBLICATIONS:

Co-author of more than 20 publications such as guides, manuals or texts published under the authority of the Ministry of Health of Chile or Bolivia, the Secretary of Education of México, and the Pan American Health Organization, including some of the following titles:

- Manual de Salud Materna para Auxiliares de Enfermería de Puestos Sanitarios (Chile)
- Protocolos para la Detección y Prevención de Alto Riesgo Gineco-Obstetrico (Chile)
- La Adolescente Embarazada (Normas y Políticas del Min. de Salud de Chile)
- Normas de la Atención de la Mujer Embarazada y el Recién Nacido (Sec. De Salud/Bolivia)
- Curriculum con Asignaturas para la capacitación de Parteras Profesionales en México (Sec. de Educación de México)
- Evaluation of the Nutritional Status of the Pregnant and Lactating Woman in Chile (Pan-American Health Organization, 1988,89,90,91,92)
- Current Situation of Family Planning Programs in Chile (PAHO, 1987)

■

ANNEX H
FOUR CLINICAL CASES

Case One

In the delivery room, the evaluation team came upon an indigenous woman of two previous normal deliveries in full labor. She was being treated on the traditional “Western” birthing table (for her, placed in a very embarrassing and uncomfortable gynecological position.) She had been admitted for about one hour. Her labor started in the village, attended to by a village midwife; just prior to delivery, the midwife had convinced the patient to seek hospital care. When the evaluation team entered with the obstetrician/gynecologist (the only one on call at the hospital), the medical resident attending to the woman responded when asked of her condition that the fetus was breach, and was dead. The obstetrician/gynecologist prepared to assist in the extraction of the feet. The resident performed the maneuver and extracted an arm. The obstetrician/gynecologist stated that the fetus was in a transverse position and the women needed to be prepared for surgery. Also present in the room was a pediatrician with a bottle of aspirin in his hand.

This woman had been referred to a health center by the village midwife, admitted to the hospital of first referral in labor, and then shipped to the regional hospital. At each point along the way, it appeared she had been attended to by a professional, none of whom had made a correct diagnosis: that the baby was transverse and dead and that a cesarian had to be performed to remove the fetus. The pediatrician’s presence typified the scenario as he weighed the diagnosis, but he had no explanation why the woman should have wound up in the delivery room. (She should have been admitted directly to the operating room—in this hospital, on a different floor and a hundred yards away.)

Case Two

In the labor room, there was only one case of childbirth underway. A 16-year-old adolescent had been admitted on her feet with no signs of labor. Upon review of the clinical history, gestation development had a number of contradictory entries: 46 weeks, 43, 36, 33, and 32 weeks of pregnancy in different forms in the same clinical history. Uterine elevation was concurrent with a full-term pregnancy. It had been 4 hours since the last controlled analysis of fetal cardiac activity and uterine evolution. An oxytocic had been administered to induce labor, but there had been no response. The nurse on duty stated that neither the diagnosis nor indications were clear, but that the obstetrician/gynecologist was handling the case. The clinical records had confusing and sporadic information.

Case Three

The evaluation team interviewed two women in the post-delivery ward who were placed two per bed with their newborns, and a professional nurse was on duty. The women would not receive a follow-up examination until being discharged from the hospital (a stay of 24 hours is usual for normal deliveries at this hospital), at which time they would receive an examination in a post-delivery review. The newborn would be examined at the same time. This schedule applied to all cases except those involving complications,

such as excessive maternal bleeding, newborn respiratory complications, or incidence of jaundice. The women were still in the street cloths in which they were admitted, sometimes with bloodstains from the delivery. When they got up to wash themselves, at times they would faint along the way to the washroom. General hygiene was quite deficient. The hot room was conducive to dehydration and during the visit no drinking water was observed nearby. The nurse said that staff was limited, and that nurses were primarily concerned with potential cases of hematomas due to episiorrhaphy or overlooked post-delivery vaginal gases.

In this hospital, episiotomies are performed as a matter of routine, even for those women with a history of prior childbearing. Shaving is often limited to the small areas of the gynecological examination. An enema is performed when and if necessary.

Case Four

The following clinical history was reviewed with the chief obstetrician/gynecologist of one of the hospitals visited by the evaluation team. A 17-year-old woman gave premature birth en route to the national hospital in the bathroom of a gasoline station. She was admitted with a dead newborn and was bleeding profusely, apparently due to lesions of the placenta; there was no admittance diagnosis performed. Her blood pressure on admittance was reported at 100/60. The physician attending to the woman indicated a D&C procedure and placed the woman under general anesthesia to do so. During the procedure, coagulations and placenta clots were extracted. Four hours later, the woman was still unconscious; in a deep coma she was transferred to the hospital in the capital where she died. The head of obstetrics/gynecology indicated that he was generally in agreement with the treatment except for the lapse of time in discovering that the woman had not awoken from the general anesthesia. He felt that the anesthesia had been administered adequately because the patient was not in shock, but perhaps an error of anesthesia could have occurred. The physician did not mention the use of oxytocics, sera or other manual procedures to assist in stopping the hemorrhaging (review, extraction of clots, bimanual compression). The blood pressure reading at the time of admission leaves some room for doubt, and there were no other vital signs evaluated before the anesthetic was administered.

ANNEX I
EVALUATION TEAM LETTERS PRODUCED DURING TRAVEL

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

M E M O R A N D U M

PARA: Dr. Mario Chavez
Plan Internacional

FECHA: 17 de agosto, de 1999

DE: Frank Sullivan y
Maria Elena Casanova

Ref.: Reunion de grupo de mujeres en Chanchalo
12 de agosto de 1999.

En relacion con la reunion que tuvimos la suerte de presenciar en Chanchalo y en respuesta a tu solicitud, las siguientes son algunas breves observaciones que comentamos contigo en esa ocasion:

- Es practicamente imposible mantener la atencion de un grupo de personas durante mas de 30 o 40 minutos. Por lo tanto, pensamos que la transmision de los mensajes podria ser mas efectiva si se planeara la reunion para durar ese lapso de tiempo.
- La recomendacion para evitar que la reunion se alargue, seria trazar un "plan de accion" (lesson plan) asignandole un tiempo especifico a cada tema del programa. Ej.: Introduccion, 3 min; presentacion de laminas, 5 min., etc.
- Durante el trabajo es importante que el mensaje central de la sesion, por ejemplo, la emergencia obstetrica y que hacer cuando se presenta, no se pierda de vista; y que las preguntas y respuestas no se desvien hacia otros temas (ej.: planificacion familiar). Cuando surgen preguntas sobre otros temas se contestan con un frase y se regresa al tema central.
- Es importante evitar que sea una sola persona quien conteste todas las preguntas de la capacitadora, tratando de preguntar dirigiendose a una persona diferente cada vez. Si la misma persona (ej.: la partera) trata de contestar a todo, se le puede decir algo como: "Si, dona Hortensia, ya sabemos que usted lo sabe muy bien, pero vamos a ver que nos dicen las senoras".

Estos son solo comentarios que pensamos que podrian hacer la comunicacion mas efectiva y hacer un mejor uso del tiempo disponible.

Te agradecemos, una vez mas tu amabilidad deseandoles el mejor de los exitos!

MIDTERM EVALUATION OF THE LATIN AMERICAN AND
THE CARIBBEAN MATERNAL MORTALITY INITIATIVE

f. Esta cuota podría homogeneizarse en toda la Región en los centros que ofrecen dichos servicios de alta calidad.

Por lo tanto recomendamos que las clínicas materno infantiles se establecieran en el futuro teniendo muy en cuenta los siguientes parámetros:

- Mantener el sistema actual de la Clínica Materno Infantil de Siguatepeque, que permite que el 50% de sus ingresos sean administrados y manejados por la Directora y el Comité de Apoyo. Este es, sin duda, un **factor fundamental** para lograr la calidad de atención que existe ahora en ese centro de servicios.
- Identificar a las personas idóneas para dirigir dichas clínicas, o sea personas comprometidas, con una gran vocación de servicio y amor a su trabajo y a la comunidad.

Sin otro particular, agradecemos una vez más su muy amable hospitalidad y le deseamos a usted y su personal toda clase de éxitos en su trabajo.

CAMBIOS SUGERIDOS

Guia de bolsillo Para la atencion y manejo de las emergencias obstetricas Por niveles de complejidad

Agosto 1999

Nota: las siguientes son observaciones sugeridas para agregar (o modificar cuando se especifica) al texto original. Los signos de interrogacion sugieren revisar la inclusion de ese manejo, examen o procedimiento. (Se ha conservado la misma enumeracion del texto original para referirse a cada complicacion.)

1.1. Amenaza de aborto (en singular)

a) Signos:

Amenorrea

b) que hacer en Cesar, Cesamo (agregar)

Indicar reposo en cama (incluye abstinencia sexual)

Si continua o aumenta sintomatologia, referir

Si el sangrado esta comprometiendo el estado general o es abundante

referir de inmediato al nivel hospitalario

iniciar un suero con solucion salina

c) que hacer en el hospital

Si el aborto no se ha producido no es necesario aplicar inmunoglobulina anti Rh en caso de Rh(-)

Evaluar vitalidad fetal (ecosonografia)

1.2 Aborto incompleto: se sugiere no separar el manejo en menor y mayor de 12 semanas.

a) signos: agregar

Amenorrea

Sangrado leve o moderado

Tamano uterino inferior segun edad gestacional

Utero de consistencia aumentada (duro) y sensible al tacto

Cuello permeable

Puede observarse perdida de liquido amniotico

b) que hacer en Cesar...

Estimar cantidad de sangre perdida

c) que hacer en el hospital

Eliminar: Evacuar el contenido uterino por induccion con oxitocina

Control de Hb ; manejo de la anemia si corresponde

1.3 Aborto septico

a) signos

Amenorrea

Perdida de secrecion de mal olor y/o hemopurulenta

Estado general comprometido (pre shock o schok)

b) que hacer en Cesar...

Iniciar un suero : especificar tipo y dosis por minuto

Iniciar antibiotico: especificar dosis y via (igual para hospital)

c) que hacer en el hospital

Continuar con suero y antibioticos (especificar tipo, dosis y duracion)
Especificar cuales exámenes hematológicos
Solicitar sangre si es necesario
Cultivo de secreción vaginal y antibiograma
Urocultivo y antibiograma

1.4 Embarazo ectopico

a) signos..

Amenorrea

Dolor abdominal localizado en un lado, difuso o intenso si se ha roto

Puede tener signos de shock si se ha roto, es una complicación grave.

Utero de tamaño menor que el correspondiente a la amenorrea

solo hospitalario

Abombamiento del fondo de saco posterior

b) que hacer en el hospital

Evaluar estado general de la paciente

Corrección hemodinámica: especificar

Exámenes hematológicos: especificar

Examen de orina??

Ultrasonografía o prueba rápida de embarazo o pelviscopia (punción

del Doulas?) según disponibilidad

confirmado el diagnóstico: cirugía inmediata

Inmunoglobulina anti Rh....(ponerlo al final de las medidas, esta indicado en las primeras 48 horas del puerperio).

3. Embarazo Molar

a) signos..

Signos de anemia??

b) que hacer en el hospital

Prueba de función tiroidea??

Radiografía de tórax? En esta fase?

Solicitud de sangre si es necesario

Control durante un año: explicar que se debe controlar y como

4.1 Placenta previa

a) signos...

Sangrado vaginal indoloro que puede aumentar progresivamente o que puede desaparecer y volver a aparecer

Estado general variable dependiendo de la cuantía del sangrado puede haber shock

b) que hacer en Cesar....

Signos vitales, especialmente presión arterial y pulso

Estimar y registrar cantidad de sangre perdida (igual para hospital)

Control de LCF (igual para hospital)

Estimar edad gestacional (igual para hospital)

Corrección hemodinámica: especificar

c) que hacer en el hospital

Reposo absoluto si no hay indicación inmediata de cesárea

Corrección hemodinámica

Sangre si es necesario

Conducta expectante segun sangrado vaginal, estado general, edad gestacional y vitalidad fetal.
Prueba de funcion renal? Esta disponible? Es necesaria?
Ultrasonografia: si es lateral evaluar posibilidad de parto vaginal
Exámenes hematologicos: especificar
Cesarea en caso de embarazo mayor de 37 semanas Y evidencia de compromiso materno fetal
Clarificar que significa indicacion obstetrica
Maduracion pulmonar si es menor de 37 semanas
Hemoglobina de control antes del alta
Reposicion de sangre si esta indicado o indicacion de hierro (indicar dosis y duracion).

4.2 DPPNI

a) signos

Sangrado vaginal leve a intenso dependiendo de la magnitud del desprendimiento (parcial, moderado o total)

b) que hacer en Cesar....

Signos vitales, especialmente presion arterial y pulso
Estimar y registrar cantidad de sangre perdida (igual para hospital)
Correccion hemodinamica: especificar

c) que hacer en el hospital

Evaluar condicion fetal
Evaluar actividad uterina
Prueba de funcion renal? Es necesaria? Esta disponible??
Exámenes hematologicos: especificar
Interrumpir el embarazo por la via mas adecuada:
via vaginal si el parto es inminente y la condicion materna lo permite
cesarea si el parto no es inminente
Control de Hb, manejo de la anemia si corresponde

5. Rotura prematura de membranas

a) signos

Perdida de liquido amniotico a traves de la vagina sin trabajo de parto
Puede haber signos de infeccion ovular
En el hospital
Hallazgo de liquido amniotico en fondo de saco posterior

b) que hacer en Cesar..

Estimar edad gestacional (igual para hospital)
Averiguar tiempo de rotura (en horas)
Signos vitales, especialmente la temperatura bucal (igual para hospital)
Iniciar antibioticos: especificar cuando, cual, dosis y via

c) que hacer en el hospital

Borrar en caso de compromiso fetal, solicitud de unidad de sangre
Cristalografia, ph de liquido si es necesario
Antibioticos: especificar cuando, cual, dosis, duracion y via
Embarazo de pretermino sin signos de infeccion:
manejo expectante
proteccion de genitales con pano limpio o esteril
control de temperatura bucal
control de LCF
maduracion pulmonar si se desencadena trabajo de parto
hacer el minimo de tactos vaginales

Embarazo de pretermino con signos de infeccion:

antibiotico: especificar tipo, dosis, duracion y via
maduracion pulmonar

induccion del parto

Embarazo a termino sin infeccion:

esperar inicio del trabajo de parto espontaneo

Embarazo de termino con infeccion:

antibioticos: tipo, dosis, duracion y via

induccion del parto

6.3 Infeccion del tracto genitourinario

Se sugiere diferenciar manejo de infeccion baja (cistitis) que puede ser tratado ambulatoriamente y sin referir, del manejo de una pielonefritis que requiere hospitalizacion. Especificar que con una cistitis y ante la aparicion de fiebre, compromiso general y lumbalgia la mujer debe ser referida.

6.4 Pre eclampsia

Se sugiere diferenciar entre manejo de pre eclampsia moderada y grave clarificar que un alza de 30mmHg en la sistolica y de 15mmHg de diastolica es sobre la basal (no sobre los valores previos).

Edema en manos y cara o generalizado segun gravedad.

El peso diario no se justifica especialmente en pre eclampsia grave (donde debe evitarse estímulos innecesarios)

7.2 Eclampsia

a) que hacer en Cesar

Medidas inmediatas: manejo de la crisis (proteccion de golpes, despejar via area, colocar canula o bajalenguas envuelto en gasa, medicacion sedante o anticonvulsivante: indicar tipo,dosis y via)

Referencia inmediata acompanada

Si el parto es inminente, atenderlo y referir a ambos inmediatamente despues. Estar preparado para hacer reanimacion neonatal

b) que hacer en el hospital

Evaluacion obstetrica y fetal

Resolucion inmediata del parto por la via mas adecuada

Prueba de contracciones?? Ultrasonido y perfil biofisico?? Radiografia de torax??

8. Parto pelvico

a) que hacer en Cesar...

Asegurar que la espalda rote a posicion anterior (revisar dibujo No 3, esta errado)

Una vez que se han desprendido los hombros, con una mano levante los pies y con la otra hacer presion suprapublica para favorecer la flexion y salida de la cabeza (orregir dibujo 4 y 5)

Evaluar al recién nacido y reanimar si es necesario

Clarificar cuando es necesario referir a la madre y/o al recién nacido.

9. Prolapso de cordon umbilical

a) signos..

Signos de sufrimiento fetal (LCF inferior a 120 o superior a 160 latidos por minuto)

b) que hacer en Cesar...

Evaluar condicion fetal (igual para hospital)

Determinar presentacion fetal (igual para hospital)

Explicar como se rechaza la presentacion y que es posible que si el feto esta vivo debe mantener esta maniobra durante el traslado.

Si el feto esta vivo proteger el cordon con aposito esteril son solucion salida tibia y evitar manipularlo (no tratar de introducirlo)
Canalizar vena??

c) que hacer en el hospital
Exámenes de laboratorio??
Solicitud de sangre??
Oxigeno si se dispone
Atencion de parto si es inminente
Si el feto esta vivo y el parto no es inminente, mantener rechazo de la presentacion hasta cesarea
Si el feto esta muerto , evaluar condiciones obstetricas para induccion/conduccion y parto vaginal o cesarea

10. Se sugiere cambiar - Parto de pretermino- por Amenaza de parto de pretermino-

a) signos
Inicio de dinamica uterina entre las 20 semanas y 37 semanas de gestacion

b) que hacer en Cesar
Canalizar vena: especificar tipo de suero y dosis por minuto
Control de dinamica y LCF (igual para hospital)
Correccion del estado hemodinamico??
En caso de parto inminente, evaluar al RN y decidir si es necesaria la referencia (si esta sano, explicar a la madre sobre los cuidados para mantener la temperatura y en relacion a alimentacion)

c) que hacer en el hospital
Uteroinhibicion: especificar medicamento, dosis y via
Especificar que es tratamiento esteroidales: (maduracion pulmonar?) cuando, tipo de corticoides, dosis y via.

11. Se sugiere cambiar - Parto prolongado- por Trabajo de parto prolongado

a) signos..
Agregar al 2o y 3er signo que es en fase activa.
En general no hay progreso de la dilatacion con trabajo de parto activo

b) que hacer en Cesar...
Confirmar que la mujer esta en trabajo de parto activo
Descartar que la mujer este deshidratada o hipoglicemica (sin comer en las ultimas horas) . Corregir si es necesario y volver a evaluar
Control de LCF y evaluacion de actividad uterina
Referir si las condicones se mantienen

Clarificar el parrafo final de esta pagina (67)

12. Rotura uterina

a) que hacer en Cesar...
Canalizar vena: especificar
Signos vitales, especialmente presion arterial y pulso
Evaluacion de vitalidad fetal (igual para hospital)
Sacar correccion del estado hemodinamico (incluida en canalizar vena)

b) que hacer en el hospital
Ultrasonografia y Rx?? Y Exam. de laboratorio?? (Con excepcion de grupo y Rh y Hb, pareciera que otros exámenes no tienen sentido dada la urgente resolucion que requiere su manejo)
Control de diuresis

Control de Hb post operatorio, manejo de anemia si es necesario:
especificar

13. Retencion placentaria

a) signos..

Sangrado abundante despues de la salida del nino (excepto si es una placenta accreta total)

Utero blando o hipotonico

Puede haber signos de infeccion en casos de partos en domicilio

b) que hacer en Cesar..

Explique a la mujer lo que esta pasando y lo que va a hacer

Iniciar un suero fisiologico 500 cc mas 20 unidades e oxitocina, goteo rapido hasta obtener respuesta, luego continuar con suero oxicotico de mantencion 30 – 40 gotas por minuto hasta asegurar mantencion de la contraccion uterina.

H acer un masaje suave en el fondo del utero para estimular contraccion

Hacer estimulacion de pezones o idealmente poner al pecho al recien nacido

Hacer traccion suave y sostenida del cordon para

Inicio de antibioticos solo SI hizo extraccion manual o hay signos de infeccion: especificar tipo, dosis, duracion y cantidad. (igual para hospital)

Control de retraccion uterina

Control de presion arterial y pulso

Control de Hb, indique hierro (especificar dosis y duracion) o refiera si necesita transfusion

c) que hacer en el hospital

Lo mismo que Cesar mas control de Hg y transfusion si fuera necesario

Manejo de complicaciones (histerectomia) o referencia a un nivel de mayor complejidad con vena canalizada (velocidad de goteo de acuerdo al estado de la mujer), paciente abrigada y en posicion de Trendelenburg.

13.2 Retencion de restos placentarios

a) Signos

Retencion de restos placentarios o de membranas ovulares

Contraccion y retraccion uterina insuficiente

Puede haber signos de infeccion en partos en domicilio

b) que hacer en el hospital

Cambiar - exploracion ginecologica – por revision manual de cuello y utero. Legrado si persiste sangrado o retencion de restos

Exam. hematologicos: especificar cuales (Hb?)

Transfucion si es necesario (Hb bajo.... usar norma)

13.3 Trauma genital (Se suguiere agregar Laceraciones o desgarros)

a) que hacer en Cesar...

Revision del canal del parto: identificar el sitio del desgarro: vaginal, vulvar o cervical

Canalizar vena: especificar

Especificar que tipo de desgarro sera resuelto en este nivel y cual referido. Tambien indicar compresion del desgarro durante el traslado si el sangramiento es abundante y posicion de Trendelenburg

(Se suguiere agregar unos dibujos con la tecnica de sutura)

13.4 Atonia uterina (se suguiere agregar e Hipotonia)

a) que hacer en Cesar... (igual para el Hospital)

Control de signos vitales, especialmente presión arterial y pulso

El suero idealmente debe ser fisiológico (para evitar riesgo de intoxicación por agua) 500cc más 20 unidades de oxitocina A CHORRO

Asegurar que la vejiga está vacía, hacer vaciamiento vesical con sonda simple si es necesario.

Masaje externo uterino y expresión de coágulos

Si no hay respuesta rápida hacer compresión bimanual externa, si no hay respuesta rápida hacer compresión bimanual interna (si está entrenado).

Si no hay respuesta uterina y el sangrado continúa referir de inmediato, durante el traslado debe mantener la compresión bimanual externa y una vena canalizada.

Si hay respuesta uterina, mantener la infusión oxitóxica con 30-40 gotas por minuto hasta estar seguro que el útero se mantiene contraído (globo de seguridad).

Estimar cantidad de sangre perdida

Referir si se sospecha que necesita transfusión

c) que hacer en el hospital

Descartar restos placentario/ovulares y desgarros

Vaciamiento vesical con sonda simple si es necesario

Masaje uterino y expresión de coágulos

Compresión bimanual externa e interna si no hay respuesta

Borrar exploración ginecológica o explicar con qué fin lo va a hacer

Estimar cantidad de sangre perdida

Control de Hto o Hb

Transfusión si es necesario o indicación de hierro (dosis, duración y vía)

Se sugiere incluir un dibujo que muestre la compresión bimanual externa

Si no hay respuesta o es insuficiente y el sangrado persiste, referir al nivel de mayor complejidad para cirugía. Durante el traslado mantener vena permeable, posición de Trendelenburg, paciente abrigada, compresión bimanual externa y compresión de la aorta si fuera necesario.

13.5 Inversión uterina

a) signos

Se sugiere poner en primer lugar - Visualización del útero invertido en vagina o fuera de ella durante el alumbramiento o como consecuencia de este

b) que hacer en César...

Sugiero retirar inicio de tratamiento antibiótico (es recomendable hacerlo una vez que se resolvió el cuadro)

Corrección del estado hemodinámico (poner todo junto, está en dos puntos en el texto): clarificar tipo de suero, cantidad total y por minuto

El dibujo de la página no está claro si representa la protección del útero con paño húmedo o es la reducción de la inversión (más parece esta última)

Dependiendo del grado de inversión: si es leve, reducción inmediata (explicar procedimiento) para evitar el shock y desprendimiento manual de placenta si aún estaba adherida. Si es total, referir de inmediato protegiéndolo con paño estéril y húmedo (solución fisiológica tibia)

c) que hacer en Hospital

Exam. de laboratorio?? Cuáles y en qué momento

Evaluación y corrección del estado hemodinámico: especificar

Infusión oxitóxica : especificar tipo de suero (idealmente fisiológico), cantidad de oxitocina, dosis y vía.

Tratamiento antibiótico: especificar

15. Se sugiere cambiar - Sepsis puerperal- por Endometritis (corresponde mejor al manejo descrito)

a) que hacer en César...

Control de signos vitales especialmente temperatura bucal

Inicio del tratamiento antibiótico: especificar tipo, dosis y vía

Borrar inicio con antipireticos (puede confundir la evolucion del cuadro)

Si la fiebre es muy alta, usar medios fisicos como panos frios.

b) que hacer en el hospital

Legrado: explicar cuando debe ser hecho

Exam disponibles: prueba de funcion renal: Es necesaria en todos los casos de infeccion puerperal?? (igual comentario para prueba de coagulacion, prueba de funcion hepatica y hematologico): especificar en que condicones deben ser solicitados

Cultivo de secrecion y antibiograma

Tratamiento con antibioticos: explicitar tipo, dosis, duracion y via.

16. Shock septico

a) signos...

Se sugiere ordenar los signos de menor a mayor gravedad

b) que hacer en Cesar

Especificar suero y antibioticos: tipo, dosis y via

17. Shock hipovolemico

a) signos

Se sugiere poner al comienzo – sangrado visible... (aparece al final en el original)

b) que hacer en Cesar (igual para el hospital)

Identificar la causa del sangrado (retencion placentaria o de restos ovulares, atonia uterina o desgarros)

Proceder de acuerdo a la causa identificada

Canalizar vena: especificar tipo de suero y cantidad por minuto

Tratar de estimar a traves de familiares/acompanantes y observacion directa la cantidad de sangre perdida

18. Emergencias del recien nacido

Se sugiere separar las diferentes emergencias descritas como asi mismo los manejos.(hipoxia, pretermino, bajo peso, macrosomico y otras: especificar). Especialmente el manejo de la depresion neonatal, describiendo paso a paso la reanimacion cardiopulmonar inmediata sin necesidad de intubacion ni medicamentos (para el nivel Cesar) con la cual se recupera el 80% de los ninos nacidos con hipoxia.

RECOMENDACIONES GENERALES

Procurar que tanto la descripcion de los signos y sintomas como el manejo (ya sea en Cesar/Cesamo u Hospitales) mantengan la misma logica y orden en que deben ser identificados y realizados.

Procurar que la descrpcion de los manejos sea muy precisa, especialmente en lo que se refiere a medicamentos y procedimientos.

Evaluar la conveniencia de solicitar un examen o efectuar un procedimiento en terminos de su real utilidad y verdadera disponibilidad o destreza para realizarlo.

Asegurar que todos los procedimientos indicados esten descritos, ya sea en el mismo parrafo o en un anexo si es muy extenso

Revisar e incluir en esta guia los flujogramas de manejo de las complicaciones que aparecen al final del documento “Normas de Manejo de Emergencias y Patologias Obstericas para el Nivel Institucional” Tegucigalpa, M.D.C. Febrero, 1999

ANNEX J
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ANNEX K

**SUGGESTED INDICATORS FOR QAP
MONITORING AND EVALUATION**

LINEA DE BASE

En base a la informacion recogida se elaboro una linea de base con 22 indicadores.

Los criterios para definir unidades de AOE, no incluyen cumplimiento de la Norma especialmente en el manejo de las principales complicaciones obstetricas y neonatales.

La definicion de los establecimientos de AOE basicos no incluye:

- deteccion de anemia; deteccion de complicaciones (HIE, sangrado ante, durante y despues del parto; parto obstruido; sepsis y asfixia neonatal)
- monitoreo del trabajo de parto (uso del partograma)
- compresion bimanual externa e interna
- revision manual
- administracion de sueros endovenosos
- atencion inmediata del recien nacido
- reanimacion neonatal

INDICADORES

- No todos estan midiendo la intervencion en terminos de mejorar el acceso y AOE.
- Algunos se pueden incluir en un indicador mas amplio
- Algunos no tienen relacion con la intervencion
- Uno de ellos no es un indicador (numero de nacimientos esperados)
- La mortalidad materna es una tasa que tiene significacion en una poblacion mas que en un establecimiento. La tasa de letalidad que tambien esta incluida es un indicador mas adecuado.

Se sugiere reducir el numero indicadores a los siguientes

- 1) Igual al propuesto pero se sugiere expresarlo como proporcion. Para el numerador se requiere de una definicion de las actividades especificas que debe efectuar el establecimiento de AOE basica y establecimiento de AOE comprehensiv.
- 2) Cobertura de control de embarazo: Numerador es el numero de embarazadas atendidas al menos en tres controles y, el denominador el numero de embarazadas estimadas para el periodo.
- 3) Cobertura de partos: Partos asitidos versus partos esperados
- 4) Igual al propuesto. Revisar la fuente de datos, debe ser del registro de egresos
- 5) Igual al propuesto. Revisar la fuente de datos, puede ser el libro de ingresos
- 6) Igual al propuesto. Revisar la fuente de datos, quizas sea necesario hacer una adecuacion para registrar el dato.

- 7) Proporción de complicaciones obstétricas y neonatales adecuadamente manejadas. La fuente de información: revisión de los casos materno y neonatal complicados. Numerador: número de complicaciones obstétricas y neonatal seleccionadas manejados según la norma. Denominador: total de complicaciones maternas y neonatal.

Se sugiere empezar con las 4 principales causas de mortalidad materna (HIE, hemorragia, parto obstruido y sepsis en la madre y, con asfisia neonatal en el recién nacido). Una vez que el proceso se ha establecido se amplía a las otras complicaciones menos frecuentes.

Manejo adecuado es aquel que haya aplicado la norma.

- 8) Proporción de partos con uso correcto del partograma. Fuente: Historias clínicas. Numerador: número de parturienta con partograma correctamente llenado. Denominador: total de egresos por parto o cesarea

Egresos que no se incluyen en el denominador: cesarea electiva, la mujer que ingresa en expulsivo.

- 9) Proporción de cesareas resueltas en el hospital. Numerador número de mujeres a las que les indicó una cesarea y debieron ser referidas. Denominador: número de mujeres a las que se les indicó y efectuó la cesarea en el mismo establecimiento.
- 10) Proporción de personal que se siente seguro y con confianza para identificar y manejar complicaciones obstétricas y neonatales seleccionadas.

Fuente: Encuesta a todo el personal que atiende a embarazada y parturientas.

Numerador: Número de personas que brindan control de embarazo y atienden partos que expresan sentir seguridad y confianza en el manejo de complicaciones seleccionadas. Denominador: total de personas que atienden a embarazadas y parturientas.

Se requiere de definir un listado de acciones, destrezas y procedimientos implícitos en el manejo de complicaciones obstétricas y neonatales de acuerdo a la Norma.

Se sugiere comenzar con las 4 causas más frecuentes de mortalidad materna y con asfisia neonatal.

- 11) Igual al 11 de la propuesta original. Se sugiere incluir en la prueba de conocimientos, causas de sangrado, manejo de pre-eclampsia y sepsis, identificación de signos y síntomas, interpretación de la gráfica del partograma.
- 12) Proporción de meses con abastecimiento suficiente de medicamentos, equipo e insumos para el manejo de complicaciones obstétricas seleccionadas. Numerador:

Numero de meses con abastecimiento completo de medicamentos, equipo e insumos seleccionados. Denominador: 12 meses.

Se requiere elaborar un listado de todos los medicamentos, equipo e insumos necesarios para el manejo de complicaciones seleccionadas, segun la Norma.

Se sugiere empezar con los medicamentos e insumos necesarios para el manejo de las 4 principales causas de muerte materna y, la asfixia neonatal.

13) Tasa de letalidad perinatal hospitalaria. Numerador: Muerte fetal o neonatal ocurrida despues del ingreso de la embarazada al hospital. Denominador: numero de recién nacidos del hospital en el mismo periodo.

Esta es una version de la estructura de la tasa de mortalidad perinatal, que sera util para evaluar el manejo hospitalario perinatal.

Se recomienda usar el periodo comprendido entre las 28 semanas de gestacion y los 7 primeros dias de vida del recién nacido.

ANNEX L

**SUGGESTIONS ON QAP (ECUADOR)
BASELINE DATA REPORT**

Monitoreo y Evaluacion

El documento “Informe de la Linea de base institucional del proyecto mejoramiento de la Calidad del Cuidado Obstetrico Esencial” de la provincia de Cotopaxi – Ecuador, Junio, 1999

Explicita la mision del QAP en mejorar la calidad de los servicios que prestan AOE, asesorando el desarrollo, implementacion y comunicacion de estandares a traves de capacitacion y otros mecanismos. Monitorear el cumplimiento de los estandares y los resultados de los cuidados. Implementar metodos institucionizados de mejoramiento de calidad y resolucion de problemas.

Linea de Base

En Ecuador la informacion fue recogida en 6 establecimientos de salud de la provincia de Cotopaxi y, la intervencion es en 3 con una poblacion total de 133.785 habitantes.

En Honduras la informacion se recogio en los 6 municipios en que esta la intervencion del proyecto con una poblacion de 171,494 habitantes.

Instrumentos utilizados para coleccionar datos/ observaciones de cada uno

Encuesta rapida

Se han realizado dos oportunidades en cada pais. No parece clara la razon de la segunda encuesta en circunstancias que el proyecto no ha intervenido aun en los aspectos que son encuestados.

No se incluye informacion sobre disponibilidad para efectuar examen de grupo y Rh, Hematocrito o Hemoglobina y disponibilidad de equipamiento para efectuar cesareas, histerectomias y legrados. Tampoco disponibilidad de formularios de Partograma.

Hoja de registro para el estudio de historias clinicas:

En Referencia o autoreferencia no se consignan los signos sintomas detectados y si se hizo algun tratamiento o manejo antes de la referencia

En Ingreso no aparecen signos y sintomas detectados, solo el diagnostico (con ambas informaciones es posible evaluar consistencia y exactitud del diagnostico)

La condicion al ingreso para la madre no especifica si estando viva, esta sana o con complicaciones. Lo mismo para el estado del feto o recién nacido (evitar el termino producto para referirse al bebe)

En registro de signos vitales es necesario anotar los valores y no solamente si se tomaron (para evaluar si estaban en los rangos normales y si el manejo fue consistente con estos

hallazgos). Llama la atención que se especifique “no tomar en cuenta los registros de enfermería”

En complicaciones no se determina si se hizo un diagnóstico y si es concordante y esta completa según los hallazgos (no hay espacio en el formulario para escribir esta parte solo lo hay en caso de muerte materna).

Se incluye un listado de complicaciones donde no están incluidas: anemia, trabajo de parto prolongado, distocia de presentación, retención de restos placentarios, atonía uterina y desgarro vaginal.

Solo se especifica con detalle el procedimiento de pre-eclampsia / eclampsia y no se evalúa si fue adecuado.

En los procedimientos no está masaje uterino y expresión de coágulo, compresión bimanual externa/interna y revisión manual.

En caso de Labor (trabajo de parto)

No se consigna interpretación de la gráfica en el partograma ni el plan a seguir.

No se consignan complicaciones durante el parto y post parto

Encuesta de Conocimientos, actitudes y prácticas obstétricas

En el entrenamiento no se especifica si la capacitación incluyó práctica con aplicación de destrezas.

Permite medir algunos conocimientos, pero no actitudes y prácticas.

Hoja de Observación para Normas de Bioseguridad

En general está diseñada como un inventario de la infraestructura para lavado de manos y disponibilidad de guantes, ropa y material esterilizado. No tiene información sobre cumplimiento de normas de bioseguridad en el manejo de sangre y fluidos corporales. Manejo de material cortopunzante, lavado y desinfección de guantes y equipo, previo a la esterilización, limpieza de superficies, eliminación de desechos, preparación y uso de solución con cloro, etc.

Observación directa de la realización de cesárea o parto

Esta referida a la observación de algunas técnicas de asepsia y antisepsia exclusivamente. No incluye observación de técnicas de atención del parto, alumbramiento, post parto y del recién nacido.

Encuesta para la medición de satisfacción de la usuaria

Podrian incluirse preguntas como si sintio que la escucharon con atencion, si hubiera deseado un trato diferente, como? y si volveria al hospital o recomendaria hacerlo a sus familiares o amigas.

Instrumento para verificacion de Kardex de medicamentos

Esta dirigido a conocer la disponibilidad anual y mensual de los medicamentos Pitocin (oxitocina) y Methergin exclusivamente. No se incluyen otros insumos y medicamentos basicos para el manejo de las principales complicaciones maternas y de la asfixia neonatal. Sin embargo la mayoria de estos medicamentos estan incluidos en la encuesta rapida aunque alli solo se pregunta si hay o no en el establecimiento y no su disponibilidad regular.

Registro de Cesareas

La pregunta de si la indicacion de la cesarea esta registrada, se incluye en el rubro siguiente. En cambio no se pregunta si estuvo bien indicada.

Formulario de resumen de datos hospitalarios

En las causas de complicaciones obstetricas y muertes maternas aparece hemorragia ante y postparto como un solo diagnostico. Esta agrupacion no permite identificar la causa de la hemorragia y por tanto definir definir intervenciones especificas futuras.

En el total se clasifican las causas como obstetricas mayores (?) y otras causas obstetricas. Es recomendable utilizar la clasificacion internacional de tipo de causas de mortalidad materna: directas, indirectas y no relacionadas.

En ninguno de los instrumentos se incluyo informacion sobre la disponibilidad de anestesista, equipo e insumo de anestesia y, disponibilidad de sangre (banco u otra fuente).

ANNEX M
SCHEMATIC OF EOC

Atencion Obstetrica Esencial (AOE)

el QUE

Elaborar una “definicion operativa” de los componentes de EOC que incluya especificamente:

- acciones
- destrezas clinicas
- medicamentos
- equipamiento
- insumos
- necesarios para brindar una AOE de las 4 causas mas frecuentes de mortalidad materna e hipoxia en el recién nacido

el DONDE:

- Definir en base a la situacion real del campo los establecimientos donde cada una de las acciones debe ser brindada.
- Un establecimiento de Salud con capacidad de brindar AOE debe dar atencion las 24 horas del dia, ser accesible y asequible, con el personal capacitado en AOE (conocimientos y destrezas de la “definicion operativa”) y disponer regularmente de la dotacion de medicamentos, equipo e insumos (segun la “definicion operativa”)

el COMO:

Mejorar la identificacion de signos de peligro en la comunidad, fomentar la consulta oportuna y asegurar el transporte expedito.

Mejorar la calidad de respuesta de los establecimientos de salud mediante:

- Capacitacion a los proveedores de salud para mejorar los conocimientos y destrezas clinicas.
- Implementacion de un sistema logistico para asegurar la disponibilidad de medicamentos, equipamiento e insumos.
- Monitoreo de la calidad de esta atencion
- Implementacion de un sistema de produccion y recoleccion de datos y analisis de la informacion
- Implementar normas de atencion materna y neonatal y politicas que aseguren la entrega de AOE

el RESULTADO

Mejorar la entrega de AOE

RESPONSABLES

Del resultado: QAP/JSI y OPS

De las actividades en la comunidad: JSI

De las actividades en los establecimientos de salud: QAP

De las actividades en los Ministerios de Salud: OPS

INDICADORES:

Estructurar indicadores que midan las actividades en la comunidad, en los establecimientos de salud y en los Ministerios de Salud.

La “definición operativa” será el ámbito de referencia para definir las actividades a realizar en la comunidad (identificación de las señales de peligro, transporte expedito y acceso oportuno), en los establecimientos (ágil acceso y manejo clínico adecuado) y en los Ministerios de Salud (normas y políticas de salud que aseguren el cumplimiento de estas actividades).